

Annual report 2023



WAGENINGEN
UNIVERSITY & RESEARCH



Table of Contents

	Supervisory Board	3
	Executive Board	4
	Profile and core activities of Wageningen University & Research	5
	Foreword	7
1	Introduction	9
2	Wageningen University & Research Management Report	10
2.1	Supervisory Board	10
2.1.1	Report of the Supervisory Board	10
2.1.2	Report of the Audit Committee	12
2.1.3	Report of the Appointments Committee	12
2.1.4	Report of the Education and Research Committee	13
2.1.5	Independence and compliance	13
2.1.6	Background of the Supervisory Board members	13
2.2	Key Figures	14
2.2.1	Wageningen University & Research	14
2.2.2	Wageningen University	16
2.2.3	Wageningen Research Foundation	16
2.3	Mission, Ambition and Strategy	17
2.3.1	Mission and ambition	17
2.3.2	Strategic Plan 2019-2024	17
2.3.3	Attention to Corporate Social Responsibility	18
2.4	Education	19
2.4.1	Profile and policy	19
2.4.2	Highlights	21
2.4.3	Results and Success rate	22
2.4.4	Quality assurance in education	22
2.4.5	Funding	23
2.4.6	Students	23
2.4.7	Outlook	30
2.5	Research	31
2.5.1	Policy and Organisation	31
2.5.2	Internationalisation	33
2.5.3	Quality assurance, results and developments	36
2.5.4	Outlook	39
2.6	Impact	40
2.6.1	Collaboration, tech transfer and co-creation with partners	40
2.6.2	The entrepreneurial use of knowledge	42
2.6.3	Sharing knowledge	45
2.6.4	Wageningen Campus, Ecosystem & Facilities	47
2.6.5	Wageningen University Fund	49
2.6.6	Outlook	50
2.7	Staff members	50
2.7.1	One Wageningen	50
2.7.2	Recruitment, Onboarding & Inclusion theme	50
2.7.3	Leadership & Talent Development theme	51
2.7.4	Organisational Development theme	53
2.7.5	Vitality & Health theme	53
2.7.6	HR & Operational Excellence theme	55
2.7.7	Employee participational body	56
2.7.8	Recognition and Rewards	57
2.7.9	Employment conditions and (social) safety	58

2.7.10	Complaints and arbitration procedures	59
2.8	Operational management	60
2.8.1	Management of information provision and ICT developments	60
2.8.2	Personal data protection (privacy)	62
2.8.3	International collaboration and knowledge security	62
2.8.4	Corporate Social Responsibility	63
2.8.5	Safety and environment	64
2.8.6	Purchasing policy and supply chain responsibility	69
2.9	Compliance	69
2.9.1	Governance	69
2.9.2	Independence and integrity	70
2.9.3	Risk Management and Internal Control	71
2.9.4	Remuneration of senior executives	75
2.9.5	Side activities of Supervisory Board members and Executive Board members	80
2.10	Economic Performance Indicators	82
	<i>Direct economic values</i>	82
2.11	Wageningen University Continuity Section	84
2.11.1	Principles of the financial policy	84
2.11.2	Internal risk management	88
2.11.3	Risks and uncertainties	88
2.12	Reporting criteria and scope	89
3	Specific Ministry of Education, Culture and Science accountabilities	90
3.1	Quality Agreements report	90
3.1.1	Process	90
3.1.2	Progress	90
3.1.3	Budget	95
3.1.4	Student Staff Council and Supervisory Board	97
3.1.5	Reflections from the WUR co-participation council (the Student Staff Council)	97
3.2	National Programme for Education/Coronavirus section	99
3.2.1	Coronavirus impact	99
3.2.2	NPO planning and monitoring process	99
3.2.3	NPO for education implementation progress	100
3.2.4	NPO research	107
3.3	Green Deal for Nature-Inclusive Agriculture Green Education	109
3.4	Smarter Academic Year pilot	111
3.5	Report on the Administrative Agreement	111
3.6	Wageningen University Profiling Fund	114
3.7	Clarifications	115
3.8	Treasury policy	118
4	Abridged WUR annual accounts	119
4.1	Wageningen University	119
4.1.1	Financial Report	119
4.1.2	Abridged Wageningen University Annual Accounts	123
4.1.3	Accounting Principles	126
4.1.4	Auditor's report by the independent auditor	132
4.2	Wageningen Research Foundation	133
4.2.1	Financial Report	133
4.2.2	Abridged Wageningen Research Annual Accounts	136
4.2.3	Accounting Principles	139
4.2.4	Auditor's report by the independent auditor	146
	Appendix 1 Education at Wageningen University	147
	Appendix 2 Valorisation indicators	152
	Appendix 3 Social Annual Reportv	158
	Appendix 4 Glossary	162

Supervisory Board

At the end of 2023, the members of Wageningen University & Research's Supervisory Board were as follows:

Prof. E. Dijkgraaf (chair)
Ms M.A. Verhoef (vice-chair)
Prof. F.P.T. Baaijens¹
Mr B.C. Jansen
Mr T. Klimp
Dr K.D. Schuijt

The members of the Supervisory Board for Wageningen University & Research are the same as for Wageningen University and the Wageningen Research Foundation.

Refer to 2.9.5.1 for an overview of the side activities of the members of the Supervisory Board.

¹ Prof. F.P.T. Baaijens was appointed as a member of the Supervisory Board with effect from 1 September 2023.

Executive Board

At the end of 2023, the members of Wageningen University & Research's Executive Board were as follows:

Dr S. Heimovaara (President)

Prof. A.P.J. Mol² (Vice-President and Rector Magnificus of Wageningen University)

L.A.C. Buchwaldt, MBA

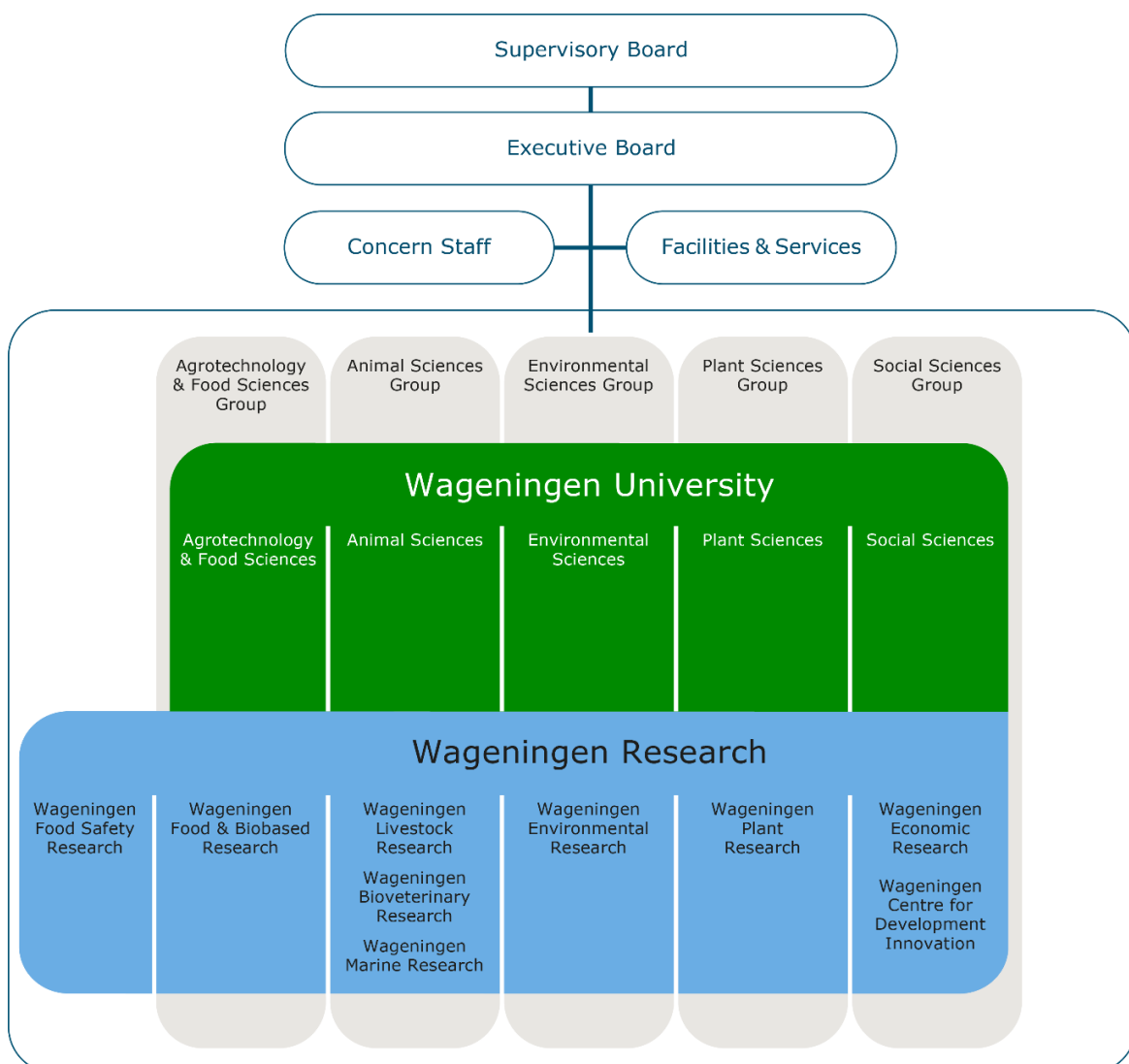
The members of the Executive Board for Wageningen University & Research are the same for Wageningen University and Wageningen Research Foundation.

Refer to 2.9.5.2 for an overview of the side activities of the members of the Executive Board.

² Prof. A.P.J. Mol stepped down on 9 March 2024; Prof. C. Kroeze was appointed Vice-President of the Executive Board and Rector Magnificus of WU on 10 March 2024.

Profile and core activities of Wageningen University & Research

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



In 2023, one research institute, Wageningen Food Safety Research (WFSR), was not organisationally integrated with a sciences group. Among other things, WFSR carries out Statutory Research Tasks (WOT) 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 consolidated annual accounts for their group. WUR as a whole does not publish consolidated annual accounts.

Foreword

The year 2023 was one of profound global change, politically, socially, academically and therefore also substantively in the domains in which WUR operates. It was the hottest year on record, with biodiversity permanently under pressure. Global conflicts impacted people and their food security, especially those who already had little to spend.

Against the backdrop of these predominantly uncertain circumstances, there is much to be proud of. In 2023, WUR was again named best university in the Netherlands by students, and it was ranked internationally as the best agricultural university and most sustainable university in the world. A large and growing number of our study programmes were crowned 'top study programme', based on appraisals by our own students. Such recognition is, of course, due to the tireless efforts of our employees – lecturers, researchers and support staff – who work passionately to develop new knowledge relating to the climate, sustainable food production and the green living environment.

Yet, there is no time for complacency, especially not right now. Aside from global developments, our own country is also in a state of flux. It is still unclear what impact the elections for the House of Representatives and the formation of a new government will have on higher education policy, for instance in relation to internationalisation and funding. Our partners are also noticing that we live in uncertain times. Therefore, WUR is continuing to monitor its financial situation closely so that we remain a strong, healthy organisation in the future too. In addition, 2023 also saw the first steps towards the development of the new 2025-2028 Strategic Plan.

Working on sustainable solutions

The new bachelor's programme in Marine Sciences began in September and immediately had the wind in its sails. More than 100 students enrolled for it. This programme will enable us to meet the task of better understanding the marine domain and working towards solutions for marine ecology and a sustainable blue economy.

After a series of open discussions with students and employees, in July 2023 the Executive Board decided that the rules regarding collaboration with the fossil fuel industry would be tightened. Then, in December, a specially appointed advisory committee presented a decision framework for employees to use when dealing with a research project with a fossil fuel partner.

The Ministry of Economic Affairs awarded 40 million euros to high-quality Wageningen research facilities, including climate-controlled compartments, advanced research greenhouses and the FoodTech Facility.

Dialogue on Agriculture & Nature

Ahead of the elections for the House of Representatives, Wageningen researchers identified six dilemmas for the future of agriculture and nature in the Netherlands. In doing so, they demonstrated that politicians have important decisions to make in relation to food supply, nature policy and the living environment. The six dilemmas attracted a lot of national media attention and offer a tool for political and social discussions on this subject.

Financial results

From a financial perspective, 2023 was not a great year. Both WU and WR posted negative results for the first time in years. WU's operating result was -€5.1 million; WR's was -€11.5 million. These negative results were caused by Collective Labour Agreement increases, a rise in energy costs and higher sickness-related absenteeism. With incidental results at WU of -€4.2 million, mainly due to the inclusion of a provision for the Vitality Pact and the offsetting of results from SRF with WR, WU's net result worked out at -€9.3 million. WU's operating result is in line with the budget. WR's incidental

results were, on balance, positive to the tune of €1.7 million, bringing WR a net result of -€9.8 million. That result fell short of expectations.

Growth in government funding at WU and the LNV tasks at WR led to a further expansion of staff capacity. Although staffing grew in line with the budget, it has not yet proved possible to deploy all the additional resources, especially those for the sector plans at WU.

Dr S. Heimovaara (President of the Executive Board)

Prof. C. Kroeze (Vice-President of the Executive Board / Rector Magnificus)

L.A.C. Buchwaldt, MBA

1 Introduction

This annual report covers the 2023 financial year of Wageningen University & Research (WUR), the partnership between Wageningen University (WU) and Wageningen Research Foundation (WR). This encompasses both the joint management report and the individual abridged annual accounts of the separate legal entities.

In the annual report, the performance of WUR will be presented along with the social aspects of this performance. The reporting to internal and external stakeholders covers the economic, environmental and social 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 Social Annual Report, such as the implemented personnel policies and personnel key figures, are a part of this annual report.

Both WU and WR have a social function. How both organisations have implemented this in 2023 is made clear in this annual report.

The following chapters offer the reader an overview of the key developments that occurred in 2023. Chapter 2 contains the reports from the Executive Board and the Supervisory Board (2.1). Section 2.2 provides key figures, while Section 2.3 outlines WUR's ambitions and the Strategic Plan. Following that are the achievements in education (2.4), research (2.5) and impact (2.6). In addition to the Social Annual Report (Appendix 3), the developments in terms of employees (2.7) and operational management (2.8) are also covered. Section 2.9 offers insight into how the organisation is managed, reporting on the remuneration of executives (2.9.4). 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. Since 2021, a chapter has been added to the annual report (3), which provides insight into the use of specific Ministry of Education, Culture and Science (OCW) funded programmes, specifically the Quality Agreements, the NPO resources and the Profiling Fund.

Chapter 4 includes the abridged annual accounts of WU (4.1) and WR (4.2), as well as the auditor's report on the abridged annual accounts. The abridged annual accounts are directly derived from the full annual accounts, which are published on the Wageningen University & Research website.

The Wageningen University & Research Annual Report 2023 was adopted by the Executive Board on 29 April 2024 and approved by the Supervisory Board on 21 May 2024.

2 Wageningen University & Research Management Report

2.1 Supervisory Board

2.1.1 Report of the Supervisory Board

In 2023, the Supervisory Board held six regular meetings – five of them in person at different WUR locations and one online. The Board also met six times in closed sessions in 2023.

Supervisor

The Supervisory Board met with the Executive Board in 2023 to discuss a variety of topics related to WUR's Strategic Plan, spending of resources and relevant social developments.

In 2023, the Supervisory Board discussed with the Executive Board the process for drafting the new 2025-2028 Strategic Plan and topics related to the current Strategic Plan, such as Digitalisation and Recognition & Rewards. A number of research topics, such as perspectives on the future of agriculture and nature, were also discussed with the Supervisory Board. The Supervisory Board also made several working visits, including to the Farm of the Future in Lelystad. During these visits, various areas of research were explained in more detail.

Another strategic topic that received specific attention in the conversations between the Supervisory Board and the Executive Board was collaboration with the fossil fuel industry and the meetings that took place about this with the WUR community of employees and students. Discussions also revolved around integrity and social safety, adjustment of the Strategic Housing Plan (SHP), evaluation of the ombudsperson position, organisation of HR's services through centres of expertise, and changes to the planning and control cycle.

The Supervisory Board was also informed about a whistleblower report, and the results of the Supervisory Board's self-assessment were followed up on. The Supervisory Board held discussions with various officials, such as the representatives of the central participational body and the Academic Board.

Various reports were discussed with the Supervisory Board, including from the ombudsperson and the central participational body, and in relation to statutory research tasks, integrity and social safety. The Supervisory Board was informed of the progress of major real estate projects through real estate reports and the project reports. The SHP's progress report was also discussed.

The Supervisory Board also discussed the Quality Agreements in 2023. For example, the 2022 Annual Report and the progress of the Quality Agreements were discussed with the Executive Board using information from the dashboard; these progress reports were provided several times. The Supervisory Board also discussed the Quality Agreements with the participational body. The Supervisory Board is very satisfied with the progress of the Quality Agreements and the transparent way in which the Board was informed about them. The Supervisory Board was also briefed in 2023 on the progress of and deployment of funds from the National Programme for Education (NPO), intended to be a coronavirus support measure for education. WUR had drafted a plan for this in 2021, the implementation of which was continued in 2022 and 2023. The report can be found in section 3.2 of this annual report.

The Supervisory Board had separate discussions with the participational body (WU students and employees) about the role and involvement of the Supervisory Board and the participational body in the progress of the Quality Agreements. During these meetings, the Supervisory Board ascertained that the participational body is able to perform its role properly. The Board itself monitored progress via the dashboard and also kept track of the proper spending of funds. The Board considers it important to continue these discussions with the participational structure. The extensive report on the Quality Agreements is included in Chapter 3 of this Annual Report.

The Supervisory Board has approved the 2022 WUR Management Report and the 2022 Annual Accounts of WU and WR. Based on the positive recommendation of the Audit Committee, the Supervisory Board approved the 2024 budget of WU and WR as well as the 2024-2028 multi-year forecasts.

The Supervisory Board supervised the effective spending of resources, including the government funding and the TO2 subsidy. The Supervisory Board did this primarily by assessing the intended expenditures as stated in the budgets and multi-year forecasts and performing a general check on them to see whether they are in line 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 disinvestments/investments larger than €5 million. This was done in 2023 with regard to building fixtures, renovations and the construction of new research facilities. The Supervisory Board and the Audit Committee consulted with the external auditor regarding the annual accounts, the Management Report, the 2022 Auditor's Report and the 2023 Management Letter. The Supervisory Board advised the Executive Board to accept the auditor's recommendations. Furthermore, the Board regularly discussed the financial reports and investments.

Employer

Following the recommendations of the Appointments Committee, the recruitment procedure for the Rector Magnificus, also Vice-President of the Executive Board, was started in the autumn of 2023, in view of Prof. A.P.J. Mol's term of office expiring on 9 March 2024. Candidates were selected and nominated by the Academic Board. The central participational body advised the Supervisory Board on this. In December 2023, the Supervisory Board decided to appoint Prof. C. Kroeze as Rector Magnificus and Vice-President of WUR's Executive Board. The appointment took effect on 10 March 2024.

The Supervisory Board approved the six-month overviews of personal expenses by Executive Board members. The Supervisory Board also granted its approval for (new) side activities and external activities of members of the Executive Board. The Supervisory Board completed the annual performance reviews with the members of the Executive Board in 2023.

Following the Supervisory Board's nomination, Prof. F.P.T. Baaijens was appointed by the Ministers of OCW and LNV as a member of the Supervisory Board with effect from 1 September 2023.

Relationship with stakeholders

In March 2023, the Supervisory Board attended the internal meeting with the WUR Council. The Supervisory Board also attended the consultation meeting between the Executive Board and the participational body in June 2023. An informal consultation between the Supervisory Board and the participational body took place in December 2023. Consultations were held with the central participational body regarding the profile of the Supervisory Board vacancy and the profile and appointment of the Rector Magnificus and Vice-President of the Executive Board.

Again in 2023, the Supervisory Board was able to visit a different part of WUR prior to virtually every meeting to meet employees and be updated on the research that is being conducted and the education that is being provided. The Supervisory Board met various employees, such as management, lecturers, researchers and students, who make an important contribution to social issues and groundbreaking research. The Supervisory Board was present at a range of meetings, such as the Dies Natalis and the official opening of the academic year.

The Supervisory Board also liaised with external stakeholders. Twice a year, the chairs of the Supervisory Boards of Dutch universities meet: during these meetings they are also in contact with the Dutch Ministry of Education, Culture and Science. The Supervisory Board members' personal networks are in contact with the environment around WUR, such as the Wageningen Ambassadors and WUR clients.

Development

A self-assessment by the Supervisory Board, with external guidance, was performed at the end of 2022. The Executive Board was also involved in this. The topics of discussion were team formation, role distribution within the Supervisory Board and collaboration with the Executive Board. The self-assessment revealed some points for attention, which the Supervisory Board followed up in 2023 by discussing and pursuing a topic at each meeting.

The Board discussed the committee composition and adapted it following the changes in the Supervisory Board.

2.1.2 Report of the Audit Committee

The Audit Committee convened for four regular meetings and one closed meeting with the auditor in 2023.

The Audit Committee discussed WUR's 2022 annual report and the 2022 annual accounts of WU and WR. The Auditor's Report was discussed in the presence of the auditor. Some points for attention in the audit were the new construction financing of the High Containment Unit and the pro rata VAT scheme. Liquidity was discussed in relation to the OCW signalling threshold. For 2023, attention should be given to the ground rules around the spending of public funds on private activities.

The Audit Committee advised the Supervisory Board to approve the 2022 annual accounts of WU and WR and adopt the auditor's recommendations.

Other topics of discussion included the financial management reports, cyber security, a change in the planning and control cycle, innovations in the financial organisation, real estate reports, investment project reports and the progress and updating of the SHP. Some investment proposals were also discussed, for which the Audit Committee issued a positive recommendation to the Supervisory Board.

The status of the 2023 Internal Control Plan, the internal reviews and audits to be performed and the internal control plan for 2024 were discussed in the presence of the internal auditor. Some incidents investigated by the internal auditor were discussed with the Audit Committee. 2023 also saw a focus on the registration of side activities.

Consultations were held with the auditor about the 2023 audit plan and the 2023 management letter. This opportunity was used to discuss concrete plans and progress relating to innovation in administration and control, cyber security risks, subsidy controls and the increase in costs.

The Audit Committee discussed the 2024 budgets of WU and WR and the multi-year forecast at the end of 2023. Topics of discussion here included the investment agenda, cost control, rates structure and personnel outflow in relation to retirement. With respect to the multi-year forecast, talks included the student intake and the phasing of investments. On the basis of the discussion with the Supervisory Board, the Executive Board included a phasing of the investments in the multi-year forecast.

The Audit Committee issued a positive recommendation to the Supervisory Board on the 2024 budgets of WU and WR. At the start of 2024, the Audit Committee issued a positive recommendation to the Supervisory Board on the 2024-2028 multi-year forecast of WU and WR.

2.1.3 Report of the Appointments Committee

The Appointments Committee convened twice in 2023. One regular meeting was cancelled, and a new date was not set. Important issues during that period were therefore added to the Supervisory Board's agenda.

There were also several meetings of the Selection Committee, of which the Appointments Committee is an integral part, in preparation for the nomination of a new member of the Supervisory Board to the Minister. A Selection Committee was also formed, of which the Appointments Committee is also an integral part, in preparation for the appointment of the Rector Magnificus and Vice-President of the Executive Board. The process for both appointments involves the central participational body and, for the Rector Magnificus process, also the Academic Board.

The Appointments Committee prepared the annual performance reviews with the members of the Executive Board with input from various employees from the organisation, including the central participational body. The performance reviews with the members of the Executive Board were held in early 2024 and reported on to the Supervisory Board.

As the self-assessment concerns were addressed in 2022, the next comprehensive self-assessment was scheduled for early 2024. Preparations for this were started by the Appointments Committee in late 2023. In 2023, the Chair of the Supervisory Board met with all its members to discuss the state of affairs.

The development of leadership and talent was discussed with the Executive Board. The way succession planning is handled was also discussed.

In January 2023, the composition of the Supervisory Board consisted of three women (60%) and two men (40%). With the appointment of Mr Baaijens, this changed to three women (50%) and three men (50%) at the end of 2023.

Details of the remuneration for the members of the Executive Board and Supervisory Board for 2023 are provided in Section 2.9.4 of this annual report.

2.1.4 Report of the Education and Research Committee

The Education and Research Committee met three times in 2023. Fixed topics that were discussed at the meeting were the (progress of the) Quality Agreements and the NPO, the quality assurance of WU, the early registrations of students and the Statutory Research Tasks (WOT) report. In addition, Artificial Intelligence (AI) in education and research and the focus areas for cooperation in the EWUU alliance (Eindhoven University of Technology, WUR, Utrecht University and UMC Utrecht) were addressed.

With regard to education, the committee discussed the new assessment policy, the new study programmes and progress on various elements of the Strategic Plan. The committee also took note of the Board of Education's annual report.

With regard to research, discussions included the income of scholarship recipients (PhDs), start-up and incentive grants, disruptive academia, knowledge security, guidelines for cooperation with fossil fuel industry partners and transparency about externally funded chairs. The committee also took note of the Dean of Research's annual report.

2.1.5 Independence and compliance

The Supervisory Board ensures that its members are independent. In the Supervisory Board's opinion, this is indeed the case in accordance with the requirements of [Wageningen University & Research's Code for Good Governance](#). 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 this to the Supervisory Board and the Audit Committee and discusses the internal risk management and control systems on this basis. The WUR Supervisory Board's [Regulations](#) (in Dutch) apply to the Supervisory Board.

2.1.6 Background of the Supervisory Board members

Prof. E. Dijkgraaf (1970) has been a member of the Supervisory Board since 1 March 2021.

Mr Dijkgraaf was appointed Chair of the Supervisory Board on 1 December 2022. His first term of office ends on 1 March 2025.

Mr Dijkgraaf was chair of the Education and Research Committee, he has been a member of this committee since September 2023 and he is also a member of the Audit Committee.

Mr Dijkgraaf is professor of Empirical Economics of the Public Sector at Erasmus University Rotterdam.

Ms M.A. Verhoef (1959) has been a member and Vice-Chair of the Supervisory Board since 1 January 2017. Her first term of office ended on 1 January 2021; she was reappointed for a second term until 1 January 2025.

Ms Verhoef is chair of the Appointments Committee. She was a member of the Education and Research Committee until September 2023.

Ms Verhoef is President of the Executive Board of Levvel.

Mr B.C. Jansen (1959) has been a member of the Supervisory Board since 1 March 2021. His first term of office ends on 1 March 2025.

Mr Jansen is a member of the Audit Committee and of the Appointments Committee.

Mr Jansen was chairman of the board and CEO of Avebe until 1 October 2021.

Ms T. Klimp (1972) has been a member of the Supervisory Board since 1 September 2018. Her first term of office ended on 1 September 2022; she was reappointed for a second term until 1 September 2026.

Ms Klimp is chair of the Audit Committee. She was a member of the Appointments Committee until September 2023.

Ms Klimp is CFO of Vion Food Group.

Ms K.D. Schuijt (1974) has been a member of the Supervisory Board since 1 July 2022. Her first term of office ends on 1 July 2026.

Ms Schuijt is a member of the Education and Research Committee.

Ms Schuijt is director-general of WWF-International; she was CEO of WWF Netherlands until December 2022.

Prof. F.P.T. Baaijens (1958) has been a member of the Supervisory Board since 1 September 2023. His first term of office ends on 1 September 2027.

Mr Baaijens is chair of the Education and Research Committee and a member of the Appointments Committee.

Mr Baaijens was Rector Magnificus of Eindhoven University of Technology (TU/e) until May 2023 and is currently a professor at TU/e.

2.2 Key Figures

2.2.1 Wageningen University & Research

Table 2.1 Education

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Bachelor's programmes	19	19	19	19	20
Master's programmes	30	30	30	31	31

Table 2.2 Research

	2018	2019	2020	2021	2022	2023
Number of scientific publications of:						
Wageningen University & Research (WUR)	5,305	5,142	5,411	5,663	5,790	5,857
Wageningen University (WU)	4,614	4,415	4,661	4,907	4,982	5,067
Wageningen Research Foundation (WR)	1,517	1,475	1,422	1,488	1,585	1,480
Number of PhD degrees obtained	286	293	283	292	320	359

- Data from Pure (dated 22/02/2024).
- All scientific publications (articles in academic journals - reviewed and non-reviewed), books, book chapters, conference reports or PhD theses).
- This number includes academic articles with the status e-pub ahead of print. These articles were published online in 2023, but have not yet received a definitive publication year, volume and number from the publisher.

Table 2.3 *Students*

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Number of enrolments	12,847	13,275	13,676	13,678	13,564
Bachelor's students (including Pre-MSc)	5,928	6,037	5,904	5,842	5,773
Master's students	6,409	6,936	7,249	7,266	7,284
Other enrolments	510	302	523	570	507
Enrolled first-year students	2,923	3,032	2,982	2,814	2,935
Bachelor's (including Pre-MSc)	1,629	1,745	1,557	1,475	1,576
Master's	1,294	1,287	1,425	1,339	1,359
Number of diplomas ³	3,239	3,663	3,329	3,677	
Bachelor's	1,295	1,345	1,139	1,308	
Master's	1,944	2,318	2,190	2,369	
Number of nationalities among students	102	106	111	110	109
Percentage of international students					
Bachelor's students (including Pre-MSc)	5	6	7	8	9
Master's students	36	34	35	37	40

Source for earlier years: AIR; source since 2021: Osiris.

Table 2.4 *Employees*

	2019	2020	2021	2022	2023
Average number of employees (in FTE)	5,400	5,880	6,256	6,579	6,907
Distribution on the basis of appointment:					
Wageningen University	2,743	2,951	3,179	3,337	3,509
Wageningen Research Foundation	2,657	2,929	3,080	3,243	3,398

Table 2.5 *Sustainability*

	2019	2020	2021	2022	2023
Reduction of CO ₂ emissions by % compared to 2010 ⁴	50	63	64	60	58
Annual decrease/increase in energy in %	- 1.1	- 6.5	+ 6.6	- 4.3	- 10.4

³ The number of diplomas for the 2023-2024 academic year will only be known after the summer of 2024. These figures will be included in the 2024 Annual Report.

⁴ The annual CO₂ emissions as a percentage of the total CO₂ emissions for the reference year 2010 (100%). For further explanation, see section 2.8.5.2.

2.2.2 Wageningen University

Table 2.6 Key financial figures for Wageningen University (x €1 million)

	2019	2020	2021	2022	2023
Government funding excluding target funding	226.4	241.9	269.8	295.6	306.6
Tuition fees ⁵	38.1	39.2	35.7	32.8	44.3
Indirect government funding and target funding	34.3	33.7	36.4	36.0	37.4
Matching funds market and contract research	64.1	59.3	68.0	72.6	83.7
Investments in buildings and land	17.7	48.4	45.2	8.8	3.1
Investment of other fixed assets	15.4	24.7	22.1	18.8	18.9
Net result	20.0	20.5	11.6	14.1	-9.3
Wageningen University capital					
Capital in fixed assets	248.1	285.1	319.9	314.1	304.5
Equity capital	212.0	232.5	244.2	258.3	249.0
Total liabilities	405.3	437.6	458.6	507.7	536.8
Housing ratio (%) ⁶	8.2%	9.2%	9.2%	9.1%	10.3%
Solvency ratio 1 (%) ⁷	52.3%	53.1%	53.2%	50.9%	46.4%
Solvency ratio 2 (%) ⁸	55.2%	56.0%	55.8%	53.1%	49.0%
Signalling value of excess equity capital ⁹		0.74	0.70	0.73	0.69
Wageningen University Liquidity					
Liquid assets	114.2	104.2	83.3	116.7	145.9
Current ratio	0.9	0.8	0.7	0.8	0.9

2.2.3 Wageningen Research Foundation

Table 2.7 Key financial figures for Wageningen Research Foundation (x €1 million)

	2019	2020	2021	2022	2023
Turnover	344.0	355.1	372.1	394.2	418.6
LNV proportion in total revenue (%)	43	43	44	44	44
Investments in company buildings and sites	9.8	19.0	11.4	9.5	8.1
Investments in other tangible fixed assets	13.7	7.2	7.7	3.4	5.2
Net result	14.9	17.0	9.4	3.9	- 9.5
Wageningen Research capital					
Capital in fixed assets	339.0	344.2	342.7	334.2	325.2
Equity capital	334.0	351.0	360.3	364.3	354.8
Total capital	555.8	579.3	576.0	577.1	602.8
Solvency ratio (%)	60.1	60.6	62.6	63.1	58.9
Wageningen Research liquidity					
Liquid assets	129.2	143.7	135.8	137.3	155.3
Current ratio	1.4	1.3	1.3	1.4	1.3

⁵ Excluding course fees.

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

⁷ Solvency ratio 1: equity capital / total liabilities.

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

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

2.3 Mission, Ambition and Strategy

2.3.1 Mission and ambition

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 has been 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. Current national and global developments – such as the coronavirus, nitrogen and energy crises and the ever-changing geopolitical circumstances – require new knowledge and solutions in order to react and anticipate properly.

With knowledge, education and research of the highest possible standard, WUR aims to tackle global challenges and contribute to shaping and accelerating the required transitions. We contribute to this by developing innovative technological, social and nature-based solutions. These solutions also contribute to protecting nature, improving biodiverse ecosystems, a circular economy, and supporting liveable urban and rural communities.

At the same time, we focus on continuous internal reform, change and further development of our education and research to maintain 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 2019-2024

The 2019-2022 Strategic Plan (SP) [Finding Answers Together](#) is a call to new and existing partners, students, alumni and citizens to join us in understanding the challenges we face, exploring possible solutions and discussing - and navigating between - conflicting interests. We want to work together on scientific evidence-based and socially inclusive responses that can help shape the necessary transitions.

The SP has been extended for two years, until 2024. An important aim of this extension is to gradually align the plan periods of WUR's SP and WR's Strategic Agenda as soon as possible. At the same time, we used the extension to update our strategy together with internal and external stakeholders in response to recent external developments and results of several interim evaluations. To further strengthen our social impact through education, research and value creation, a number of additional ambitions and strategies were added to the current SP. The 'Extension & Update' complements and is an integral part of the current SP.

Twelve Change Performance Indicators (CPIs) were identified in the SP. These CPIs serve as a guide for the implementation. We also implement the SP by including the ambitions and objectives in the core programme as much as possible. We use existing processes and tools, such as the Planning & Control (P&C) cycle, the budget, existing boards and councils, and meetings. For each CPI a team is active to facilitate the realisation in the organisation using a 'Theory of Change' that was created. The Theory of Change details the intended outcomes and impact of each CPI and how we intend to achieve them through concrete actions, policies, instruments and programmes. The sciences groups have also developed the CPIs further in their multi-year plans and are fully implementing them.

The year 2023 is the penultimate year of the current (extended) SP. Overall, we can say that positive developments have been made on all topics in the SP. In 2023, many activities, projects and programmes were realised that contributed to this.

At the same time, there are challenges as well as room for improvement. Preparations for drafting a new 2025-2028 SP began in 2023. This work will continue in 2024. It incorporates a reflection on the insights gained from the current SP. The main insights are:

- CPIs are valuable as they focus on change over (a longer) period of time. However, this does make it more difficult to measure developments in the shorter term.
- The translation to 'the line' and internalisation in it are not ideal because the SP and the SPs of the Sciences Groups are not phased. This is overcome with the extension of the current SP.
- Limited use was still made of existing P&C cycles and management discussions for monitoring.
- There is room for better communication of what has been or is being done at the various CPIs, including what is going well.

2.3.3 Attention to Corporate Social Responsibility

We strive for sustainability on all fronts: education, research, value creation and operational management. In everything we do, we are aware of the social effects and we take our social impact into account in our decision-making. 'One Wageningen' is central to our Corporate Social Responsibility (CSR) strategy, and 'Science for Impact' is an explicit starting point for research and education. This is how we contribute to the global social challenges of food security, safety, health, liveable cities and sustainable land use.

The WUR 2019-2024 [Strategic Plan](#) gives priority to promoting the vitality of our employees and students, to a healthier and more sustainable food supply in our canteens 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 purchasing policy, we put pressure on chains to operate in a transparent, sustainable, circular way and free of modern slavery. In 2023 and 2024, additional emphasis is being placed on enhancing social safety for all employees and students. In 2023, the Social Safety programme ran under the banner of 'Looking out for each other'. A second additional focus is making sustainability more visible in our educational programmes. One example is the launch of the new 'Marine Sciences' Bachelor's programme, which focuses on the search for innovative, sustainable solutions for (the use of) the sea.

The ambitions and objectives from the Strategic Plan, which affect CSR and sustainability, have been included in our CSR agenda: a list of 17 social themes that are important to our organisation and stakeholders (see Figure 2.1). WUR has social impact through its core activities of education, research and value creation. That impact is reflected in sharing and disseminating knowledge and seeking innovative challenges. Research must be ethical; employees are expected to act with respect towards people and animals and with an eye for nature and the living environment. This is stated in our [integrity code](#). Transparency and openness are also core values. A dialogue was held in 2023 on whether or not WUR should cooperate with fossil fuel companies. The outcome of three 'Let's Explore' sessions (discussion meetings for staff and students) on this topic was the establishment of an advisory group. At the end of 2023, this produced a decision framework for collaboration with fossil fuel industry partners in research projects. Diversity and vitality, aimed at the health and wellbeing of employees and students, are important focus areas when it comes to social responsibility. By dealing consciously and responsibly with the local neighbourhood, the climate and raw materials, we aim to minimise our environmental impact as much as possible. More information on the progress of the CSR agenda can be found in section 2.8.4.







MVO-agenda	Ambitie	Bijdragen aan SDG's
In wat we doen in onderzoek en onderwijs 	<ul style="list-style-type: none"> Onderzoek en onderwijs om een bijdrage te leveren aan maatschappelijke uitdagingen Innovatief en uitdagend onderzoek en onderwijs 	
In hoe we het doen 	<ul style="list-style-type: none"> Kennis delen en verspreiden Ethische verantwoord onderzoek Ondernemerschap en toegepast onderzoek Impactvolle partnerschappen Flexibele leerpaden 	
Governance 	<ul style="list-style-type: none"> Verantwoorde samenwerking Verantwoord economisch beleid Ketenverantwoordelijkheid 	
Studenten en medewerkers 	<ul style="list-style-type: none"> Vitaliteit Ontwikkeling en training Diversiteit 	
Milieu 	<ul style="list-style-type: none"> Klimaatadaptieve omgeving Afval en circulariteit Duurzame energie Duurzame mobiliteit 	

Figure 2.1 CSR agenda

In 2023, we also started drafting an updated CSR policy, which has been well integrated into the new Strategic Plan. As part of this, we will also align with the latest trends in CSR, such as the requirements under the Corporate Sustainability Reporting Directive (CSRD) relating to the monitoring of sustainability, integrated reporting and double materiality (assessing impact as well as the financial implications of sustainability risks).

2.4 Education

2.4.1 Profile and policy

As an internationally oriented university, we contribute to the development of solutions for urgent and relevant scientific and social challenges. The power of WUR lies in its potential to combine the expertise of WU with that of the specialised research institutes of WR. This interdisciplinary nature of WU enables us to integrate the efforts and insights from various scientific, social scientific and technical scientific domains. Combining this expertise leads to scientific breakthroughs that can quickly be applied in practice. This multidisciplinary approach is also central to education.

Companies, government agencies and public bodies, social organisations and research institutions can visit the 'Society Based Education' desk that connects the questions to courses for students who are learning to use their academic skills to resolve concrete issues. The Science Shop is available for non-profit organisations.

The education and research is aimed at the domain of healthy food and living environment. The Bachelor's and Master's programme offerings for the more than 13,000 campus students in the 2022-2023 academic year consisted of 13 Dutch-language Bachelor's programmes, 7 English-language Bachelor's programmes and 31 English-language Master's programmes (Appendix 1, Table B1.1).

Three of these study programmes are jointly provided with other institutions of higher education: the Tourism Bachelor's programme (BTO) with Breda University of Applied Sciences (BUAS), the Water Technology Master's programme (MWT) with the University of Groningen, Twente University and

Wetsus in Leeuwarden, and the Master's programme in Metropolitan Analysis, Design and Engineering (MADE) offered jointly with Delft University of Technology under the umbrella of the Amsterdam Institute for Advanced Metropolitan Solutions (AMS).

Three Master's programmes offer an online 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 study programmes which are accredited by the Accreditation Organisation of the Netherlands and Flanders (NVAO) and are publicly funded, WU offers open and online education, such as massive open online courses (MOOCs) and professional online courses. Through Wageningen Academy and the Wageningen Centre for Development Innovation (WCIDI), WUR organises professional online and in-person training programmes and postgraduate courses for professionals in the business community and public or semi-public sector.

Wageningen education is multidisciplinary, sometimes interdisciplinary and transdisciplinary, and the MSc study programmes in particular are strongly international in character, with regard to both 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 and multicultural 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 based on its responsibility for ensuring the quality and study feasibility of the programmes.

In 2018, a start was made on 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 2023. The three important pillars for the development of education are:

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 the study programmes, WU collaborates with (or is a member of) various umbrella and other associations and organisations. Some networks important for education are:

- The four technical universities: Wageningen University, University of Twente, TU Delft and Eindhoven University of Technology (4TU.Federation)
- Comenius network
- Euroleague for Life Sciences (ELLS)
- European Bioeconomy University (EBU)
- Groenpact, the partnership between green education (WO, HBO, MBO), business and government
- Knowledge alliance between Eindhoven University of Technology, WUR, Utrecht University and the University Medical Centre Utrecht (EWUU).

2.4.2 Highlights

Start of BSc Marine Sciences study programme

The new Marine Sciences Bachelor's programme started in September 2023. The students will tackle a range of issues currently relevant to the marine domain. Oceans have a lot to offer, including food, space to generate energy, recreation and transport. Students will be searching for answers to questions such as "how do we properly allocate oceanic space and natural resources". They will be looking for sustainable solutions taking into account the natural environment as well as society, biodiversity, food supply and quality of life. The students will be taking courses on social and natural sciences and will also focus on systems approaches and data science. Cross-border perspectives and approaches are an important part of this international Bachelor's programme. Students will learn to bridge not only the boundaries between disciplines, but also those between culture, science and society.

New assessment policy

In spring 2023, the Executive Board of WU adopted a new assessment policy for education. It replaces the 2017 policy and reflects developments that have taken place within WU since then in the way that assessment is carried out. Improved learning is the common denominator for the various ambitions related to assessment. The ambitions build on current developments within WU and beyond, and the policy document links them to relevant literature and practical examples. The ambitions are:

- To strengthen formative assessment to help students guide their learning process.
- To conduct assessments in more realistic, less standardised settings.
- To conduct assessments in the context of longitudinal development.
- To use digital resources to improve students' learning experience in assessment.
- To make assessment part of our vision of education and ensure that assessment reflects any changes in the provision of education.

A new resit policy was also adopted in 2023. The number of resit opportunities was reduced and the scheduling of resit weeks was changed, giving both students and lecturers a longer, uninterrupted summer break.

EduXchange for students

One of the major objectives of the EWUU alliance (collaboration between TU/e, WUR, UU and UMC Utrecht) is to promote student mobility. One of the ways we are doing this is through the development of eduXchange. EduXchange is an online platform where the EWUU institutions post their courses and share information on their content, level, prerequisite knowledge, language, scheduling and whether they are online or on campus. One of the special features of the platform is that students can also register directly for courses. This registration is done via eduID, a personal identification account for Dutch students that is independent of any educational institution.

Bachelor's skills

Wageningen has the ambition to embed skills education-wide in all its Bachelor's programmes. Most BSc study programmes have defined a skills profile. In the skills profile, a study programme translates the sixteen generic WUR skills into its own programme, with the profile describing the degree of visibility and explicitness of the skills, and the intended final level. Several study programmes have implemented solutions to make their skills learning processes more explicit and visible to students. Students are often guided through a Brightspace course, portfolio tool, reflection activities and sessions. Inspiring examples were shared this autumn at the semi-annual lunch meeting of the programme committees, the Board of Education and ESA, and during Teachers Day.

Lecturer professionalisation

Significant strides have been made in the programmes offered by WUR for lecturer professional development. The University Teaching Qualification (UTQ) has undergone a major revamp and became operational in September.

In addition, the first cohort for the Senior University Teaching Qualification (SUTQ) completed their pathway, out of nine cohorts in total. The SUTQ pathway at WUR is not just a qualification; it is a movement to promote excellence in education and enable lecturers to make a lasting impact.

2.4.3 Results and Success rate

The success rate (study success or diploma attainment) of the Master's programmes after two years is 20% (for the 2021 cohort). In comparison with the previous year, the Master's programme success rate has remained more or less stable after two years, but it is still not at the level of the period before the coronavirus pandemic.

The success rate of the Master's programmes after three years is 68%, which is slightly lower than the previous year (70%). In the Bachelor's programmes, the success rate after three years is 26%, which is more or less comparable with the previous year (27%).

The success rate after four years for the Bachelor's programmes is 67%, which is slightly lower than the previous year (69%).

For the 19th time in a row, WU was elected as the best university in the Netherlands in 2023 (Keuzegids 2024). Sixteen of the nineteen study programmes assessed achieved the title of 'Top programme', three more than last year. In prominent international rankings such as the Times Higher Education, ARWU and QS, WU consistently placed relatively high in 2023 as well, despite some of these rankings not adjusting for the formative scope of an institution. WU's quality comes best to the fore in the subject rankings that differentiate between different fields. In the 'QS World University Ranking by Subject', the university is ranked first for the subject of Agriculture and Forestry and second for Environmental Sciences.

With 'EW Best Studies 2023', 14 study programmes were awarded gold medals. This means that a study programme scores significantly above average for at least eight questions. WUR also received seven silver and 14 bronze medals.

The GreenMetric ranking compares how academic institutions around the world deal with energy, climate, waste, transport, water, biodiversity and infrastructure. It also analyses the sustainability of these institutions' education and research programmes. According to the 2023 GreenMetric ranking of Universitas Indonesia (UI), Wageningen University is again the most sustainable university in the world.

In the field of Open Education, work continued on the open sharing of learning materials. For example, a pilot was launched to create an Open Textbook, to be used in education, and to identify the support needed for this in the organisation. Furthermore, after successful completion of the pilot with SURF's 'Edusources' portal, a licence was concluded. Learning materials that are openly shared in WUR's own portal 'Library for Learning' can also be found in this national portal. It is also possible to offer a WUR collection of open learning materials on Edusources, of which 'Boundary Crossing' is an example. To take the next step as an organisation, the development of policy guidelines for 'Open Educational Resources' began in 2023. This policy will be submitted to the Executive Board for approval in 2024.

2.4.4 Quality assurance in education

Internal

With the help of the course and programme evaluations, lecturers, course coordinators, programme directors, professors holding a chair and Examining Boards provide important information on the quality of education, more specifically on courses and the study programme as a whole, as perceived by students. Digital evaluations are sent, reports are prepared and information is gathered using the 'Programme and Course Evaluations' (PaCE) system.

The average overall satisfaction score of students across all courses (2022-2023) is 3.9 on a scale of 1 to 5, the same as the preceding years. At the course level, 44% of the courses even scored a 4.0 or higher. The response rate to course evaluations was 28% on average again in 2022 over the whole year and remains a major concern. Within this, however, there are large differences between periods (period 1: 34% and period 6: 24%) and between different courses. Due to concerns about declining student response rates, a working group explored options for increasing the response rate. A set of actions was initiated, such as informing students about the importance of the evaluations, informing

lecturers about what they can do and exploring linking the evaluation to ANS, the digital testing programme.

The programme committees (together with the programme directors) wrote an annual report and annual plan again in 2022-2023, in which they reflected on the education provided and the improvements made, and looked ahead to the new academic year. In it they describe their ambitions, innovations and/or improvements. Discussing this annual report is part of the annual visit by each programme committee to the Board of Education. The annual reports show how much time, care and attention has been given to providing good education and continuing to improve and further develop the programmes. In connection with the annual reports and plans, the importance of continuing to organise meetings between the study programme and the professional field advisory and Examining Boards was emphasised once again.

The annual National Student Survey (NSE) was carried out in January 2023. The response rate to the NSE was lower than in the past three years (33%). However, the results remain comparable and show that students are generally very satisfied with their study programme and WU. Of the respondents, a good 82% said they would choose their studies again, based on their experiences. Overall satisfaction and atmosphere at the academy score significantly higher than the national average. The following points for attention emerge from the NSE: preparation for career opportunities, connection with the professional field and the extent to which reflection/multiple perspectives are addressed in the education.

External

In 2023, two existing study programmes were assessed by an external panel to maintain their accreditation. The panel gave a positive recommendation for the BSc Nutrition and Health and the MSc Nutrition and Health. In addition, the new BSc Marine Sciences was given the green light by the NVAO to start in September 2023. The year 2023 saw the start of preparations for a large number of study programme visitations in 2024 as well as preparations for the application for a new BSc Data Science.

2.4.5 Funding

Education at WU is funded by direct government funding for education and research that consists of government funding of €306.6 million plus the proceeds from tuition and course fees of €44.3 million, totalling around €350.9 million.

2.4.6 Students

2.4.6.1 Study counselling, student counselling and student wellbeing

Study counselling

The study advisers provide information and answers to questions concerning the content and organisation of the study. They have a good overview of the structure and content of the study programmes and studying in itself. In principle, every student has contact with a study adviser, who is also the one who can contact a student dean or psychologist for help and support.

A widely supported Service Level Commitment policy was developed for study advice in 2023. This policy describes the responsibilities and service to be provided to students.

Student deans

In 2022, there was a sharp rise of almost 13% in the total number of appointments with the dean's office (from 1747 to 1965). This rise was mainly caused by the increase in student numbers. In 2023, we saw a slight decrease in the total number of appointments: from 1965 in 2022 to 1835 in 2023. The percentage of students making at least one appointment with a dean remained the same (9%). On average, students needed slightly fewer appointments with a dean: from 1.6 in 2022 to 1.5 in 2023. Notable in 2023 was the shift from MSc students to BSc students: more BSc students, also relatively speaking, used the services of the dean's office. In addition, it was notable that relatively few EU students made use of the dean's office. In 2023, 14.5% of Dutch students - and as high as 19.5% of non-EU students - used the dean's office versus 7.5% of EU students. It is important to find

out whether the dean's office is sufficiently visible for EU students. A relatively high number of non-EU students used the dean's office; this mainly involved financial matters.

Student psychological services

Although many students reported dealing with anxiety and depression, we did not see this reflected in the registrations for a consultation with a student psychologist. Registrations have been declining since the coronavirus pandemic, from 1189 in 2021 to 965 in 2022 and 806 in 2023. The number of intakes and the total number of consultations also decreased. However, the total number of walk-in registrations and consultations did increase. For the walk-in service, students can make their own appointment or walk in for a brief consultation with a student psychologist. In particular, the walk-in held at Sports Centre de Bongerd was well attended. We can conclude from this that students have a greater need for an easily accessible facility, and we will further expand this facility in 2024. Another reason for the decline in the number of registrations with the student psychologist was the fact that students can also easily approach a life coach or a peer coach for a consultation. In addition, students can also access a self-help module on the online platform Gezonde Boel. So, the support is more customised. There are also group training sessions given by psychologists. Not only is this efficient, but students can also learn from each other and benefit from the recognition of mental health issues. On the positive side, there was almost no waiting list in 2023 and students who needed to could therefore see a student psychologist fairly quickly. The main reason students reported to a student psychologist in 2023 was stress, relating to both studies and personal circumstances.

Student training & support

Besides consultations with a student dean, student psychologist, life coach or peer coach, WU also pays close attention to preventing mental health issues, dealing with stress and increasing student resilience. The Student Training & Support team organised 55 activities with 1,067 participants in 2023. In addition, the team organises coaching during exam weeks. There is a lot of consultation with study advisers, and students are also on the team as student assistants. Meetings for students with ASD began in 2023, and meetings for gifted students were continued. The Surf Your Stress week was also organised again in 2023, together with student organisations. Many different activities were organised during this week and were attended by more than 1,000 students. They gave the week a rating of 8.1.

Student wellbeing

In 2023, as in 2022, extra attention was paid both nationally and in Wageningen to the issue of student wellbeing. WU participated in the Monitor on Mental Health and Substance Use among Higher Education Students in 2023. Over 13% of WUR students took part in the survey (compared to a national average of 6.5%). On the whole, our students did not differ significantly from the average student, but they did differ when it came to naming climate as a major source of stress: 37% compared to 22% nationally.

On average, Wageningen students awarded a decent score for their lives (6.8). Over two thirds (68%) rated their lives at 7 or higher. At the same time, three quarters rated their own mental health as moderate. Depression and anxiety symptoms were reported by 44% of students. Of students with mental health issues, 62% sought help within or outside the university. Some 31% of students received help within WU (e.g. from a study adviser, dean, psychologist, etc.), with 69% (very) satisfied with the help within WU. Over three quarters of Wageningen students who completed the monitor had drunk alcohol in the month prior to the monitor; as many as 11% drank excessively and 18% heavily. Cannabis was the most commonly used drug according to the monitor; 39% of Wageningen respondents had used it in the past year, 5% of them at least once a week.

(Social) safety

(Social) safety is an important issue for WU. There are several related topics: safety during practicals, safety during field trips, travelling abroad safely and feeling safe on campus. This is about both prevention and a proper reporting structure. Of particular concern here is the issue of social safety off campus especially and between students. In 2023, extra attention was paid to establishing or improving a process around safety, such as a protocol for travelling abroad, and establishing a protocol for handling cases where a lack of social safety is reported. In addition, 2023 saw attention

continue to be paid to prevention through providing online modules on safety, conducting workshops and training sessions and, above all, trying to get people to talk about the topic.

Every study and student organisation has a confidential contact/counsellor for students whose training is funded by WU. WU has outsourced the role of confidential counsellor for students to an external agency, 'Werk in Vertrouwen'. This has the advantage that it ensures real independence. However, there are permanent confidential counsellors and regular consultations with WUR's support structure. The total number of reports to the confidential counsellor for students also showed growth in 2023: from 39 reports in 2022 to 49 in 2023; of these, 32 were from MSc students. The two largest categories on which reports were received were sexual harassment and intimidation.

2023 saw an increase in reports of sexual violence. These were mainly off-campus situations, and there was mostly no clarity regarding consent and whether alcohol was involved. In 2022 and 2023, we saw that the complainant and the defendant were often not from the Netherlands. However, in 2023, the number of defendants from the Netherlands grew significantly. In both 2022 and 2023, the largest group of defendants were students. It is notable, however, that the number of defendants in the lecturer and supervisor camp increased from 13 to 21 in 2023.

Student Career Services

WU considers it important that students can build a career out of their studies. Student Career Services supports students and recent graduates in preparing their CVs and presenting themselves but also in the areas of expectation management and intrinsic motivation. In 2023, some 7,607 students participated in Student Career Services activities, including one-on-one interviews and CV checks. We see that international students in particular request additional support from Student Career Services. There is a WUR Career Platform which lists the events, and employers post their junior positions and internships here. Approximately 8,000 WU students use the platform. Career Week was organised again in 2023. We also conducted a series of workshops for students with disabilities in 2023, in collaboration with the student dean's office and Jops (WUR HR participation jobs).

2.4.6.2 Student services and study climate

Provision of information

Providing good information to students is an important prerequisite for study enjoyment. To a large extent, this is provided by the Student Service Centre (SSC), housed in the Forum building. Students can go there with questions about, say, enrolment, admission, visa, tuition fees, grade lists, graduation and participating in an exchange programme. 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, also taking into account the diversity within the student population. Although more and more services are provided online, there is also an information desk present in the Forum building. A pilot was launched in 2023 to have the information desk partly manned by student assistants. The aim of this is to give students easy access with any questions they may have relating to support, wellbeing and (social) safety.

Since 2021, WU has been using the student portal 'myWURtoday' for communication with students. The student portal is the personalised entry point for 4,000 to 6,000 students per day, giving them an insight into their courses, timetable and study progress. Students can subscribe to news items they are interested in and receive relevant notifications at the time appropriate to the educational process, studying and living on campus. For students, myWURtoday is also the point of access to the student information system Osiris and Brightspace (online learning environment).

Study climate

A good study climate is important for student success, which is why WU has a wide range of student facilities. We also feel it is important for students to have a rich life within and outside of the university, in addition to being active in their study programme. We support a range of extracurricular activities of organisations, such as cultural associations, student associations, study associations and sports associations as well as organisations involved in social responsibility, sustainability, entrepreneurship and skills. In this way, students contribute to a wide range of facilities while gaining experience in organising them.

A broad discussion of the criteria for administrative grants under the Student Financial Support (FOS) regulation started in 2023. The aim of this discussion is to create more space for new initiatives or associations. Whereas previously the basic premise was that every association should be open to all students, the focus is now more on the goal that every student should be able to find a place where the student feels comfortable and can develop.

Study associations signalled in 2023 that they would like to have a place on campus to gather for meetings and drinks. They currently have to use education rooms on campus or external facilities off campus for this purpose. We are talking to students to see what the demand is and how we can meet it.

Introduction days

Feeling at home somewhere is important for the student's wellbeing and therefore for the outcome of their education. An important start is made during the Annual Introduction Days (AID) in August and February. Students also play a crucial role in preparing the orientation weeks for new students. All student organisations contribute to the organisation of events during AID. In 2023, some 2,067 new students participated. Students were supervised by 408 mentors spread across 159 bachelor's groups and 45 master's groups. The AID was supported by 230 crew members. Besides the general programme, 2023 was the first time there was a special programme for participants who only wanted to experience the content-related parts. There were 153 participants for this campus programme. There was also an extra focus on the participation of students with disabilities in 2023. Participation in the AID was discussed with people at senior secondary vocational level; it transpired that there was not enough interest in this.

Attention to diversity

WU values diversity and has launched several initiatives to contribute to an inclusive study environment. Twice a year the rainbow flag is hoisted to let LGBTI+ students and staff know that they are welcome here. We offer workshops to prepare students for the education system, culture shock and working in an international environment. Again in 2023, we organised the 'One World Week': a week of activities aimed at creating understanding between people with different cultural backgrounds, sexual orientations, religions, gender identities and abilities. We also actively contribute to projects aimed at combating racism and discrimination.

Management promise of student associations

Regular talks are held with the major student associations, and a management promise is signed annually. The management covenant includes agreements on preventing undesirable behaviour. This promise was signed again in 2023, when an agreement was made to pay more attention to undesirable and sexually inappropriate behaviour. The student associations themselves have taken the initiative to organise a Wellbeing Week.

Sport

WU also has extensive facilities on campus for athletic students. Wageningen University's Sports Foundation (SWU) Thymos promotes the interests of Wageningen student athletes — individual athletes as well as members of the student sports clubs (SSAs). The Foundation operates according to the 'for students, by students' principle. Sports Centre de Bongerd (SCB) is the sports centre for students and employees of WUR. All students and staff are able to use the SCB at reduced rates. The SCB offers a broad high-quality range of sports and activities in excellent indoor and outdoor facilities.

In 2023, for the first time, more than 7,000 students purchased sports rights; at 7,314, the SCB achieved a rounded percentage of 56%. Among employees, we are well on our way to serving 1,000 out of about 7,600 employees with sports rights. In terms of the facilities available, an additional artificial pitch for korfbal was realised last year, which can also be used for futsal (indoor football).

In a series of interactive sessions with all lecturers, the 'SCB Code of Conduct' protocol was drawn up in collaboration with the Corporate Human Resources Department and SSC.

Student housing

Student housing is not a core task of the university, but it is an important part of the study climate. We have a consortium agreement with Idealis on student accommodation for international students. This agreement makes it possible for our international students pursuing a BSc or MSc study programme to find a room in Wageningen on time. This makes Wageningen unique compared to other student cities. However, it did prove difficult for exchange students to find a room in 2023. We are working with Idealis to try to find a solution to this. In addition, it is not always easy for Dutch students to find a room either, especially at the beginning of the academic year when the demand for a room peaks. It therefore remains important to have good public transport to Wageningen.

2.4.6.3 Student numbers

In 2023 (reference date of 1 October), 1,477 first-year BSc students started. This influx of first-year students (excluding Pre-MSc) increased by 6%. Not only did the number of Dutch students go up (+ 75), but the number of international students did too (+ 14). Given that a limited share of our Bachelor's programmes is taught in English, the number of international BSc students is relatively low. The increase in first-year BSc students is explained by the start of the new BSc Marine Sciences study programme from September 2023, with 90 first-year entrants. Nationally, the enrolment of both Dutch and international BSc first-year students fell slightly.

The intake of first-year MSc students also grew by 6%. This percentage is based on the number of students who started an MSc study programme at WU between 1 September 2023 and 1 October 2023, compared to the numbers in the same period in 2022. Both the intake of Dutch MSc students (+ 62) and the intake of international students (+ 46) increased. The MSc intake consists of students progressing from the BSc at WU to the MSc at WU (internal progression) and students newly starting at WU with an MSc study programme (lateral intake). Internal progression especially increased compared to last year. Nationally, there was also a slight increase in the number of first-year MSc students.

On the reference date 1 October 2023, the percentage of non-Dutch BSc students was 8%: 481 of 5,661 students in total, spread across 62 nationalities. Of these non-Dutch students, the most common nationality was Italian (51), followed by Indonesian (45) and German (44). Seven of the twenty BSc study programmes are taught in English.

Of the MSc students, 40% have non-Dutch nationality: 2,881 of 7,284 students, spread across 102 nationalities. The most common nationalities were Chinese (455), Italian (296), German (266), Indonesian (256) and Greek (241). All the MSc study programmes are taught in English and are provided to Dutch and non-Dutch students together. Among the 112 Pre-MSc students, 34 are of non-Dutch nationality (30%).

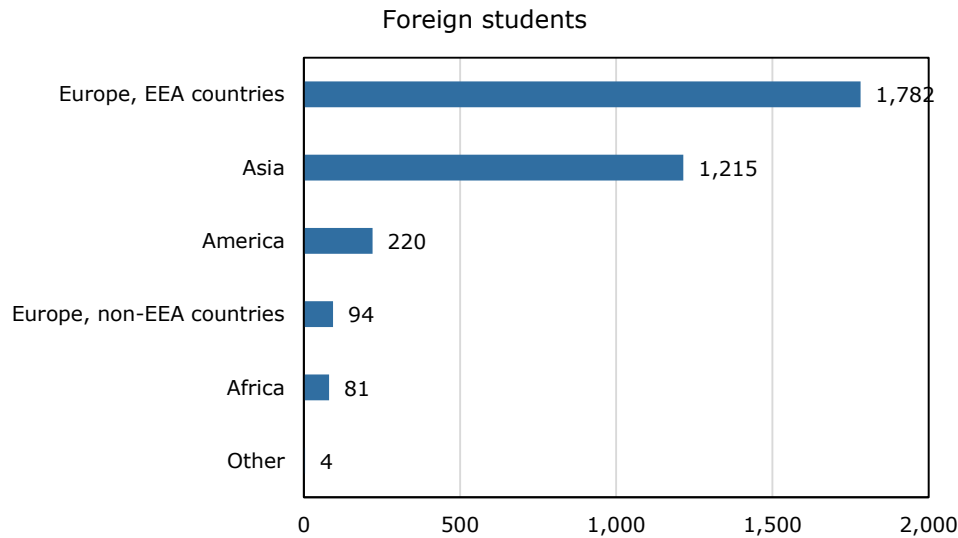


Figure 2.2 Distribution of the 3,396 international students (BSc, MSc and Pre-MSc) at Wageningen University based on nationality, reference date of 1 October 2023. The 'other' category includes Australian and New Zealand students and students whose nationality is unknown. Russian and Turkish students are classified as Europe, non-EEA (source: Osiris).

2.4.6.4 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. In the vast majority of cases, this is six months of study. Incoming students are a welcome addition to the diversity of nationalities in Wageningen and contribute to the international character of our education. The exchange programme also contributes to the success of the ELLS (Euroleague for Life Sciences) network, with around 100 students coming to Wageningen and 142 students going from Wageningen to one of the ELLS partners in the past year.

The EU has allocated an amount of Erasmus+ funds for 2023: €2,333,308. This is €50,000 more than the amount allocated in 2022. 20% of this amount is intended for exchange and internship outside Europe and the rest for exchange and internship within Europe. A further €90,790 was granted for exchange programmes with HUJI (Israel) and the University of British Columbia (Canada).

In 2023-2024, 518 WU students have been nominated for exchange for their studies (reference date of 31/01/2024). That is over 127 fewer than last year, which can be largely explained by students who could not go on an exchange previously due to the coronavirus pandemic making up for lost time in that year. Of the 518 nominated students, 131 have a destination outside Europe; that number is also considerably lower than in the year before.

The number of incoming students in 2023-2024 is 415, which is four more than last year. The incoming students took part in the regular activities organised for them, such as the Annual Introduction Days and activities by student organisations such as ESN and ISOW. Some students choose one of the regular study programmes at WU following their exchange.

The number of scholarships awarded for internships in 2023-2024 is 431, 30% more than the previous year, at an average of €1,900 (reference date of 31/01/2024). Some 38% of these scholarships were granted for a destination outside Europe.

Several new agreements with universities were concluded in order to continue to meet the demand for exchange options in different fields and regions in the coming years. New countries for exchange are Thailand and Taiwan. This brings the total number of agreements to 235.

2.4.6.5 Student participational body

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 (GV) and the Student Council (SR).

The Student Council consists of twelve full-time members from various groups and nationalities. These student members are normally elected for a one-year term by fellow students. No election took place in 2023, as no more students had stood as candidates than the number of seats to be filled on the council. In addition to regular topics, such as the Education and Examination Regulations (EER), important topics for the SR in 2023 were:

- Review of and amendments to the Wageningen University Student Financial Support Regulations (FOS).
- The WUR Social Safety Code of Conduct & Relationships at Work Code.

2.4.6.6 Objections, appeals and complaints

Dispute Advisory Committee

The Dispute Advisory Committee (GAC) received no appeals in 2023.

Examination Appeals Board

In 2023, the WU Examination Appeals Board (CBE) received 57 appeals, 21 of which were directed against a decision not to admit the appellant to an MSc study programme. One appeal was directed against a decision not to admit the appellant to a BSc study programme. Of the remaining appeals, 30 were against a negative binding study advice, two against a grade review, one against a rejection of electives, one against an exam declared inadmissible and one against the non-award of a bonus point.

In 53 cases, the parties agreed on an amicable settlement, or the appellant withdrew the appeal for other reasons, and the CBE consequently did not handle the appeal. In four cases, the CBE ruled after hearing the student and the respondent, with two cases involving an appeal against a negative BSA, one case involving a rejection for an MSc study programme and one involving a grade review. The CBE dismissed all four appeals and declared one appeal 'manifestly inadmissible' due to the late filing of the appeal. In addition, as a result of an appeal dismissed by the CBE in 2022, a student appealed to the Administrative Law Division of the Council of State. This appeal was against the grade conversion of results obtained abroad and was heard orally at a hearing in 2023. The Administrative Law Division ruled in favour of WU in these proceedings.

Student Complaints Committee

WU's Student Complaints Committee received two complaints in 2023. One complaint related to the student wanting to start an internship and ambiguity regarding the internship agreement. The Student Complaints Committee ruled in favour of the student in those proceedings. The other complaint concerned the supervision of the student's thesis. After receiving a detailed explanation relating to the complaint, the student decided to withdraw the complaint.

2.4.6.7 Alumni

The number of Wageningen alumni continues to grow strongly. In the fourth quarter of 2023, the WUR alumni population consisted of 64,150 individuals, about 2,900 more than at the end of 2022. Wageningen's alumni population is relatively young: 38% are 35 years of age or younger. The proportion of international alumni also continues to grow; in 2023, 26.6% of alumni were non-Dutch, an increase of 0.6% from the previous year.

There are four facets to the engagement of these alumni: donations, communication with our supporters, participation in events and volunteering. More about alumni and donations can be found in the 'Wageningen University Fund' section. The communication channels were consolidated in 2023. Online communication – previously divided between two groups and the WUR Connect platform – was

merged in the LinkedIn environment 'alumni@WUR', which grew to almost 16,000 members in 2023. Alumni are also reached through newsletters and Wageningen World, among other things.

To mark WUR's 105th anniversary, the 'Wageningen Experience Day' (WED), the annual alumni event in October, was expanded into a campus-wide experience, welcoming both alumni and employees with their families. A total of about 2,300 participants attended the WED.

Besides the WED, alumni also found their way to our other activities. More than 800 alumni participated in live alumni meetings this year, including regional council meetings, 25th and 50th-year reunions and international meetings (in countries including the United States, Kenya, Switzerland, Germany, Singapore and China).

In 2023, the possibility of collaboration between alumni and WUR as volunteers or partners was explored. This revealed that alumni are keen to contribute to WUR's mission. The linking of alumni to questions from the organisation is therefore playing an increasing role within alumni relations. In 2023, the first projects were launched to see how collaboration between alumni and WUR could be shaped in future years.

2.4.7 Outlook

Formulating a new vision for education is an important issue for 2024. A new vision for WU education for the coming years will be formulated by a working group in close cooperation with internal and external stakeholders. The main points of this vision will become part of the Strategic Plan for WUR, also to be drawn up this year.

WU will continue the implementation of the Quality Agreements in 2024. A plan will also be developed in close coordination with the participational body to flesh out the Quality Agreements in 2025 and beyond.

The implementation of the ambitions and objectives as set out in the 'Vision for Education' will be continued in 2024. This includes the implementation of the skills education offerings for the Bachelor's programmes. Efforts will also continue to address the recommendations from the programme accreditations.

Attention will also be paid to the further development and integration of the "Education Ecosystem"; a cohesive portfolio of campus education, online education and education for professionals in 2024. 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 (continuing education). The development of a new Bachelor's programme in data science will also continue.

Work pressure and the vitality of lecturers and other educational staff are important points of interest when implementing our ambitious plans.

2.5 Research

2.5.1 Policy and Organisation

Wageningen University

Research at Wageningen University (WU) is conducted within 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, i.e. 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; a national graduate school)
- 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 lead organisation).

The WU graduate schools have three core tasks: they coordinate, develop and facilitate the PhD curriculum at WU; they safeguard, monitor and advance the quality and progress of academic research (PhD candidates, postdocs and researchers); and, finally, they encourage and coordinate a cohesive research programme that is in line with the mission of the graduate school.

In addition to the PhD curriculum, WU also recently launched an Engineering Doctorate (EngD) curriculum. This curriculum is coordinated by the Dean of Research Office (DoRO).

Wageningen Research

Most of the research conducted by Wageningen Research (WR) is funded under the TO2 scheme by the Dutch Ministry of Agriculture, Nature and Food Quality (LNV): Knowledge Base Research (KB), Policy Support Research (BO), Statutory Research Tasks (WOT) and research within the top sectors (TS). WR also engages in research in European programmes and bilateral Contract Research.

WR's excellent position in the national and international knowledge ecosystem is largely underpinned by our solid knowledge base. It is very important that we develop this continuously and maintain it. To this end, LNV is also the delegated system administrator for WR as a TO2 institute. The knowledge we are developing now, in our five robust knowledge base programmes, is essential for finding answers in two to four years' time. The knowledge base develops building blocks and expertise that we use in the other knowledge instruments (BO, WOT, TS, EU and Contract Research). We promote cohesiveness, and in turn synergy, between the knowledge base and the other knowledge instruments.

KB funds are spent within the five themes of the knowledge base programmes of the extended 2023-2024 Strategic Plan:

- Circular and climate-neutral
- Food security and the value of water
- Nature-inclusive transitions
- Safe and nutritious food
- Data driven and high tech

The current five programmes were originally set to run until 2022. These programmes have also been extended for two years (2023-2024) due to the extended WUR Strategic Plan. As a follow-up to the main recommendations from the 2021 interim KB review, the following actions were also implemented in 2023 in the different KB programmes:

- All themes use a Theory of Change approach to clarify the intended impact and monitor each project's contribution to it. The core teams monitor this cohesiveness.
- The themes have structural alignment points and shape this relationship within the projects through the following: 1) co-funding, 2) proceeds from the KB WOT contribute directly to the WOT programmes, 3) KB leads are represented in the 'WUR EU Council' and the 'Regional Council' and 4) WR themes have contributed to EU Partnership Developments and Joint Programming and Growth Fund proposals (towards bilateral market).
- WR theme representatives are involved in global networks and activities that lead to agenda-setting, such as by assuming strategic positions in different themes.
- The connection between the Wageningen Modelling Group and KB is secured by liaising in projects, at project leader level and through KB leads / core team.
- In 2023, five PhDs (one PhD per programme) worked on their PhD research: collaborating with events (such as the WIFI conference in June 2023), working together with NWO funding (so that WR can participate in it) and collaborating thematically, in which WU and WR act together in investment themes, WUR-wide initiatives (Microbiome, Food System Transitions, Biodiversity & Food Systems, Wageningen Biodiversity Initiative, health@WUR, etc.) and calls (Wageningen Global Sustainability Programme).
- The extension of the programmes has made the links between themes more visible, e.g. through joint workshops (Synergies & Trade-offs and Living Labs), joint topics (climate & biodiversity and food systems) and joint communication.
- Each programme has part of the budget set aside for co-funding of EU programmes, and prior consideration is given to the projects / EU partnerships that are relevant. However, the rhythm of supply and demand for co-funding makes implementation difficult.
- Core teams are more firmly established in the institutes; each programme organises a kick-off and community days, which are also attended by the KB leaders of the other programmes. We pool the internal and external communication on WR themes, including through a single KB magazine that was issued in early 2023.
- For proper coordination with the institutes, there are frequent consultations between KB leaders and managing directors, both bilaterally and in joint meetings.

The BO is divided into two programmes:

- Sustainable food supply, production chains and nature. This research is similar to the multi-year social innovation programmes (MMIPs), as is the research within the top sectors, which promotes interaction among and integration of results.
- Climate portfolio. Work began in 2023 to shape multi-year programmes for research within the Climate portfolio, with a projected start in 2023.
- Nitrogen programme. Part of the BO research was set up specifically (over multiple years) for the LNV's nitrogen approach.

The implementation of the WOT is divided into seven programmes:

- Infectious Animal Diseases
- Food Safety Policy
- Food Safety Enforcement
- Genetic Resources
- Nature and Environment
- Fishing
- Economic Information

Funding of the WOT programmes is provided through the Ministry of Agriculture, Nature and Food Quality (LNV), with the exception of WOT Food Safety Enforcement which is funded through the Dutch food and consumer product safety authority (NVWA).

Research within the top sectors Agri & Food and Horticulture & Propagation Materials is managed by the Top Consortia for Knowledge and Innovation (TKI) which have been specifically set up to manage these two top sectors. Programming is done on the basis of questions that are formulated in the context of the innovation helix between government, the business community and research institutes. These questions lead to public-private partnerships (PPPs) that are programmed annually through a call based on the Knowledge and Innovation Agenda (KIA) of the Agriculture Water Food theme (2020-2023). Funds are also set aside to co-fund EU projects that fit within the top sector. Additional attention is also paid to disseminating knowledge to specific target groups for selected themes through the 'Kenniss op Maat' (Tailored Knowledge) programme. There is also a programme aimed at international projects through the Seed Money Projects programme.

Investment themes

WUR invests in investment themes as part of the Strategic Plan. These themes primarily focus on knowledge development throughout WUR, for topics that are important to the entire organisation in the longer term, in order to maintain and strengthen WUR's knowledge position. In addition to the WR themes, three investment themes were named within the framework of the 2019-2022 Strategic Plan, which were financed with strategic funds from WU and a small portion of the KB resources from WR. These investment themes were:

- Connected circularity
- Protein transition
- Digital twins

The end of the investment themes was followed by an evaluation in 2023. The evaluation focused on the following aspects: quality, output, impact and the potential for sustainable continuation of the research within the themes. The adoption of the investment themes for WUR was felt to be positive and these themes were found to be important in supporting the complementary relationship between WU and WR. It was recommended that clear milestones and objectives be defined with regard to the expected impact or new competence and that educational aspects be included. It was also advised that the experiences of the coordinators of previous themes be used to prepare the current theme coordinators better. Support with coordinating project management of the themes was also proposed.

As part of the extension of the WUR Strategic Plan, three new investment themes were also launched in 2022 (after having been prepared in 2021), which will continue to the end of 2024. These are specifically:

- Biodiversity-positive food systems
- Transformative bio-economies
- Data-driven discovery in a changing climate

2.5.2 Internationalisation

In order to widen and increase the international portfolio, and properly organise relationship management with parties outside the Netherlands, WUR has regional account managers for Brussels/Europe, Central and Eastern Europe, the Middle East and Northern Africa, Africa, Asia, China, Latin America, North America and Oceania. Within these regions, the account managers focus on the countries or areas that are most relevant for WUR.

EU

Brussels/Europe is important for WUR because many research funds are allocated through the Brussels research and innovation framework programmes. In addition, a lot of policies are developed in Brussels that affect our domain. The Horizon Europe programme that began in January 2021 is of strategic importance to WUR because it contributes to the scientific positioning, collaboration with partners within and outside Europe, network formation and ability to attract talent. This programme offers many opportunities for Wageningen, especially within cluster 6 (Food, Bio-economy, Natural Resources, Agriculture and Environment). In this cluster, WR and WU are number 1 and number 2, respectively, in Europe in terms of both EU contribution and the number of projects having been awarded funding.

In 2023, the WUR Europe Council further developed the relationship management with the Brussels institutions and strengthened the cooperation with LNV towards Brussels in the new European partnerships within Horizon Europe. As part of the UK strategy, there was a further focus on collaboration with funding agencies Innovate UK and Defra in 2023. Steps were taken in 2023 to further reinforce strategic collaboration with Teagasc in Ireland, Aarhus University in Denmark and the Swedish University of Agricultural Sciences (SLU). Together with INRAE, WUR advocated hard for the theme of Food Transition in the Franco-Dutch Pact for Innovation that was signed in Amsterdam on 12 April 2023. In 2023, the annual Mansholt Lecture in Brussels bore the title of 'Nature based approach for Europe'.

Central and Eastern Europe

WUR's strategic collaboration with Central and Eastern Europe (CEE) was successfully consolidated and expanded further in 2023. Several strategic partnerships were concluded, both on a bilateral basis and within EU initiatives, with partners in Romania, Bulgaria, Estonia, Poland, Slovakia and Ukraine, among others. As a leading Life Sciences organisation in Europe, WUR's proactive role in collaborating with the academic world and relevant stakeholders in CEE countries proved to be very influential in increasing the innovation potential in the region. Developing research projects and curricula with universities in CEE countries and other local partners strengthens opportunities for the joint implementation of EU policies (Green Deal) and involvement in European funding programmes. At the same time, there is growing collaboration with partners in CEE countries at the bilateral level, including with governments, academic partners and companies.

Sub-Saharan Africa

In 2023, the Dutch Government published the 2023-2032 Dutch Africa Strategy, focusing on the following objectives: promoting equal economic development, reducing poverty, improving human rights and limiting irregular migration. Africa is a priority for Europe, with a 'Global Gateway Africa-Europe Investment Package'. Part of this package is the initiative to develop a Europe-Africa platform on the theme of food and nutrition security as well as sustainable agriculture, where researchers, providers of finance and users can pool their efforts to achieve more impact. An International Research Consortium (IRC) is being developed by European and African institutions, including WUR. This proposal was approved by the European Commission in 2023. The WUR Sahel Platform supports partner organisations in West Africa in setting up a centre of expertise on the theme of food systems transformation in conflict zones. The work of WUR and its partners in Ethiopia is facilitated from the office of SWR Ethiopia.

Middle East and North Africa (MENA)

In 2023, WUR shifted its focus to the establishment of a MENA platform. WUR aims to strengthen cooperation with regional partners, such as research and government institutions, international organisations and social consultancy firms. The MENA platform will work with partners to develop a research agenda and disseminate results to government agencies and public bodies and NGOs. The MENA platform will specifically target the five focus countries of Morocco, Egypt, Jordan, the United Arab Emirates and Saudi Arabia.

Asia

Since the gradual easing of travel restrictions following the coronavirus pandemic, WUR has seen more incoming delegations from key focus countries in the Asian region, including India, Bangladesh, Japan, South Korea, Indonesia, Malaysia, Nepal and Singapore. WUR has taken part in several high-level outgoing missions to these countries. In coordination with the LNV, WUR is in the process of deepening WUR's presence in Central Asia, with a special focus on Kazakhstan, Uzbekistan and Mongolia.

China

In 2023, WUR introduced a strategic change in its business approach to China. Significant savings for the China Office were made successfully. The China Office will function more as a back office to address problems as they arise.

About half of the more than 400 Chinese PhDs at WUR come from three joint PhD programmes set up with three esteemed Chinese institutions: CAU, CAAS and Tsinghua RIET. It is becoming more and

more challenging to recruit top candidates for the joint PhD programmes, given the increasing competition from other prestigious Chinese universities.

The China Platform (CP) will celebrate its tenth anniversary in 2024. This platform is a good example of how to effectively manage a regional account. It will continue to function as the central hub for information sharing and internal discussions, for which risk assessment remains an important task.

Latin America and the Caribbean

The priority countries in Latin America are Brazil, Colombia and Mexico, followed by Argentina and Chile.

Following a rules harmonisation process for PhD research, a Joint Doctoral Programme was signed in 2023 with the Faculty of Agriculture of the University of Sao Paulo.

WUR, together with the Dutch Research Council (NWO), has taken the initiative to bring together Dutch parties active in the Amazon (universities, NGOs, research institutes, the Ministry of LNV and the Ministry of Foreign Affairs), at least twice a year, in an 'Amazonia Round Table' initiative aimed at improving project coordination.



Regional Manager for Latin America and the Caribbean, Ria Hulsman, was honoured in 2023 with the title of 'Knight in the Order of Rio Branco' by the Brazilian ambassador to the Netherlands.

Based on experience in the Dutch Caribbean, WUR looked at raising the profile of WUR knowledge for Small Island Development States (SIDS) in 2023. WUR expanded its network in the Caribbean with strategic partners such as the Caribbean Agriculture Research and Development Institute (CARDI) and the University of the West Indies (UWI). An agreement with the University of Aruba is currently being prepared with a view to strengthening cooperation in the (Dutch) Caribbean on the themes of Sustainable Tourism and Sustainable Island Solutions for Caribbean Island States.

Canada & USA

The focus for this region in 2023 was on the themes of AgriTech in Greenhouse Horticulture, Protein Transition and AI/Data Science. This will also be the case for 2024.

Canada and the EU have reached an agreement on the admission of Canada to Horizon Europe Pillar 2, which will open up new opportunities for WUR to work with Canadian partners.

WUR has also taken the lead in organising a trade and innovation mission to British Columbia, together with partners and the Dutch Government, on the theme of AgTech Innovation in Greenhouse Horticulture. In June 2023, a WUR delegation participated in a Protein Innovation mission to Calgary (Canada) and Minneapolis (USA).

With the University of Guelph, a joint transdisciplinary and international programme in the field of AI and Data Science for AgriFood was launched.

Oceania

In 2023, work continued on ongoing developments and on maintaining relations with New Zealand.

This included a second visit by the Climate Ambassador, who visited our horticulture/greenhouse location in Bleiswijk together with the New Zealand ambassador. The renewed partnership agreement

with Massey University was also followed up. From 2023, New Zealand is also eligible to participate in the European research and innovation programme Horizon Europe.

Food and Agriculture Organization of the United Nations (FAO)

WUR again participated in the FAO Science and Innovation Forum this year. The Global One Health research programme contributed to the prize fund for the student challenges. The President of the Executive Board served on the jury for the final of the Transformative Research Challenge (TRC). There, the President also announced the physical hub for the Youth Food Lab at WUR on campus and discussions were held about improving the cooperation between FAO and WUR.

Consultative Group for International Agricultural Research (CGIAR) and Foreign Trade and Development Cooperation (BHOS)

Several WUR academics make contributions to the new One CGIAR Initiatives (2022-2024), including, in 2023, a meeting for the Low Emission Food Systems (Mitigate+) initiative and meetings with research partners for the Sustainable Healthy Diets through Food Systems Transformation (SHIFT) initiative in Addis Ababa (Ethiopia), Hanoi (Vietnam) and Wageningen.

Meetings were organised with the Dutch Ministry of Foreign Affairs to exchange knowledge and make efforts more cohesive based on 'coordinated relationship management' in the field of BHOS.

Wageningen Global Sustainability Programme (INREF)

To respond to society's need for more impact in research for development and to contribute to the development of innovative research approaches, WU launched the Interdisciplinary Research and Education Fund (INREF) programme in 2000. The fourth phase of INREF was evaluated by an external committee that presented its findings to the INREF board. On the basis of the evaluation, a proposal was written for the next phase and approved by the Executive Board. The new phase will run from 2024 for six years and has been given a new name: Wageningen Global Sustainability Programme. No fewer than 21 proposals were received in response to a call, with six respondents invited to further develop their proposal. The final selection will take place in 2024. In addition, six new initiatives were stimulated to develop a project with Seed Money.

2.5.3 Quality assurance, results and developments

Quality assurance in research

Every six years an evaluation of the Wageningen graduate schools is carried out in accordance with the Standard Evaluation Protocol (SEP 2021-2027), developed and established by the Royal Netherlands Academy of Arts and Sciences (KNAW), the Netherlands Organisation for Scientific Research (NWO) and the Universities of the Netherlands (UNL).

All Wageningen graduate schools were assessed in accordance with the new SEP (2021-2027) in 2021. The next SEP evaluation will take place in 2027.

An evaluation of the individual WR institutes takes place periodically as part of the agreements between WR, the Ministry of Economic Affairs and Climate Policy and the Ministry of Agriculture, Nature and Food Quality. In accordance with the EMTO protocol, WR as a whole is evaluated once every four years. The 2020 EMTO evaluation and its recommendations have been the basis for the developments of the WR 2022-2025 Strategic Agenda.

Seven WR institutes were audited in 2023. The institutes evaluated were: Wageningen Plant Research, Wageningen Environmental Research, Wageningen Economic Research, Wageningen Centre for Development and Innovation (the latter two institutes together), Wageningen Marine Research, Wageningen Livestock Research and Wageningen Bioveterinary Research (the latter three institutes together). The evaluations were carried out to assess the (inter)national position of the institutes in terms of research quality, economic and social impact of the research, and viability of the organisation in the light of its own mission. In addition to these three criteria, the performance of legal tasks by the institute was also assessed. The assessments help to monitor and improve the overall performance of the WR institutes and the development of long-term strategies. The evaluation reports will be published in 2024.

Academic awards

WUR researchers were awarded ten Veni grants, three Vidi grants and one Vici grant in 2023. This brought the total number of Veni, Vidi and Vici laureates since the start of the innovational incentive in 2002 to 213.

Table 2.8 Academic awards

NWO innovational incentive grants	Grants
Veni	127
Vidi	68
Vici	18
Total	213

One ERC Starting Grant and one ERC Consolidator Grant were awarded to a Wageningen researcher in 2023. Since the ERC Grants were set up by the European Research Council in 2007, eleven ERC Starting Grants and twelve ERC Advanced Grants have been awarded to WUR. The ERC Consolidator Grant was set up in 2013. Eight of these have since been awarded to Wageningen.

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, among other things, by the positive assessments in visitations that have been carried out and by the participation levels of PhD candidates in Europe in the courses offered in Wageningen. By the end of 2023, WUR had 2,440 PhD candidates, with 106 nationalities. PhD candidates are affiliated with the Wageningen graduate schools EPS, WASS, PE&RC, VLAG, WIAS and WIMEK.

Table 2.9 Number of PhD candidates by graduate school

Graduate school	Number of PhD candidates
EPS	233
PE&RC	499
VLAG	543
WASS	498
WIAS	238
WIMEK	450
Total	2,440

There were 359 PhD graduations at WU in 2023. Of the 359 PhD graduations, three were joint graduations, in which a partner university was also involved. In all cases, the graduation ceremony took place in Wageningen. Of the 359 PhD candidates, 187 were women (52%). 243 PhD candidates (68%) had non-Dutch nationality. The percentage of PhD candidates with a successfully completed Training & Supervision Plan (TSP) is 96%, the same as in the previous year. The 2023 figure of 477 PhD programmes started is almost at the same level as the previous two years (461 in 2022, 471 in 2021).

In addition to the PhD candidate group, the first group of Engineering Doctorate (EngD) candidates also started the Post-Master's in Design for Agrifood and Ecological Systems in 2023 (two candidates enrolled at the end of 2022, thirteen enrolled in 2023).

Top sectors

Within the framework of the Knowledge and Innovation Agenda for Agriculture Water Food (LWV), eighty new PPPs were launched by WR in 2023, of which 68 were funded using TO2 subsidies and twelve were given a PPP allowance (Horticulture & Propagation Materials, Agrifood and Water Technology). The business community makes a financial contribution of 50% (in money and in kind) to the PPP projects.

Table 2.10 *New PPPs launched in 2023 and amount for the entire duration*

Textbox	Number of projects	Total amount in € million
TO2 subsidy (WR capacity)	68	37.6
PPP allowance Agrifood	6	3.7
PPS allowance Horticulture & Propagation Materials	4	1.7
PPP allowance Water Technology	2	1.2
Total	80	44.2

From the TO2 subsidy for PPPs, a total of €45.6 million was available for 278 PPPs in 2023. Additionally, €7.9 million was committed to 133 EU co-funding projects at WR. Furthermore, 49 Top Sector projects were carried out within the framework of the 'Kennis op Maat' programme, with a total value of €2.8 million. €0.6 million was available for the 'Seed Money' programme aimed at internationalisation. 15 projects were financed from this. What is more, €1.8 million was used for the coordination and preparation of the 2024-2027 KIA.

Table 2.11 *Use of TO2 subsidy*

Top sectors	Number of projects	WR capacity in 2023 in € million
PPPs	278	45.6
EU co-funding	133	7.9
Kennis op Maat	49	2.8
Seed Money Programme	15	0.6
Coordination and KIA		1.8
Total		58.7

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. WUR is committed to the Open Science ambitions of the 2030 National Plan for Open Science and is working together with other Dutch universities on this. The transition to Open Science, therefore, is a priority area of the WUR 2019-2024 Strategic Plan. Since 2019, WUR has been promoting the Open Science & Education (OSE) programme with a view to making the connection between our research and education and society increasingly part of our standard practice through Open Science principles and approaches. The programme facilitates WUR researchers and lecturers in this and provides support with guidelines, tools, resources and best practices. The WUR OSE programme focuses on four programme lines: Open Access and Open Scholarly Communication, Findable Accessible Interoperable and Reusable (FAIR) Data, Citizen Science and Open Education. There is also a strong link from the programme to developments in Recognition and Rewards.

The independent Open Science Community Wageningen organised monthly lunch sessions in 2023. Various innovative topics and new developments were discussed, such as Open Software for community model development, the importance of standardisation and peer review of code, the application of FAIR by Design principles and Open Science in relation to Recognition and Rewards. In 2023, OpenScience.nl awarded a subsidy to further develop the activities for the community in the coming years.

WUR worked more closely with the other Dutch universities to make Open Science the norm. This resulted in a new UNL Open Science agenda, which was presented in December 2023. The Ministry of OCW is supporting the transition to Open Science through the Open Science NL initiative (part of NWO), established in 2023. The 2024-2025 work programme also became available in December 2023, which is in line with the Open Science agenda of UNL.

Open Access and Open Scholarly Communication

In order to further expand the Open Access availability of scientific publications, WUR implemented a procedure at the end of 2023. This procedure is based on Article 25fa of the Dutch Copyright Act, also known as the 'Taverne Amendment'. It allows sealed short scientific work to be opened in the WUR repository by default after six months of embargo, unless an author blocks an individual publication from being opened. In 2023, more than 600 referenced articles and over 150 book chapters and conference proceedings became eligible for the procedure. The percentage of referenced Open Access articles of WUR corresponding authors increased to 94% in 2023.

A lot of attention was paid in 2023 to the quality of scientific (Open Access) journals, in particular those that are located in the grey area between high-quality and blatantly fraudulent. WUR employees have expressed their concerns about the rapid emergence of new OA journals in this grey area, the quality assurance of the peer review process by publishers and the increasing pressure on the scientific publication system.

FAIR Data

In 2023, important steps were taken in the infrastructure, organisation and support of FAIR data. Yoda, a data management platform, is increasingly used by researchers from WUR, where up to 1,000 active users currently store their data. The Yoda support team successfully engaged an application administrator to support and further develop the Yoda service. The first cohort of data stewards completed their knowledge sessions in research data management, and the first steps were taken to define the training needs for data stewards in the future. The growth of data stewardship coordination within the sciences groups continued, assisted by an NWO subsidy, awarded to the WDCC. The subsidy is being used to appoint a coordinating data steward at the Social Sciences Group for a period of two years.

Citizen Science

The WUR Citizen Science Hub set up in 2022 exchanges experiences and best practices in Citizen Science. From this hub, an active Community of Practice has emerged that met several times in 2023 to discuss different themes. The membership grew in 2023 to 150. The MOOC 'Transformative Citizen Science for Sustainability', launched in 2022, was widely used in 2023. WUR also became more active in the Dutch and European Citizen Science networks in 2023.

2.5.4 Outlook

The quality of our research is high, and that applies to both WU and WR. The evaluation of WR in 2020 and the peer review of WU in 2021 confirm this. In 2023, the investments made under the coalition agreement led to good progress with the implementation of the Natural Science and Technology sector plans and with the start of the start-up grants for assistant professors who are to be given tenure. It is expected that the number of permanent academic positions at WU will increase by about eighty FTEs. This will give a boost to research and education in the years to come in domains that are important to WUR.

A number of applications for funding for facilities were approved with a view to strengthening the research infrastructure at WR. We will install these in 2024. Through this, and with investment rounds in the coming years, we can renew our research infrastructure and provide it with a firmer foundation.

WUR also receives funds through the National Growth Fund to work on sustainable economic development in the Netherlands in collaboration with private and public parties. Programmes that are important to WUR, such as NL2120, Rege-NL and NextGen HighTech, will start in 2024.

The four-year evaluation of WR will also take place in 2024. The institute evaluations conducted in recent years were positive about the research carried out by our institutes. We are therefore confident about the WR evaluation.

WUR's point of departure to help solve a number of very important social challenges that lie at the heart of WUR's expertise is therefore good. These include the sustainable production of food and bio-based raw materials for a circular economy, issues of climate adaptation and the use of space, and the

nitrogen issue in the Netherlands. These tasks remain of great importance, and WUR is a knowledge partner for government agencies and public bodies and industry in this respect.

However, there are also uncertainties in the domain in which WUR operates. The formation of a new cabinet has not yet been completed, and it is not clear what the cabinet's ambitions for higher education and research will be. It is also unclear how the cabinet will deal with questions relating to nitrogen, the climate, nature and water & soil quality. The future shape of the mission-driven innovation policy and the National Growth Fund is also uncertain.

Outside the Netherlands too, geopolitical developments are requiring us to reflect on matters such as knowledge security and international cooperation. In the context of the development of the new WUR Strategic Plan, a research strategy is therefore being developed that focuses on these aspects among others.

2.6 Impact

Due to our international position as a leading research institution in the field of healthy food and living environment, we have a great 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 added value (impact) through application.

Society is increasingly demanding answers to questions regarding the legitimacy of public spending in the area of research and the translation of academic insights 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 social organisations with WUR playing a central role. Creating impact together is and also remains the central message of the WUR 2019-2024 Strategic Plan (SP) 'Finding Answers Together', including the extension. Important matters in 2023 are the award of funding for a number of new research facilities from the TO2 budget, the first edition of the new SummerVibes campus festival, the start of the Delta Climate Center and the growing volume of funds through the foundation Universiteitsfonds Wageningen (UFW).

The initiatives concerning value creation under the SP were further strengthened, such as encouraging an entrepreneurial attitude among our employees through the second wave of the 'Joint Value Creation' training course for senior business developers and programme managers. Inspiring stories about the impact realised in society can be accessed via the impact stories. Making an impact is an important part of the DNA of WUR students and employees.

2.6.1 Collaboration, tech transfer and co-creation with partners

Our knowledge makes a significant contribution to innovation and progress in society. Our impact is not only made by transferring knowledge and technology through various forms of intellectual property rights, licences and spin-offs; forms of collaboration such as contract research and Public-Private Partnerships (PPPs) are especially important for this. In the process, WUR works with businesses, government agencies and public bodies, 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

WUR carried out many publicly and privately funded projects and programmes at the European and national level in 2023, including for the benefit of the national government's Knowledge and Innovation Agendas. WUR is involved in all agendas, but the main focus is on Agriculture, Water and Food in collaboration with the Agri & Food and Horticulture & Propagation Materials top sectors. In early 2023, several applications were submitted for the National Growth Fund (NGF), together with other stakeholders. WUR was leading Economically-Powered Protein Transition through Innovation in

Chains (EPPIC) and T3NL, and had a major role in Biobased Circular, the Valorisation Delta Plan, Holomicrobiome, PreventiePromotor and Re-Ge-NL. WUR is also involved in a few other applications. Funding has been awarded for Re-GE-NL, partial funding has been awarded for Biobased Circular and the remaining budget has been reserved. The budgets have also been reserved for the Centre for Animal-Free Biomedical Translation, the Valorisation Delta Plan and Holomicrobiome. This means that while these consortia need to develop new proposals, the NGF's advisory committee does find them interesting concepts.

Besides PPP collaborations, WUR also works intensively together in the context of EWUU and 4TU to strengthen collaboration between universities.

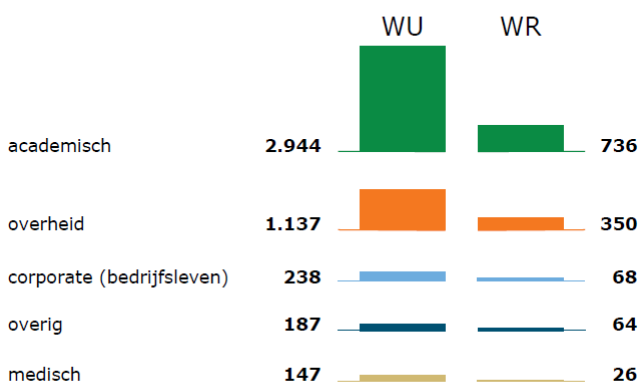
The turnover in bilateral research with the business community is a measure of the contribution of WUR to the innovative capacity of businesses. WU's contract research (including top sector contribution), funded by the business community, amounted to €16.1 million in 2023, compared to €17.0 million in 2022. WR's turnover from contract research by the business community (including top sector contribution) amounted to €62.2 million in 2023, compared to €61.4 million in 2022. See also Table B2.14 in Appendix 2.

The turnover from EU grant programmes is a measure of the contribution of WUR to co-creation on international social challenges. WU's turnover from EU subsidies, at €27.5 million in 2023, was higher than in 2022 (€20.5 million) for the fourth year in a row. WR's turnover from EU grant programmes also increased to €27.7 million in 2023, compared to €22.5 million in 2022. 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. The number of co-publications appears to be stabilising (Table B2.16 in Appendix 2). Figure 2.3 shows that the primary share of the nearly 3,600 co-publications are prepared with others in academia, roughly one third are prepared with government agencies and public bodies and around 8% with the business community. It is worth noting that the number of medical co-publications grew to 5% in 2023.

Co-publicaties 2023

Aantal gezamenlijke publicaties (co-authored publications) van Wageningen University & Research met partners binnen en buiten de academische wereld, wereldwijd



bron: Scopus, Elsevier B.V. All rights reserved. SciVal ©

Figure 2.3 Number of WUR co-publications with partners in 2023

2.6.1.2 Knowledge transfer and innovative capacity

WUR strives to maximise impact creation by making strategic use of intellectual property. The primary reason for recording intellectual property is to disseminate knowledge widely, thereby encouraging the business community and other stakeholders to develop innovative products, services and processes. By granting licences, WUR expands society's innovative capacity and increases its impact and contribution to society.

In 2023, 86 new inventions were identified within WUR and active support was given to the valorisation of 50 of these inventions. Patent protection was explored (IDF) 22 times, and a total of 11 new patent applications were submitted, of which 7 by WU and 5 by WR (see Table B2.4 in Appendix 2).

WUR has 126 active patent families in its portfolio, with a total of 68 granted licences for patents, species, models or materials. Of these licences, 48 were issued by WU and 28 by WR. To bridge the gap between technological development and actual application or commercialisation, WUR assists researchers with (attracting) Proof of Concept funding. A total of €400,000 has been realised, bringing 11 innovation projects a step closer to the market.

2.6.1.3 Knowledge for government policy, laws and regulations

An important part of the research conducted at WR institutes is commissioned by the Dutch and EU government. We carry out statutory research tasks in the areas of infectious animal diseases, food safety, economic information, fisheries management, genetic resources and nature. Our policy-supporting and scientific research forms the basis for government policies, laws and regulations in our domain aimed at protecting the health of people and animals, promoting exports and preserving vibrant nature. Through these statutory research tasks, the policy-supporting research and the PPP research, we make a concrete contribution to society. In 2023, the knowledge was made available through KennisOnline, with the help of newsletters and the KennisOnline Magazine. In 2023, numerous reports by WR were discussed by the Dutch House of Representatives, such as The Perspective of Organic Farming report, the Scenario Study in the Context of the NPLG, and the Impact of Applying Diluted Slurry to Sandy Soil report.

For a number of years now, the TO2 magazine has been published annually. In this magazine, the joint TO2 institutes show how research has an impact on society. The WUR examples in the 2023 version include the improvement of seed in Africa, the 'Water and Soil Guiding' principle for designing and organising the Netherlands, the reduction of peat degradation by water logging and the possibilities of bio-based construction.

2.6.1.4 Customer satisfaction

The Ministry of Economic Affairs and Climate Policy (EZK) has promised to submit a summary of customer satisfaction and knowledge utilisation for all five TO2 institutes to the House of Representatives. In 2023, just as in the previous years, WR clients were very satisfied. WR scored an 8.8 for customer satisfaction and almost 93% of respondents deemed the research to be useful in 2023 (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 and the acceleration of social transitions. Stimulating innovation and entrepreneurship and supporting start-ups are therefore important components of value creation for WUR. WUR encourages entrepreneurship among students and supports the founding of start-ups. If these start-ups grow, they will have the opportunity to establish a location on Wageningen Campus. Employees and start-ups outside of Wageningen are also welcome to use their knowledge for a business in the agri-food domain. We want to serve the whole chain from within WUR: from encouraging and inspiring students to linking investment funds for scale-ups.

2.6.2.1 Entrepreneurial education

With its regular course programme, WU offers a wide selection of education programmes that support enterprising students at all stages of their education. The introduction of a continuous learning trajectory 'Entrepreneurial Skills' was launched and, as a result, more and more Wageningen students are introduced to entrepreneurial skills in Bachelor's education. In the 2022-2023 academic year, 27 courses were given that were fully or partially focused on entrepreneurship and/or innovation for BSc and MSc students, and PhD candidates, reaching around 900 (non-unique) students. The number of students in the BSc minor and Master's track has proven to be fairly stable. However, more

students have come into contact with entrepreneurship modules in programme-specific courses, in which a module on entrepreneurship and innovation is included and integrated into the curriculum.

If we look at the number of (non-unique) students who actively opt for an entrepreneurship course (in other words, outside the standard curriculum of their study programme), we see an increase to over 750 students in this academic year (for more details on the number of core subjects, see Table B2.2 in Appendix 2).

The intake of students from BSc and MSc education for extracurricular follow-up activities has remained stable, and the choice of activities has also been widened, especially from within WUR Student Challenges. More than 600 unique students participated in extracurricular entrepreneurship education through StartHub; this is comparable with previous years. StartHub has about 350 active (student) members, 80 of whom joined in 2022-2023. There are several students who have started a business from within the various education programmes, such as Aeroponics with an entrepreneurship internship in business development, in collaboration with the Agronomy programme, Sproutfull (Entrepreneurship Master's track) and Afterlife (winner of WUR Student Challenges).

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 extracurricular courses generate student interest. Guidance when actually starting up provides support during proposition development and, in turn, yields career prospects as a product and/or business developer. StartHub works with an active student office and external partners who act as mentors and experts for the student start-ups.

The incubator organised a total of 40 practical workshops on entrepreneurship as part of the StartHub programme in 2023. The number of intake interviews conducted was 27. With the opening of the Centre for Unusual Collaborations (Cuco) Nest Wageningen, the target group was expanded to include participants from CuCo who pursue training and workshops and use the facilities of StartHub and FabLab.

The connection between enterprising sustainability projects from within Enactus and the student office of StartHub was strengthened, and joint events and workshops were organised (e.g. the 'Grape to Glass' workshop on sustainable wine cultivation). StartHub is also used for the student initiative 'De Kleine Consultant', which organises its meetings and consultations in StartHub. The number of teams coached by StartHub remains stable (incoming and outgoing numbers are about the same) and is approximately 40 initiatives. Five student start-ups have registered a company with the Chamber of Commerce and two companies have ceased operations. StartHub accommodated 20 start-ups in flex offices and seven in full offices in 2023, bringing occupancy close to full capacity.

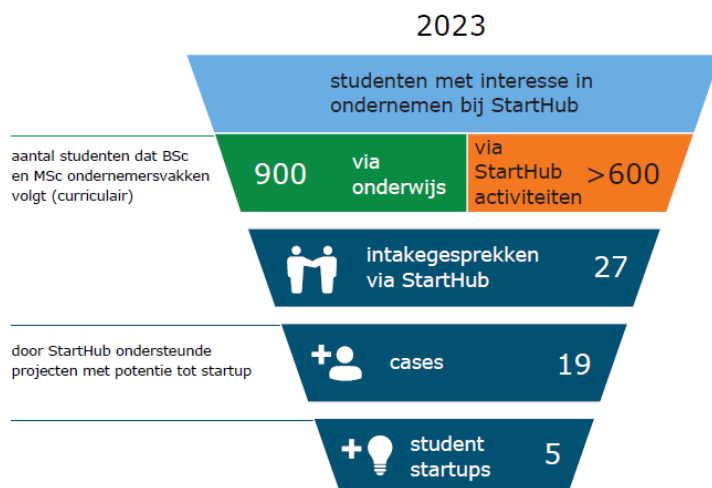


Figure 2.4 Education and incubator programmes for entrepreneurship for WU students

2.6.2.3 StartLife

StartLife is one of Europe’s leading and longest-running agri-food technology start-up accelerators. The mission is to help those start-ups that contribute to making the global food system more sustainable to excel and accelerate. The accelerator offers start-ups 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 since its inception in 2010 to more than 400 agri-food technology start-ups, which have raised more than €400 million in follow-up capital and created more than 1,500 new jobs thus far.

In 2023, 37 start-ups were launched through the StartLife programmes ‘Accelerate’ and ‘A la Carte’. They gave the support from StartLife a score of 9/10.

Rabobank, Anterra Capital, Invest NL, Foodvalley, StartLife and WUR organised the eighth F&A Next at Omnia on Wageningen Campus. F&A Next is Europe’s largest innovation summit in the field of the future of food and agriculture where companies, investors, start-ups/scale-ups and academia come together to network, inspire each other and accelerate innovations in the agri-food domain. The 737 participants from 35 countries gave the event a rating of 4 out of 5.

2.6.2.4 Spin-offs

Spin-off companies play a crucial role in generating social impact. Since 1995, WUR has produced 43 spin-off companies and more than 70 start-ups (or 113 academic start-ups). In 2023, NanoMoi and Plense Technologies were established to further develop WUR intellectual property into products and services with a social impact. By investing in the start-up accelerator StartLife and the start-up ecosystem in Wageningen, WUR has not only increased the impact of academic spin-offs, but also significantly influenced national business activities.

Spin-offs

Wageningen University
Wageningen Research



Spin-off: een bedrijf opgericht t.b.v. ontwikkeling of exploitatie van WUR IP met formele contractuele afspraken voor het gebruik van dit IP.

Figure 2.5 Timeline of WU and WR spin-offs

The Thematic Technology Transfer Circular Technology (TTT-CT) programme led by WUR is a collaboration within 4TU and with TNO, forming the investment fund SHIFT Invest. TTT-CT brought three spin-offs (MuTech, Astrape and Scope Biosciences) to the investor-ready level for SHIFT Invest in 2023. Several other spin-offs have been taken up by other investment funds. Intensified collaboration was also sought in 2023 with all six ongoing TTT programmes, in which WUR consistently participates. The National Growth Fund proposal ‘Valorisation Delta Plan’ was granted conditionally and resubmitted in 2023.

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 less closely connected to WUR. Making our knowledge and knowledge infrastructure accessible to professional learners, businesses, citizens and social organisations is an important part of the value creation by WUR.

2.6.3.1 Sharing scientific knowledge beyond the academic world

WUR not only shares its scientific output in scientific journals, 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 digital/social media. Knowledge is made available to people outside the academic world via Kennis Online, Groen Kennisnet and a large number of websites and newsletters, often aimed at specific target groups. The WUR website provides various theme-focused publications. This enables a larger group of potential users of this new knowledge to be reached. The total number of publications for professionals and the general public increased in 2023, but this is within the annual fluctuation: approximately 900 for WU and over 1,300 for WR (Table B2.17 in Appendix 2). Citizen Science also received more attention within WUR in 2023 (see also 2.5.3).

2.6.3.2 Applicable knowledge for SMEs

The agri-food sector consists largely of SMEs. WUR works closely with them in all kinds of research projects. The top sectors and the Ministry of LNV help, via the 'Kennis op Maat' programme, to release available knowledge in such a way that it offers a concrete action perspective for SMEs. There are more than 50 projects currently ongoing at WR. WUR's contract research for SMEs amounts to just €20 million per year (as opposed to almost €30 million in 2018). Questions from SMEs are also addressed within 'Society Based Learning', the practical networks for WR's regional locations, and in the collaboration with the HBO institutions. 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 agencies and public bodies, WUR is also active in science communication in interaction with society. Our organisation is at the cutting edge when it comes to addressing substantial, modern-day social themes which pose major challenges to the world and elicit a wide range of opinions. WUR aims to make the dilemmas and trade-offs of different solutions visible and open them up for discussion. A good example from 2023 is the report by a group of Wageningen researchers, who identified six dilemmas that are in part decisive for the future of agriculture and nature in the Netherlands.

WUR employees, students and stakeholders are encouraged to discuss this through 'Wageningen Dialogues'. In 2023, different types of dialogues were organised and supported, with more than 1,200 visitors, of whom approximately 30% were external. Work was also done to further strengthen dialogue skills, and more than 400 colleagues, students and professionals participated in newly developed workshops for dialogue and facilitation skills. In addition, this year a pool of facilitators was set up, consisting of around 30 colleagues and experienced students, who can help shape and guide dialogues.

In 2023, the focus was on both internal dialogues and the dialogue with society and partners. The 'Let's Explore' series of dialogues were intended for topics that were to be explored internally WUR-wide, such as cooperation with the fossil fuel industry. Dialogues within ongoing programmes helped to acquire new connections, insights and possible collaborations, for example on 'Framing in the Food Debate' and on nature-inclusive education.

2.6.3.4 Courses and study programmes for professionals

In a rapidly changing society, we, as an educational institution, want to provide opportunities for not only our students but also alumni and other professionals to respond accordingly. Accessibility of knowledge through various forms of education contributes to this.

For Wageningen Academy, the year 2023 was dedicated to further developing and securing new ways of working. Administrative processes were adapted further to allow for more automated registration and invoicing. A system for answering questions from participants and interested parties, which is also used by other divisions of WUR, is now being used successfully. This provides customers with faster and better help. The use of course managers, responsible for re-runs, has freed up time and space for programme managers to develop more new courses that are in line with WUR's strategic themes and meet external learning needs.

The MOOC portfolio was transferred from the Educational Support Centre (now TLC) to Wageningen Academy, followed by an impact and financial analysis within the context of continuing the contract with EdX/2U as a platform.

The STAP budget that was introduced nationwide in 2022 was reduced in 2023. Within Wageningen Academy, 37 participants have been able to use this budget for one of the courses offered. In 2023, Wageningen Academy continued to develop and issue micro-credentials. This led to the recognition of 29 courses for a micro-credential. A large proportion of these microcredentials are part of the online Master's programmes Plant Breeding and Food Technology. Individual courses of these study programmes can now easily be followed by professionals through Wageningen Academy, without having to complete the full curriculum.

The Board of Continuing Education, installed in 2022, met four times. Topics discussed include MOOCs, LLO catalyst, WA-WCDI collaboration, General Terms and Conditions, and Continuing Education in the educational vision and the strategic plan.

The collaboration between Wageningen Academy, TLC's Lifelong Learning Creation team (formerly Open & Online Education) and the Marketing Continuing Education team was placed on a better footing in 2023 through the description of the realisation of a course in a detailed Plan-Do-Check-Act cycle, with all activities and stakeholders elaborated for each phase.

Wageningen Academy provided 53 open-enrolment courses for 938 participants in 2023. Eight tailor-made courses were developed and provided to 259 students for companies. Wageningen Academy's offerings also include various summer and winter schools, with the latter being largely offered online.

In addition, WUR now offers 49 MOOCs on edX and there are 3 Micro-Master's programmes, in which participants combine 3 MOOCs with a concluding capstone project. In 2023, 87,489 participants followed an MOOC.

2.6.3.5 Society Based Education

Businesses, government agencies and public bodies and research institutes can receive support through the Society Based Education, which links issues in society with courses in our curriculum. Through 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 2023, this involved 228 projects for small and medium-sized businesses, start-ups, PPP consortia, the government and social organisations. A total of 1,608 BSc and MSc students and 444 employees (WU and WR) were involved (see Table B2.10 in Appendix 2).

2.6.3.6 Collaboration with secondary, green and primary education

With the assistance of PPPs, WUR provides a major contribution to lessons on nutrition and food in primary education.

Together with researchers, the Wageningen University Science Hub (WKWU), the Smaaklessen (Taste Lessons) and EU School Fruit support centre, and Wageningen Pre-University developed lesson materials and activities for primary and secondary education. Through this, WUR contributes to socially relevant, challenging and attractive education, while also improving the quality of incoming students. In the year under review, the Science Hub offered 30 teaching products, introducing more than 900 teachers and over 12,500 children in primary education to themes and research from WUR. In 2023, the Smaaklessen support centre reached more than 21,000 teachers and over 250,000 primary school pupils with the Smaaklessen teaching programme. The EU School Fruit programme reached nearly 500,000 students and more than 23,000 teachers. Wageningen Pre-

University reached 1,100 teachers through courses, workshops and teacher development teams with 50 lesson products. The Youth Institute challenges secondary school students to look for solutions to one of the biggest challenges we face in the world: “How do we feed the world in a fair, sustainable and healthy way in 2050 when the global population rises to 10 billion?” The Youth Institute reached 250 secondary education students in 2023 (see Table B2.11 in Appendix 2).

WUR also participates in Groenpact — the partnership for green education. Groenpact encourages the exchange of knowledge in the green education system via programmes such as ‘Groen Kennisnet’. WR capacity is also connected to the SIA-NPRO programme ‘Food and Green’.

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 applicant(s). The Science Shop completed 14 projects in 2023, in which 30 WUR employees, 128 Bachelor’s and Master’s students, and 45 external stakeholders were involved (See Table B2.9 in Appendix 2). In 2023, the Science Shop produced 1 scientific publication, 7 reports, 3 brochures, 3 fact sheets, 35 presentations and 1 dialogue.

2.6.3.8 Wageningen in the region

WUR works globally and is also well embedded in its own region. We participate in many regional networks such as Foodvalley, Regio Foodvalley, World Food Experience and the Stadsagenda of the Municipality of Wageningen, which was renewed in 2023. There was a lot of collaboration with the various provinces and regions regarding the nitrogen dossier in 2023, such as concrete projects relating to the processing of manure in various locations in the Netherlands. The Delta Climate Center in Vlissingen was launched, which will engage with partners in Zeeland in research, education and value creation on delta themes.

2.6.4 Wageningen Campus, Ecosystem & Facilities

WUR is working on the further development of the Wageningen Campus ecosystem. More specifically, this relates to increasing the number of parties on the campus and increasing the diversity among parties within the ecosystem (campus acquisition), the interaction within the campus ecosystem (local buzz/campus community), and the expansion and optimal use of research facilities at WUR/Wageningen Campus (Shared Research Facilities, SRF). These matters have a close relationship with the physical aspects of the further development of Wageningen Campus, for which we therefore collaborate with the municipalities of Wageningen and Ede.

2.6.4.1 Campus acquisition

Acquisition of potential new campus organisations has a reactive component, namely processing location requests submitted by parties to WUR. This happens frequently; in 2023 too, demand remained as high as before. Organisations who are interested either raise this with the WUR researchers they work with, contact the campus team directly themselves or find their way to WUR via various collaboration partners, such as OostNL, NFIA, the BSPW, Foodvalley, WFCE or individual property owners. These organisations are assessed as to whether they fit the campus ecosystem using the location criteria drawn up by WUR. We focus on knowledge-intensive organisations within our domain that explicitly seek collaboration within the ecosystem. Strategic, proactive acquisition is also being used to interest certain (types of) organisations that are underrepresented in the current campus community and that could have clear added value for the ecosystem and the realisation of the desired transitions in WUR’s domain in establishing themselves on the campus.

Together with stakeholders, such as the municipalities of Wageningen and Ede, the province of Gelderland and organisations such as Foodvalley and OostNL, we are working to create an attractive business climate in the region. In 2023, there was a slightly decreasing number of active leads compared to previous years. Nevertheless, at the end of 2023, the Plus Ultra II business hub was

almost entirely rented out. New organisations established offices here, and some that were already established expanded their premises to include laboratories and other research facilities. New organisations also moved into the Wageningen Business & Science Park, also part of Wageningen Campus. In total, the Wageningen Campus ecosystem became home to 15 new organisations in 2023, bringing the total number of innovative organisations now located there to around 230.

2.6.4.2 Wageningen Campus Ecosystem

The Wageningen Campus ecosystem is now an established concept with a clear image. Important elements for keeping this ecosystem interactive and vibrant are excellent education and research, valorisation activities, quality and talent, entrepreneurship and start-ups (including through StartHub and StartLife), various communications and organised events (see 2.6.4.3). Interaction within the Wageningen Campus Ecosystem (including the Business & Science Park Wageningen (BSPW) and other regional parties) will lead to greater collaboration on and near the campus and to increased economic activity in the region.

2.6.4.3 Wageningen Campus community & local buzz

Since the coronavirus pandemic, a lot of work is still done at home, making it extra challenging to get people physically to meetings on campus. Meeting in person contributes to a thriving ecosystem. Fortunately, there was a lot of interest among campus-based organisations and their employees in participating in the second edition of the Wageningen Campus Expedition. Besides various WUR facilities, a dozen other organisations opened their doors for a presentation, tour and/or mutual interaction. Together with Student Career Services, we organised a version for students. This was also successful, so both will be repeated in 2024. Other recurring events include the Campus Connect cafés organised around a concrete theme such as 'Sustainability challenges on Campus', 'Female founders embrace global ambitions' and 'Sharing is the Future'. As a result of the Campus Connect Cafés, but also on the basis of discussions with the organisations based on campus, numerous 'matchmaking activities' were undertaken by the campus team, with researchers from different organisations being introduced to each other.

In 2023, we started the 'DocuScience' series in Omnia, where visitors talk to each other. In addition, several cultural events and exhibitions took place. The lunch concerts were very well attended, as was the first edition of the music festival SummerVibes. Cultural events are an important addition to campus life. In 2023, 30 news items were shared on the Wageningen Campus website, five e-newsletters were sent and a pilot for a Wageningen Campus LinkedIn page was launched.

2.6.4.4 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. The 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 each other. This is often the basis for further collaboration in research projects and actively contributes to the strength of the Wageningen Campus ecosystem.

Major investments in 2023 were four Bioreactors, a Single-Crystal XRD and an extension to the Compound Extruder. In addition, the festive opening of the update and expansion of Annuna, the High Performance Computing Cluster (HPC), took place. In 2023, the WUR 'Internal Roadmap' for research facilities became embedded in the SRF process.

This roadmap lists and prioritises all ideas for new WUR research facilities, following a clear process of decision-making in order to move from the concept to the realisation of a facility. In 2023, the Roadmap proved its added value for selecting and developing the proposals that were finally submitted for the 2023 round of the fund for Facilities for Applied Research (FTO) and for the proposals that could also be submitted as 'Strategic Agenda' proposals. The result was quite something. In 2023, the Ministry of Economic Affairs (EZK) awarded around 40 million euros from the

first round of funding of the Facilities for Applied Research (FTO) scheme to four proposals from Wageningen Research for high-quality and future-proof research facilities.

SRF's search engine for devices, SEARCH, provides access to 412 devices, of which 205 are also accessible to external parties and 75 devices have been invested in by SRF (68 of these are still owned by SRF). Of the 412 devices, 8 are owned by an external party (Unilever, MARIN) and 6 are located outside of WUR. The average occupancy of the SRF equipment portfolio (part of WUR's total portfolio) was approximately 80% in 2023, of which 12% was by users outside of WUR, and the number of unique external organisations that used SRF equipment in 2023 was 65 (see Table B2.12 Appendix 2). The equipment was also widely used in research projects of WUR for external parties. The number of devices, which can be reserved via SRF's reservation system, increased to 629 in 2023. We worked on improving the Booking reservation tool in 2023, which, in conjunction with shared equipment use, is offered by SRF to WUR researchers and third parties. The launch of the new version of Booking is scheduled to take place in April 2024. The €7 million 'RegioDeal Foodvalley' subsidy, which started in 2020 for investments in shared research equipment and runs for five years, has resulted in over €4.3 million being invested in advanced shared equipment thus far.

2.6.4.5 Physical aspects of campus development

The year 2023 was an unusual year in campus development, with special construction projects under preparation but little work actually underway. It was also the year that many employees came to work in the office more often and students were able to return to education entirely in person. It was a good year for further shaping the sustainable mobility policy and the transition to sustainable energy use.

The recent opening of Aurora on the western periphery and Omnia on the eastern periphery means that the full breadth of the campus is experienced and a lunch stroll can now take longer than the average lunch break. There is also the Mansholtlaan crossing and, for Campus East, the first talks are ongoing with potential investors and companies that want to settle here. The first building is expected to be the Idealis student accommodation in the southern tip, near restaurant 't Gesprek, for which a construction consortium has now been selected.

The latter also applies to the construction of Plus Ultra III, where the first construction works can be expected in the first half of 2024. Later in the year, the new WUR-wide research building will follow at Axis, as will the process hall for Food Technology, also at Axis.

In relation to zoning plans, steps have been taken by adopting an adapted Noise Zoning Plan for Wageningen Campus and correcting the Outdoor Zoning Plan for the northern periphery of the campus. Also, the zoning at the BSPW is being consolidated within an updated zoning plan, which may be followed up for the settlement options on Nieuwe Kanaal. The contours and ambitions for Wageningen Campus, including BSPW, are being given a place in the new Bebouwde Kom environmental vision of the Municipality of Wageningen, the principles of which were established in 2023 in the Wageningen Compass.

With regard to sustainable mobility ambitions, we are seeing a turnaround in public transport, with the frequency of buses returning to pre-pandemic levels in 2024 and additional trains going to and from the new Ede-Wageningen station, a fifteen-minute bus journey from Wageningen Campus.

However, there are still other desirables, notably more frequent buses to the nearby stations in Ede and Arnhem. Above all, a solution to grid congestion is needed due to the current restrictions on connecting new buildings to the Liander and TenneT electricity grids. These issues will be dealt with in 2024, and the development of Wageningen Campus will not stop in the years that follow.

2.6.5 Wageningen University Fund

The Wageningen University Fund (UFW) awarded €12.8 million in multi-year commitments to WUR in 2023. The UFW also played a part in another €5.4 million in multi-year commitments that directly benefit the divisions of WUR. In 2023, 21 research projects were carried out within WUR thanks to

donations, 32 students studied thanks to a partial or full scholarship in Wageningen and 104 students, young researchers and alumni were awarded prizes and stipends to further develop their talents.

2.6.6 Outlook

Value creation will remain a key driver for WUR staff in 2024. For 2024, we will continue to pursue the previously established line, with particular attention to social value creation such as with Citizen Science, the elaboration of the Valorisation Delta Plan, the new construction work on campus, and the development of a new entrepreneurship programme in collaboration with UFW, aimed at helping to start up and further develop more new initiatives in the agri-food sector. In 2024, we will give shape to the new 2025-2028 Strategic Plan, with a firm focus on impact.

2.7 Staff members

The strategic priority areas established by the Executive Board form the basis for the HR policy of WUR. The HR policy in 2023 focused on the following five themes (again): Recruitment, Onboarding & Inclusion, Leadership & Talent Development, Organisational Development, Vitality & Health and HR Operational Excellence. Special attention was also paid to social safety and work pressure. The key figures that typify our workforce are included in more detail in the Social Annual Report (Appendix 3).

2.7.1 One Wageningen

As part of One Wageningen, the collective labour agreements (CAOs) of Wageningen University (WU) and the Wageningen Research Foundation (WR) align with each other wherever possible, and all further regulations are applied throughout WUR as much as possible. WUR wants to enable individual talents to develop to their full potential by offering a challenging, inspiring, international, safe working environment focused on collaboration. Fleshing out the five HR themes, in which substance is also given to Corporate Social Responsibility (CSR), supports this.

WUR is facing a number of challenges, some of which the HR department must also work hard to address. One of these is recruiting good personnel in a difficult market, a market in which your reputation as an employer (for both applicants and employees) is important. Added to this, we must also make HR processes more user-friendly and efficient.

That is why 'HR Together' was designed in 2023. The aim of the HR Together programme is to achieve greater harmonisation, concentration and professionalism throughout the HR column by working (together) more as one HR with services that make more sense to all employees, are more digital, with fewer mistakes and are more intuitive, with HR business partners who work in the organisational units, especially at the strategic and tactical level, and who are connected to central Operations Support, a central Center of Expertise and consultants who specialise in the areas of absenteeism, vitality, learning & development. This smart way of working together makes HR more efficient and provides a quality boost, so we can better support the organisation on all HR-related issues.

In 2024, we will continue to work on giving substance to HR Together, in which HR services are intuitively and intelligently tailored to users.

2.7.2 Recruitment, Onboarding & Inclusion theme

Recruitment

The growth of WUR is also reflected in the number of vacancies. In 2023, more than 1,000 vacancies were successfully filled by WUR itself. External agency involvement in this was minimal. In total, there were 40,000 applications for all these positions, more than in previous years.

As the labour market is still very tight, the recruitment team has been more focused; this year, a recruiter was engaged to target specific university positions such as PhD and postdoc positions. These vacancies usually attract plenty of candidates and require a different approach from that for positions

where we only have a scarce labour market at our disposal. An example of the specific approach for WU positions is the use of an online questionnaire, which allows an objective and relatively easy initial assessment of large numbers of applicants.

This focus means that the other recruiters can concentrate on WR positions and staff positions, which are the ones where we experience scarcity.

For the PhD and postdoc positions, we noticed that the number of candidates was also scarce and had to reopen procedures. We will therefore initiate additional actions for these positions in 2024.

Onboarding

In 2023, a massive 1,195 new faces were welcomed to WUR, through the 'Welcome at WUR' Day, among others, which has been organised no fewer than eight times. These days are always convivial and full of new encounters and surprises. With two interesting presentations and a fun tour of the campus with enthusiastic guides, rounded off with a relaxing drinks reception, these new colleagues felt right at home.

Inclusion

Diversity and inclusion is a topic of increasing importance both in society as a whole and on campus, with themes such as 'Decolonisation, Anti-Racism, Anti-Discrimination, Equity and Equal Chances' (DARE), neurodiversity, inclusion, LGBTQI+ and gender balance grouped together and coordinated centrally in order to achieve a more inclusive WUR. In 2023, a successful 'Diversity & Inclusion' week was organised with 14 events. A new 'Gender+ Equality Plan' was also designed as a follow-up to the SMART EU project. Relevant tools were deployed, including coaching in recruitment committees, meetings and lectures.

Diversity & Inclusion | 2023

What will you do to make the difference?

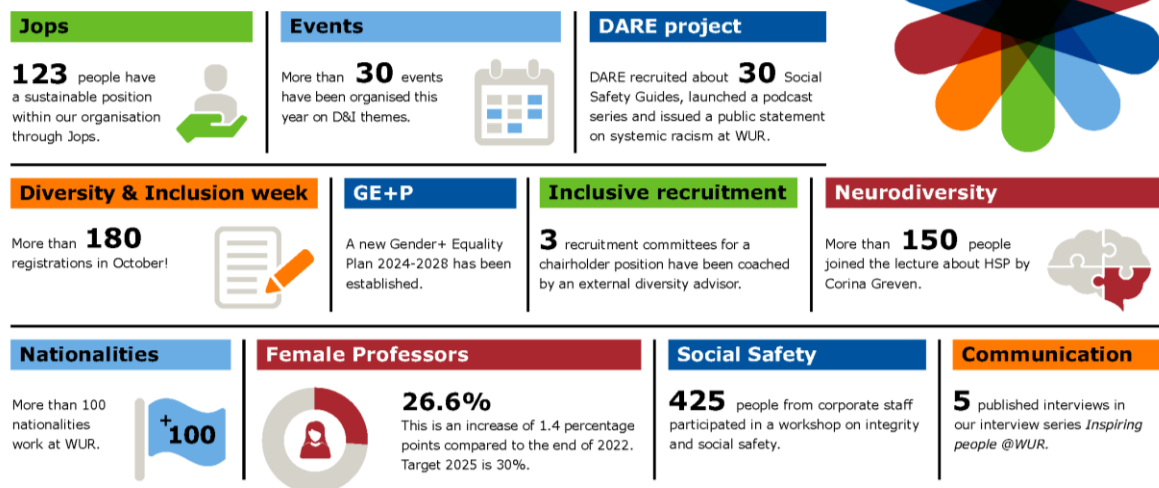


Figure 2.6 Diversity & Inclusion

2.7.3 Leadership & Talent Development theme

Leadership development within WUR in 2023

Leaders are important. They create an environment that is both safe and challenging, in which colleagues feel at home, continue to grow and do their best work. WUR has been offering leadership programmes for many years because leaders are so crucial. In 2023, 48 colleagues participated in an

extensive programme of this nature; new supervisors followed the introduction 'Welcome 2 Management'.

Our Occupational Social Work (BMW) colleagues stress the importance of continuing to promote dialogue at all levels. Supervisors are busy, so we invest in skills and preparation that help them make every conversation a good one. In 2023, we offered, for the first time, one-to-one coaching to prepare for conversations and we set up the pilot training course 'Listening as a leader', which will be given for the first time in early 2024.

Preparing for change

We are working within WUR on two key objectives when it comes to developing leaders. On the one hand, we want to equip and develop leaders so that they can grow more and more into their role of directing their team and can ensure that the team works efficiently. On the other hand, at WUR, we regularly look internally for employees for key positions to develop our organisation and fulfil specific ambitions. We want to encourage colleagues with leadership potential to continue to grow to fill such positions. Both objectives - the development of existing supervisors in their role and the development of potential - are blended in the current programmes. For this reason, the Executive Board has decided to dismantle the systems and set up two separate programme lines. To this end, a plan has been developed that will be implemented in 2024.

Learning and development

The WUR strategy can be realised using all the talents and capabilities of colleagues. This is why the motto of 'Learning & Development' (L&D) within WUR is: "Employ your potential in order to flourish."

One of the ways WUR employees are able to continue their development is by attending a study programme or training course. Table 2.12 sets out the numbers involved in 2023.

Table 2.12 Overview of L&D study programmes in 2023

Training (internal offer)	Number
PMC (Project-based Creation)	128
Tenure Track Development Programmes	33
Joint Value Creation	12
Managing Your Career	97
Feed Forward	34
Insights profiles	414
Team development training/workshops using Insights	34
External providers	Number
Edubookers	722
GoodHabitZ	723

Some 722 external training or coaching programmes were booked in 2023; comparable with the year before. This number includes bookings for individual employees and for groups. Topics included personal effectiveness, personal coaching, communication, ICT, management and mandatory training for execution of the work. In order to make it easier for colleagues to find a good coach, we developed the 'Coach & Match' platform, containing profiles of coaches with which there have been good experiences within WUR.

Colleagues followed a total of 723 training courses through GoodHabitZ in 2023. The following training courses are in the top three: Excel, Guide Your Career and Microsoft 365 One Note.

In 2023, L&D advisors from different units started working better together in preparation for the 'L&D Center of Expertise', which will start in 2024. The aim of this enhanced cooperation is to work together more efficiently, enabling us to provide more high-quality services.

2.7.4 Organisational Development theme

Hybrid working has also become widespread at WUR due to the coronavirus pandemic. Employees, supervisors and teams agree on how to work together, to suit individual needs and experienced opportunities. The Employee Monitor of November 2023 (61% response rate, with at least a 56% response per individual unit) shows that 73% of employees work part of their hours from home.

Employees indicate as follows:

- The guidelines on hybrid working are clear (3.4 on a scale of 1 to 5).
- The possibility to do hybrid working improves the work-life balance (4.1).
- A high degree of freedom of choice is experienced with respect to the workplace (4.1).
- Hybrid collaboration arrangements have been made in the chair group / team (3.4).
- There is sufficient opportunity to choose the working environment on site that suits the type of work (3.5).

Alongside the survey, a report was made in the first and second quarters of 2023 by the 'Monitoring Group' Working@WUR, using the Employee Monitor at the end of the year, which concluded that each chair group, each department and each team within WUR faces unique challenges to make hybrid working successful and that this also interfaces significantly with the plans of the Strategic Housing Plan (SHP). In 2023, therefore, steps were taken to connect the change management aspect and the more technical side of the implementation of the SHP. Hybrid working will continue to get our attention, in the new year too.

Hybride werken – Positief ervaren

73% van de medewerkers werkt een deel van hun uren vanuit huis. 15% wil dat niet, 11% kan dat niet en 1% mag dat niet

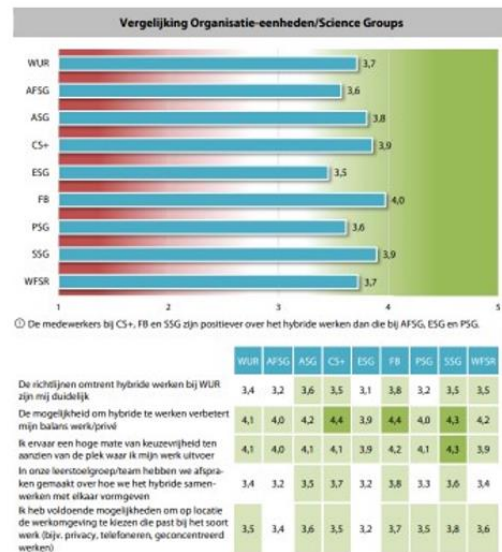


Figure 2.7 Employee experience of hybrid working

2.7.5 Vitality & Health theme

In order to promote employee vitality, several initiatives were also offered by Vital@Work this year. To get employees moving more, the exercise app was rolled out further throughout the organisation. This was put out to tender and awarded to FitterUp. The principle is that employees can save points by

walking and/or cycling. These points can be used to purchase products or vouchers. By the end of the year, 1,925 employees were using this app. In addition, we also offered fruit in the workplace again in the past year.

The Vital@Work programme is provided in close cooperation with Sports Centre de Bongerd and offers various workshops to encourage vitality when working (from home). The programme included 66 workshops relating to exercise (e.g. pole dancing, PauseXpress and squash), relaxation (e.g. chair yoga and meditation), nutrition (e.g. vitamins and 'eat yourself healthy') and workshops focused on vitality when working (e.g. informal care, manage your work and financial resilience). A total of 1,443 requests for these workshops were made by 734 unique participants. Where possible, programmes were offered partly via MS Teams to enable more people to participate.

In order to give an extra boost to the vitality of employees, another 'Vital Week' was organised in July 2023. For the sessions that required registration, a total of 262 people had registered.

Jaarcijfers HRM – Vitaliteit & Gezondheid 2023

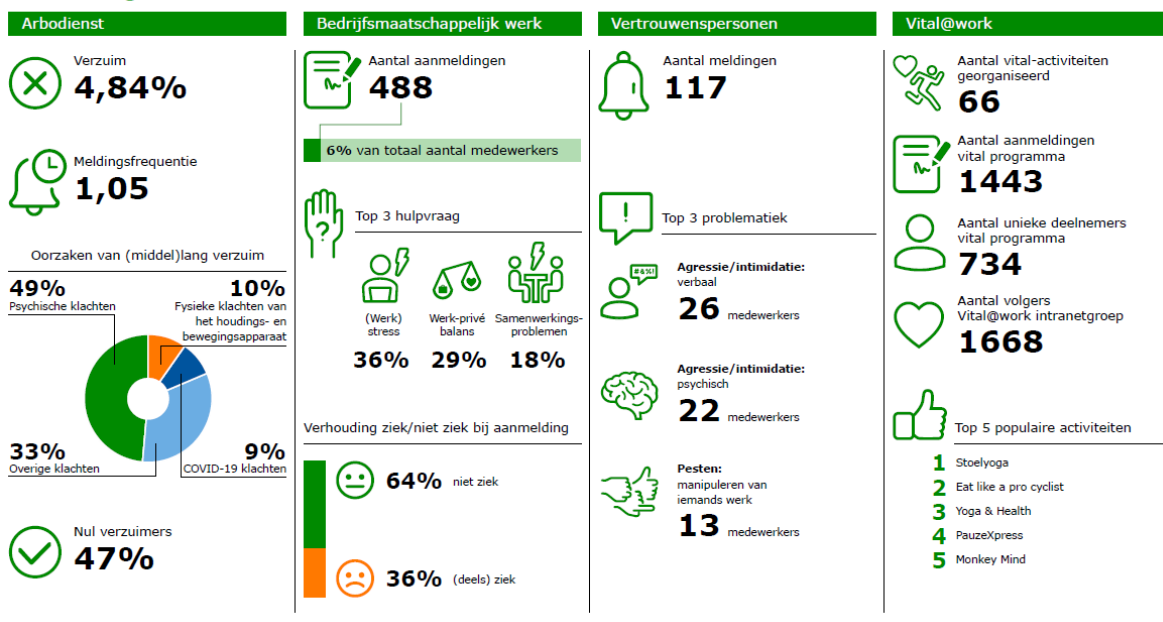


Figure 2.8 Annual HRM figures

Sickness-related absenteeism

The sickness-related absenteeism rate in 2023 was in line with the previous year; there was only a very small increase of 0.01%. However, absenteeism due to mental health issues continued to rise, and we noticed a decline in issues caused by the coronavirus pandemic. Over the coming period, we will receive further analysis from our Environmental and Occupational Health and Safety services and, in response to this, we will determine where we will direct additional attention in 2024.

Social security

The Social Security (SZ) team supports HR, supervisors, employees and former employees with questions about social security in the broadest sense. Well-known topics are long-term incapacity for work, special forms of leave, unemployment and retirement.

The Social Security team focuses on the implementation of the Unemployment Insurance Act (WW), the Sickness Benefits Act (ZW) and Work Resumption for the Partially Disabled (WGA) regulations in a broad sense. In addition, the Social Security team is a sparring partner for Vital & Health in relation to complex situations and/or the interface with social security matters, such as advice during (partial) termination of a contract in the event of long-term absenteeism (together with Corporate HR Legal).

Helping employees navigate the WW

If employees leave the organisation and are awarded benefits on the basis of the WW, they are offered WW support from an external work coach. The work coach assists former WUR employees in finding another job. In this way, we fulfil our reintegration obligations as a self-insurer for unemployment benefits. The table below explains the results of WW support in 2023.

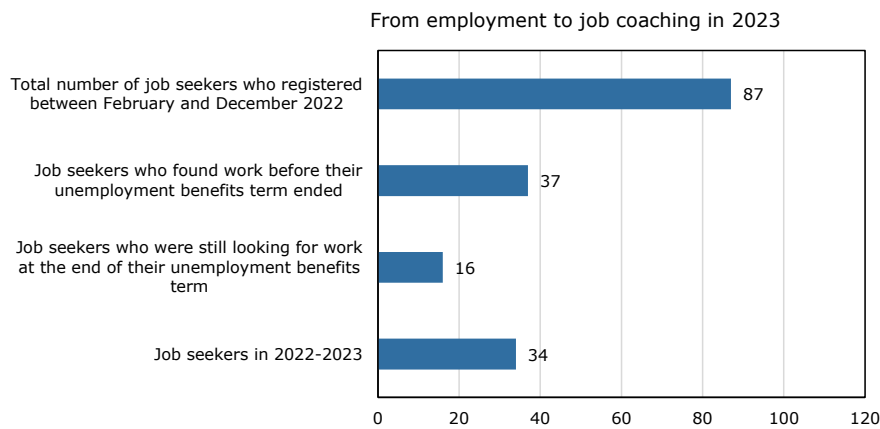


Figure 2.9 From employment to job coaching

1. Former employees receiving WW benefits are selected by the SZ team and registered with the WW Consultant.
2. All former employees (job seekers) are actively approached by the WW Consultant.
3. Guidance to another job is customised and individual.
4. Guidance is non-binding and not mandatory.
5. Registrations come from UWV surveys (90%) and via HR or supervisors (10%).

Helping employees navigate the WGA and ZW

Our obligations for the WGA and the ZW are fulfilled by involving an external reintegration agency.

Implementation of schemes

In the fourth quarter of 2023, WUR switched from Visma to Equivalence for ZW benefits. The non-statutory Wageningen Research unemployment benefit (BW-WW WR), previously implemented by pension fund APG, has been implemented by Visma since the end of 2023.

Pension information and insurance

Through training, the Social Security team now also has broader expertise in the field of pensions, and employees of WUR can contact the Social Security team with their pension issues and questions about supplementary insurance, such as the disability (WIA) gap insurance or occupational disability insurance (AOV).

2.7.6 HR & Operational Excellence theme

HR Shared Service Center 2023/HR Operations 2024

The work within HR Operations is divided into Run (operation), Change (improvements) and Data (measurements).

Run

Thirteen salary processing operations were carried out in 2023: twelve regular and one 'Extra Run' for the fiscal treatment of changes and corrections submitted late. In addition, the employee choices in Optare, the options module for flexible employment conditions, were processed by HR Operations.

Software releases from suppliers are also included under Run. These software releases ensure that WUR remains up-to-date and future-proof. For the two largest applications - ADP Workforce and ServiceNow - there are four per year.

Finally, this includes activities such as opening Optare, netting leave against MyProjects and asking employees to update data such as side activities and emergency contact.

Change

There is now an ambitious list of desired improvements in the area of HR Operations. In 2023, a 'Corporate HR Change' and an annual calendar were introduced, including active management and monitoring by the Business Change Team and the HR Operational Management Programme Board (BPB HR).

The largest projects in 2023 were:

1. Various processes from the HR Together programme were optimised to work more efficiently and to better meet the needs of the organisation. The improvements to these processes were carefully assessed in the organisation.
2. Bundling all HR information in one central location, with access to HR services through a user-friendly WUR Support Portal (with approximately 1,000 knowledge articles). In addition, a central entry point for HR questions (about 10,000 per year) with the ServiceNow application, from which there is a direct link to MyHR for a number of work processes.
3. A clean, redesigned and more widely opened digital personnel file for approximately 8,500 active employees and their supervisors (DiDo).
4. A new, more organised menu structure in MyHR for supervisors.
5. New work processes in MyHR relating to absenteeism for employees, supervisors/case managers and absenteeism professionals.
6. Making it easier to log into applications for Recruitment (Connexys) and MyHR.
7. Taking over the Welcome Center Food Valley services for supervisors within WUR who potentially want to allow employees to work from abroad.

Data

In May 2023, a second general HR survey within the framework of HR Together was launched within WUR. Satisfaction with the services increased by 0.2 points to 6.8.

In addition, we surveyed the processes optimised in 2023:

- Significant decrease in turnaround times for new employment contracts.
- Extensions/conversions and terminations of employment contracts between the end of 2022 and the end of 2023 (from 9.6 to 6.9 days) due to process improvements and, above all, increased collaboration in the HR chain. The latest survey also reveals 4% fewer retrospective personnel changes.

2.7.7 Employee participational body

The participational bodies are important partners in policy formation for the Executive Board and the management boards of the organisational units. Involvement of the employees and students in the decision-making process regarding important topics helps to generate broader support.

Employees of WUR are represented in decentralised Works Councils. WUR also has three central participational bodies:

- The Central Works Council (COR), which is made up of delegations from the Works Councils.
- The Student Council (SR).
- The Student Staff Council (GV). The latter consists of employee representatives and students of WU.

The COR and GV together make up the WUR Council. In 2023, elections were held for both the COR and the GV, which significantly changed the composition of both councils. The composition of the SR changes every year.

The GV was involved in decision-making on the Framework Letter and WU’s budget for 2024, as it has been every year. The GV provided a positive recommendation in 2023 on the preliminary decision to start with the *taverne opt-out* system, where articles are made public automatically unless indicated otherwise.

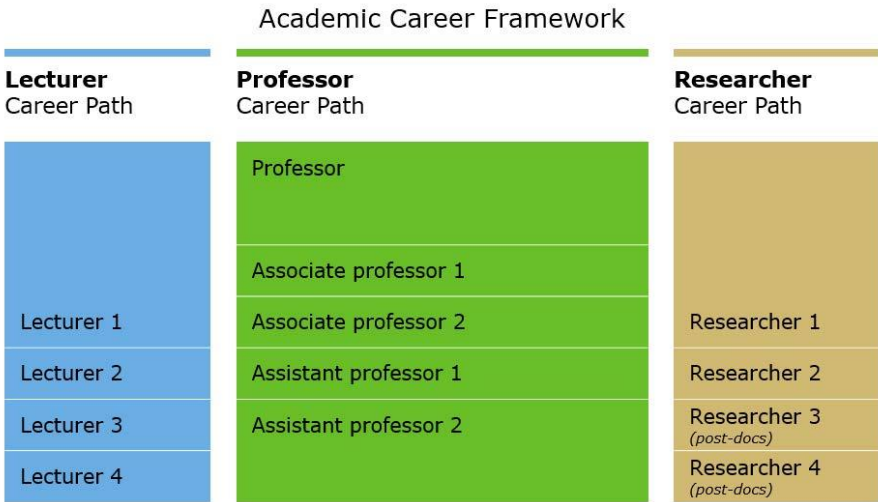
Among other things, the COR issued a recommendation regarding HR Together - whereby the provision of HR services is organised in centres of expertise - a large investment request, and approved the Code on ‘Relationships at Work’ and the ‘Social Safety Code of Conduct’.

The COR and GV both approved the Academic Career Framework and were involved in the appointment of the new Rector Magnificus, who is also Vice-President of the Executive Board. The WUR Council also paid a lot of attention to employee wellbeing on campus. It looked at closing buildings during the Christmas period, making the campus smoke-free and evaluating the ombudsperson position.

2.7.8 Recognition and Rewards

In 2019, WUR, together with other Dutch knowledge institutions and academic funding bodies, started the programme ‘Recognition & Rewards’. The aim of this programme is to recognise and reward the work of academics more broadly by paying more attention to the different core domains (research, education, impact and leadership) in which they work. With the Recognition & Rewards programme we are working to achieve a new balance in the way that academics are recognised and rewarded, whereby every talent counts.

At the beginning of 2020, the Executive Board established the Recognition & Rewards committee, which worked on the envisaged cultural change. This led to the development of a model of academic career paths, the ‘Academic Career Framework’ (ACF). This ACF was approved by the Executive Board on 10 July 2023, after receiving the approval of the WUR Council.



The ACF consists of three career paths for all academic WU staff members and follows the six guiding principles of the Academic Career Vision:

1. One overarching framework for all WU staff members.
2. Flexibility in profiles.
3. Boundaries within profiles.
4. Pursuit of excellence.
5. Facilitating mobility.
6. Transition to permanent contract.

In order to achieve both the ACF and the indicators, the committee involved the organisation in the formation of the vision and the development of the ACF in various ways: through a survey, a roadshow visiting the sciences groups, interviews and trials. In addition, various forums such as the graduate schools and the Wageningen Young Academy were involved and they shared their input. Feedback on the evaluation indicators was incorporated, and everything was submitted to the Executive Board at the end of 2023. In addition, the committee is working on a draft Assessment Regulations, which, among other things, will regulate the composition of advisory and assessment committees. In anticipation of the implementation, a programme manager was appointed to prepare the implementation of the ACF. The ACF Guidelines with indicators and assessment regulations will be finalised in 2024, and implementation is expected to start in the second half of 2024.

2.7.9 Employment conditions and (social) safety

Within the framework of Corporate Social Responsibility (CSR), it is important to provide suitable employment conditions and a healthy and safe environment to work in. A safe working environment must also be protected. The methods employed by WUR to achieve these are described below.

Employment conditions

WUR has two CAOs, the Collective Labour Agreement for Dutch Universities (CAO NU) and the Collective Labour Agreement for Wageningen Research Foundation (CAO WR).

The CAO NU was concluded for the period from 1 April 2023 to 30 June 2024. The following arrangements were made in this regard:

- On 1 August 2023, salaries were structurally increased by 9.0%.
- In addition, employees who receive the sectoral minimum hourly wage received a one-off payment of €1,200 gross.
- Employees up to grade 9 received €1,000 gross.
- A one-off payment of €800 gross was agreed for employees from grade 10.

In all cases, the one-off payment was paid to employees who were in employment on 1 August 2023. Part-time employees were granted a pro-rata amount.

The term of the CAO WR also runs from 1 April 2023 to 30 June 2024.

- The salaries of WR employees were also structurally increased by 4.7% from 1 August 2023.
- In addition, WR employees up to grade 6 who had an employment contract with WR on 1 August 2023 received a one-off payment of €300 gross on a full-time basis.
- Employees from grade 7 to grade 9 who had an employment contract with WR on 1 August 2023 received a one-off payment of €150 gross on a full-time basis.
- Part-time employees were granted a pro-rata amount.
- The end-of-year bonus for WR employees who were in employment on and/or after 1 August 2023 was structurally increased by 4.3%, thus making the end-of-year bonus 8.3%.

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

Risk assessments 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 in order to be able to arrange the work activities in such a way so as to avoid adverse health effects. In a number of positions at WUR, it may be useful to periodically perform medical checks on employees or to provide vaccinations to employees; WUR make this mandatory where necessary. If an employee does not comply with this (e.g. due to their religion), the employee will not carry out the particular work activities and will be assigned other duties. WUR has also developed a policy for periodic occupational health examinations (PAGO).

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 be provided upon their return to the Netherlands, in consultation with the Vaccination Centre.

Social safety

The Social Safety programme was rolled out further in 2023. This programme consists of a number of projects with a focus on behaviour and leadership: Mindlab as a dialogue starter (realised in 2022), the drafting of codes of conduct, the establishment and organisation of a Social Safety Contact Point and the development of training and workshops for employees and supervisors.

The following activities were realised in 2023:

- The Social Safety Code of Conduct and Code on Relationships at Work was established and approved in a participatory manner by the Executive Board and the participational bodies.
- The 'Looking out for each other' campaign resulted in communications to draw awareness to the Social Safety Contact Point. Following the approval of the Social Safety Code of Conduct and the Code on Relationships at Work, a poster campaign was also launched to encourage dialogue on behaviour and to indicate where people could turn to with issues relating to these themes. This campaign was posted on both the intranet and the internet and also published via narrowcasting. We also published interviews on certain current topics, relating, for example, to the publication of the codes and in order to discuss the social safety and wellbeing of international PhD candidates and to indicate where they can turn to with problems or topics.
- The working group formed around the Social Safety programme was expanded in 2023 with a representative from Wageningen Graduate Schools (WGS - joint graduate schools).
- Within Education & Student Affairs (ESA), work was done in 2023 to establish an escalation ladder for students that describes or shows where to go for help with certain topics.
- The Social Safety Contact Point was operational throughout the year. It was approached about 100 times with questions and requests for help from both employees and students, PhD candidates and external parties. The contact point can be reached by email, telephone and an (anonymous) form online. There is a dedicated online form that can be completed during a course evaluation. Experience was also gained with a drop-in consultation service. The contact point will be reviewed in early 2024 and a decision will then be made as to whether and if so how to proceed.
- A Protocol for Complex Case Studies was drafted to provide guidance on how to address a complex case and to standardise the approach more. This was distributed and discussed with the directors.
- In 2023, training and workshops were developed and tested for various target groups, including supervisors, teams and bystanders.
- Within HR, a community of practice was launched in 2023 with HR business partners from the various sciences groups concerning social safety to share knowledge and experience relating to this theme.
- For the entire corporate staff, fifteen dilemma workshops on 'Integrity and Social Safety' were organised by the Integrity Policy Staff Member and the Social Safety Programme Manager, in which a total of 425 people participated. The workshops produced recommendations that will be discussed by the corporate directors. In previous years, these workshops have been organised for employees and supervisors in the sciences groups.
- At the end of 2023, a number of in-depth sessions were launched by the Integrity and Social Safety steering committee to identify key problems and priorities for social safety at WUR for the next two years. The starting points were common relationships in work or study: employees-supervisors, students-lecturers and PhD candidates-supervisors.

2.7.10 Complaints and arbitration procedures

Protection of employees against possible objectionable decisions or conduct is guaranteed through various complaints and arbitration regulations at WUR. The following provides an overview of the number of submitted or processed complaints in 2023 per procedure.

Wageningen University & Research

The Scientific Integrity Committee of Wageningen University & Research (CWI) dealt with a complaint in 2023 regarding a possible violation of scientific integrity. Following the conclusion of the procedure, the CWI concluded that scientific integrity had not been violated and advised the Executive Board to

declare the complaint unfounded. The Board accepted this advice. The complainant then asked the National Board for Research Integrity (LOWI) for its opinion on this matter. The LOWI is considering this request, and its opinion is expected in 2024.

No complaints were referred to the Committee on Undesirable Behaviour based on the Regulations governing Complaints for Undesirable Behaviour in 2023.

Wageningen University

One application was made to Wageningen University's Arbitration Regulations in 2023.

Wageningen Research Foundation

There were no complaints made based on the Regulations on the Individual Right of Complaint of the Wageningen Research Foundation in 2023.

2.8 Operational management

2.8.1 Management of information provision and ICT developments

The management of information provision within WUR is done on a policy and strategic level by the Information Provision (IV) Portfolio Board, chaired by a member of the Executive Board and with representation from the primary domains of Education and Research plus Operational Management and IT. Since 2023, the Wageningen Data Competence Center (WDCC) has also been represented on the IV Portfolio Board.

The WUR-wide digitisation strategy was developed further, with a clear connection made between the data policy and the WUR-wide data facilities with the Data Science and Artificial Intelligence developments. The choice was made to make Organisation, People, Innovation and Ecosystem the guiding themes and to make technology an embodiment of the strategy. In the establishment of the 2025-2028 Strategic Plan, Digital & Data will be taken into account in conjunction with other (substantive) priorities.

Research domain

In 2023, the IV Research domain became an important pillar within central research support. The central strategy for the domain was established, and teams came together to take on the realisation.

Digital Library Services took a major step in the renewal of the library systems. The renewal had already begun in 2021, and this year the approach was revised, as was the way the team works and the collaboration with other teams. This created space to carry out the desired renewal and allowed a large number of legacy systems to be updated. As a result, the digital library services have been made more professional, so quality and sustainability are ensured.

Research IT Solutions was launched in 2023, and the team's profile has grown. Researchers now know how to reach them for all kinds of IT-related questions. This is boosting awareness of IT capabilities and best practices within research groups. In collaboration with Shared Research Facilities and a large number of research groups, the major milestone was the renewal and expansion of High-Performance Computing (HPC). This makes the shared research facility future-proof and means that, as WUR, we can participate in the digital transformation and developments in the field of AI. The renewal increased the use of the HPC by WUR researchers and external partners.

Research Data Management Infrastructure focuses on the integrated Rule-Oriented Data Platform (iRODS). For scientific research and advanced data management, iRODS provides scalability and flexibility, while facilitating data integration and collaboration. Support for daily research, but also for making data FAIR, is available to researchers in just one system. In addition to active data storage with iRODS, 'cold storage' was also realised, based on tape storage. In collaboration with the WDCC, the Wageningen Common Data Solutions project was launched with a view to boosting collaboration and making this easier for us at WUR and in our ecosystem (starting with the TO2 federation).

Education domain

The biggest change in 2023 was the implementation of the new exam resit policy. The change in periods has also had an impact on many education systems. In addition, the focus was on consolidating and simplifying where possible, with the emphasis on easing the burden on lecturers. Extending the Education Modification Cycle (EMC) provides a better understanding of what learning outcomes are covered in which course and what mandatory prerequisite knowledge is required of students. Students – both from within and outside WUR – can therefore start a course better prepared. For students, Study Anytime Anyplace (BYOD) was implemented further, partly by extending the agreement with Schoology. As a result, a number of rooms for computer practicals were converted into more functional study spaces for students. In addition, experiments were launched to make better use of the potential of laptop use in education itself.

The WUR-wide AI working group published supporting manuals for both lecturers and researchers. The AI detection method of the plagiarism tool was also evaluated. The Npuls programme is being set up, and the way in which we will participate in the transformation hubs and what participation means for WUR is being explored, starting with the Teaching & Learning Centre.

Operational Management domain

In 2022, the Operational Management domain was redesigned with a multidisciplinary triangle of control (Group Director, Director of Operational Management and Director of Information Management) and a multi-year sequential approach. This led to clear results.

'HR Together' resulted in more uniform HR administrative processes and an associated organisation. A lot of time was spent on getting the HR documentation in order and setting up a knowledge base so that employees/supervisors have immediate access to the most up-to-date documents and processes. This was in parallel to the development of HR centres of expertise.

For Finance, Projects and Purchasing, the priority was to develop the Operational Management Dashboard, which will save time in gathering data and give greater insight and more analysis options to financial controllers and managers. In addition, a broad exploration was conducted regarding the implementation of an ERP suite. This revealed that there is more value to be gained for WUR – especially for employees – from the harmonisation of financial administrative processes and from the delivery of the corresponding tool for Declarations and Budget. In particular, the many requirements of clients / subsidy providers and the great organisational effort involved in the implementation of an ERP system were important considerations in this choice. At the same time, this means that an alternative needs to be sought for project administration due to the technological obsolescence of the current application.

The process of defining a vision and building the architecture for Marketing & Communications was completed, and this will serve as the basis for the renewal of the online channels on the internet and intranet. This will be the top priority in 2024 and 2025.

At Acquisition & Legal, the rollout across WUR units was completed and the focus was shifted from acquisition processes to subsidy processes and optimal use of the digital signature tools.

IT domain

Service development in the Information Technology (IT) domain is focused on security and continuity, improving the end-user experience and targeting value. Every quarter, around fifteen initiatives were implemented that will contribute measurably to improvement in these areas. For 2024 too, this will continue to be the focus, with greater attention to sustainability. It will then be about the energy consumption and useful life of IT and sensible, balanced use of IT, something that matters a lot to employees and students and is reflected in KPIs in rankings and legislation.

Concrete results in 2023 were an increase in the cybersecurity of the central IT landscape, including the processes set up and improvements made as identified in the audit results for the cybersecurity maturity survey. Work was done to further improve the employee experience, such as faster laptop boot times, expanding an affordable core offering and smarter authentication. Focus on value means

tidying up services that take a lot of time and deliver little and improving the process by reducing the bureaucracy involved in passing on costs and tracking time. In accordance with the measurements of the IT Service Desk and the Customer Satisfaction Survey, overall employee satisfaction with IT services increased further and is now very high.

The IT organisation has a strong focus on human resources development. The IT labour market is challenging; the department management is focused on employee development and finding new employees. This has kept the percentage of external recruitment low, making the IT organisation stand out positively from other universities and government institutions. In addition, cooperation with other universities was strengthened through exchange programmes and joint knowledge development (e.g. Kubernetes and HPC) and service development (e.g. back-ups from the University of Twente are kept here with us and vice versa). There is continued attention to innovation. For example, three pilots (in software development, contract management and at the Service Desk) were launched with AI applications.

Given the complexity of IT, it is important to work in a process-oriented and architectural manner. The architecture was further strengthened by setting up solution architecture for each domain in addition to the previously introduced Portfolio Board. Process-oriented working is visible in configuration, change and incident management. Incident prevention and, where incidents do occur, good and fast resolution and communication are important and were demonstrably improved.

2.8.2 Personal data protection (privacy)

Working with the different disciplines within WUR is crucial for the protection of personal data. In 2023, there were some striking examples of this, with the establishment of the central IT and data breach hotline being one of them. The monitoring and periodic evaluation of reports made will in future help to raise awareness of security and privacy at WUR. In addition, with the policy for onboarding new employees, a strong focus was placed, in collaboration with corporate HR, on privacy aspects and processes set up for this purpose at WUR. Working with the Purchasing, Security, DML and Contract Management departments, a Basic Set of Wishes and Requirements was developed for procurement projects. This allows key basic requirements and wishes to be imposed when selecting suppliers so that they are better aligned with WUR's services. In addition, regular network meetings promote integrated collaboration with Security, IT, the Wageningen Data Competence Center (WDCC) and the Ethics Committee. The result is the development and accessibility of a common knowledge base. The monthly knowledge sessions between the privacy officers make a positive contribution to the development of new policies. For example, a guide to anonymising/pseudonymising and an International Data Transfer Manual were developed. A concrete policy was also shaped with regard to data protection for WU alumni.

2.8.3 International collaboration and knowledge security

Last year, a baseline measurement for 'Knowledge Security' at all universities and applied knowledge institutes (TO2) was carried out by two research agencies commissioned by the Ministry of Education, Culture and Science (OCW). The research was exploratory, in the form of a self-assessment that was not for setting standards but was part of a learning approach in the field of knowledge security. The Knowledge Security Screening Act, which is being prepared by OCW and which is due to enter into force in 2026 for MSc students, PhD candidates and non-EEA employees, received input from the WUR Knowledge Security Advisory Group established in 2023. Attention was also drawn explicitly to the proportionality of the screening measure and to the specific use of this law for knowledge domains with a very high security risk. With regard to the draft list of 'Sensitive knowledge and technologies', which is also being prepared by OCW, it was requested that due account be taken of the diversity and differences in risk profiles when assessing the level of protection. WUR has an overview of international partnerships, which are set out in Memorandums of Understanding (MoUs), Letters of Intent (LoIs) and similar agreements. These partnerships have often been the result of a process of long-term operational cooperation and the building and affirmation of bonds of trust. They are tested against the WUR collaboration principles before a formal relationship is established through an MoU. The policy relating to risk management is constantly evolving, with attention to careful implementation, as is also evident from the 'Sector Review of Knowledge Security at Universities'. The

WUR Knowledge Security Advisory Group has, among other things, the task of promoting awareness about knowledge security within WUR. The subject of knowledge security is now well on the agenda in various units of the organisation, partly because of the interdisciplinary composition of the working group. At the Netherlands Enterprise Agency (RVO), where the national Knowledge Security Advice Office is located, the advisory group asked for advice once in 2023.

2.8.4 Corporate Social Responsibility

Our Corporate Social Responsibility (CSR) agenda highlights the social issues that will receive additional attention in the coming years. The CSR agenda includes social, economic and environmental sustainability. It contributes to the goals of the [2019-2024 Strategic Plan](#), aligning as far as possible with the Change Performance Indicators (CPIs). For the current CSR agenda themes, see Section 2.3.3. The [Sustainability Report](#) contains more information about the WUR CSR Agenda.

The application of a living lab approach offers possibilities for linking research and education experiments to the themes from the CSR agenda. In this manner, the results of living lab projects help make our operational management sustainable. We enable students and employees to contribute to the formulation of policy visions. One example is the involvement of WUR researchers and students in plans for green space management on Wageningen Campus. The students of 'Green Office Wageningen' also use take the initiative for living lab projects, which bring together research, education and facilities support. Examples of topics from 2023 are: switching to bioplastics in laboratories, making the campus climate adaptive and building in a nature-inclusive way. Green Impact teams of staff and students are active within WUR, with the aim of making the workplace environment more sustainable. One of the initiatives that emerges from the Green Impact teams is participation in the Laboratory Efficiency Assessment Framework (LEAF) programme. LEAF provides employees and students with specific tools to make the labs in which they work more sustainable. In 2023, work began on implementing LEAF and a network of participating laboratories was established. WUR is taking steps on various fronts to make its own operational management more sustainable. Three sustainability themes were focused on in 2023: climate change, circularity and biodiversity. These themes do not stand alone, they are linked and some aspects overlap.

Climate change

The energy-saving measures taken in 2022 continued in 2023. Whereas in 2022 it was mainly about lowering the heating and optimising the installations of buildings under the banner of '[Turn it down a notch](#)', attention in 2023 was placed more on the possibilities for reducing energy consumption. At the same time, the ambition is to be gas-free in 2050, as described in the [Rough Outline for the Energy Transition 2050](#) and the corresponding implementation agenda. On Wageningen Campus, a major contribution is being made by speeding up the connection of buildings to the ATES loop. Atlas and Radix-West were connected in 2023. Once the last building has been connected in 2024, it will be possible to achieve the targeted 90% gas reduction. Energy-saving measures reduced gas consumption by 20% and electricity consumption by 1.4% in 2023 compared to the previous year.

Since 2010, we have been calculating our greenhouse gas emissions as a CO₂ footprint. Since then, WUR's CO₂ footprint has decreased by 60%. To date, this footprint has mainly comprised energy consumption, mobility, farmland, livestock and waste. In 2023, we added the impact of the purchasing chain according to the methodology of the 'Science Based Targets' for climate. The aim is to make it easier to understand where WUR stands in relation to the Paris climate targets (2015) and, by extension, what this means for our operational management. Back in 2019, the purchasing chain accounted for about 55% of the total. The ultimate goal is to reduce emissions to zero by 2050, with the intermediate step of halving them by 2030 compared to the base year of 2019.

Circularity

An important ambition of WUR is to halve the use of (abiotic) raw materials by 2030. We are realising circular operations with the 'Material Flow Management' programme. Incoming and outgoing flows of raw materials have now been mapped. A data model has been developed that links incoming flows to outgoing flows using data from the purchasing system. This insight is the basis for all kinds of projects aimed at reducing the use of raw materials. In 2023, these included field labs concerning the switch

from single-use plastics to reusable material and circular alternatives to the use of plastic in laboratories.

Biodiversity

The loss of biodiversity is closely linked to climate change. Researchers and students are working together on this theme, e.g. within the '[Wageningen Biodiversity Initiative](#)' (WBI). The WBI holds 'Bioblitzes', or biodiversity challenges. The third edition was organised in June 2023, this time in conjunction with fifteen other European universities. Some 1,375 species, including birds, mammals, insects, aquatic animals, spiders and plants, were identified on WUR premises. This exceeded the target of a thousand species. However, that was not the most important thing; the Bioblitz is mainly about marvelling at nature, instilling enthusiasm and experiencing nature together. For the 'Nature Positive Pledge', which WUR joined in December 2022, we reported for the first time on the progress made with the development of a biodiversity policy and associated monitoring system, which is still in the exploratory phase at WUR. This is not just about promoting biodiversity on our own premises, but also specifically about reducing the impact we make, via all our activities and the purchasing chain.

Social themes of CSR agenda: diversity, vitality and training & development

The theme of social safety was in the spotlight in 2023. The Social Safety Code of Conduct was approved by the Executive Board, and the 'Looking out for each other' campaign drew attention to the established Social Safety Contact Point. The CSR theme of [diversity](#) was highlighted twice in 2023: in March during 'One Wageningen Week' and in October during 'Diversity & Inclusion Week'. The DARE project was continued. DARE stands for Decolonisation, Anti-Racism, Anti-Discrimination, Equity and Equal Chances and is aimed at minimising racism and discrimination at WUR. A varied health programme with activities and courses was offered online and in person were offered by Vital@Work and Student Training & Support. Job Participation Support (JOPS) provided hiring and mentoring for employees with disabilities, with the ultimate goal of at least 230 JOPS jobs by 2040. In 2023, the counter stood at 123 jobs, an increase of 11% on the previous year. More information on the progress of activities in the social domain can be found in section 2.7.8.

WUR in the sustainability rankings

In December 2023, WU was named the most sustainable university in the world in the [UI GreenMetric ranking](#) for the seventh time in succession. In the transparency benchmark, last organised in 2023, WUR remained the highest-ranked educational institution. The new European Corporate Social Responsibility Directive (CSRD) renders the transparency benchmark superfluous. It is expected that WUR will also have to report according to the CSRD in the future.

WUR fell to a lower position in two sustainability rankings. In [SustainaBul](#), the annual ranking of Dutch educational institutions organised by students, WUR finished in sixth place. Among other things, the demonstration of a long-term vision for sustainable education, the policy for a plant-based offering in the canteens and the sustainable financial policy led to a lower score.

In the overall ranking of the Times Higher Education [Impact Rankings](#), WUR was lower in 2023 than the 65th place achieved in 2022. This ranking lists universities according to their contribution to the 'Sustainable Development Goals' (SDGs). Scores for the impact of research, education and operational management are combined in this ranking such that, for example, an increase in the CO₂ footprint or an increase in the amount of waste disposed of can mean a lower position.

2.8.5 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.

2.8.5.1 Safety

Education, research and support activities are accompanied by risks. In relation to health and safety, WUR wishes to offer employees and students a safe and healthy environment in which to work and live. 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. These apply to both WU and WR. WUR pursues a policy for the following themes: company emergency response; risk assessment and evaluation (RI&E); hazardous substances; information, instruction and supervision (VO&T); and arms, neck and shoulder complaints (CANS). Each organisational unit is responsible for having a current RI&E for all workstations and activities and for conducting in-depth RI&Es on themes.

As for incident follow-up, in 2023 there were some (near) accidents from which we can and must learn lessons. The stand-out themes were: farm safety, training risks, building power cuts and the sale of goods that are not freely marketable. In 2023, WUR contracted another supplier to provide incident reporting software. The new system has been set up and, as of 1 January 2024, the reports will be processed by the new software. The functionality remains broadly the same. A new platform was also purchased for the systematic identification of risks, with the approval of the participational bodies. This new system will also be available digitally to the organisational units in early 2024.

2.8.5.2 Environment

The [2023 Sustainability Report](#) describes in detail the policy, activities and results in the area of environment, sustainability and social responsibility. This annual report outlines the objectives achieved in 2023 for the four environmental themes of the CSR agenda (see section 2.3.3): Climate-Adaptive Environment, Waste & Circularity, Energy and Mobility. Table 2.13 summarises the 2023 results. The result is explained per environmental theme.

Table 2.13 Summary of the environmental results of operational management

Component/Issue	Target	Achieved in 2023
Climate-adaptive environment	Making our buildings and environment climate-adaptive: percentage of area suitable for water absorption	Wageningen Campus: 72%
Waste and Circularity	Halving of consumption of raw materials by 2030 (compared to 2014)	See Sustainability Report
	Improvement in percentage of waste separation	+5 percentage points
Energy	Compared to 2005:	10.4% reduction
	48% energy saving by 2025	47% reduction compared to 2005
	72% energy saving by 2050	
	Sustainable electricity purchasing	100% ^{a)}
	Sustainable energy generation	79,116 MWh ^{b)}
Mobility	2.0% reduction in transport-related CO ₂ emissions per year	27% increase
	Share of transport in CO ₂ footprint	41%
CO ₂ footprint	Emission reduction: compared to 2010	58% reduction
		compared to 2019

a) Purchase of wind energy with guarantees of origin, registered with CertiQ.

b) Using wind turbines in Lelystad, ATEs on Wageningen Campus and solar panels. This is 84% of WUR's total energy consumption.

Climate-adaptive environment

The ambition of creating a climate-adaptive environment is described in the CSR agenda as: "To make our own buildings and environment climate-adaptive, using our own innovative knowledge of climate and biodiversity." In 2023, a group of students participating in 'Academic Consultancy Training' (ACT) conducted a study into the resilience of Wageningen Campus against weather extremes due to climate change. The students' findings will be taken into account in the approach for a climate-adaptive campus.

It is important that there is sufficient space on Wageningen Campus to collect excess water. A total of 72% of the surface area of Wageningen Campus, including the test fields, was suitable for water absorption in 2023. 3.6% of the surface area has forest or woody vegetation, 26% is planted and 42.8% is permeable to water, including ponds, ditches and vegetation that was not planted.

Circularity and waste

The [vision for circularity](#) adopted in 2020 marked the transition for WUR from a waste policy to a circular raw materials policy. WUR aims to halve the use of (abiotic) raw materials by 2030 compared to 2014, which is in line with the Dutch government's circular economy policy. This will not only reduce WUR's consumption of raw materials, it will also reduce our volume of waste. This is also having an impact on procurement: circularity strategies are applied in new contracts with suppliers wherever possible.

Through a partnership, we aim with 'Material Flow Management' to get a better grip on our raw material flows in order to keep as many raw materials as possible in the chain for as long as possible. In 2023, we focused on two questions: How do we stimulate the reuse of raw materials, and how do we reduce the amount of residual waste? Based on a raw material analysis (conducted in 2022), various field labs were performed, which looked, among other things, at paper towels, reducing catering waste, replacing single-use coffee cups, the use of single-use plastic in laboratories, and organic waste streams from research. Based on data from WUR's purchasing system, a digital Material Flow model was developed for mapping incoming raw material flows. Insights from the field labs and the data model should ultimately lead to more efficient use of raw materials.

WUR has three main waste streams: industrial, paper and hazardous waste. The volume of waste for each waste stream that is removed and how it is processed is known precisely for virtually all locations in the Netherlands. The total waste stream remained almost the same in 2023 (0%; +1 tonne) compared to the previous year (see Figure 2.10). The waste separation percentage was 70%. For an insight into the developments of the different raw material flows and what has been disposed of as waste, please refer to the Sustainability Report.

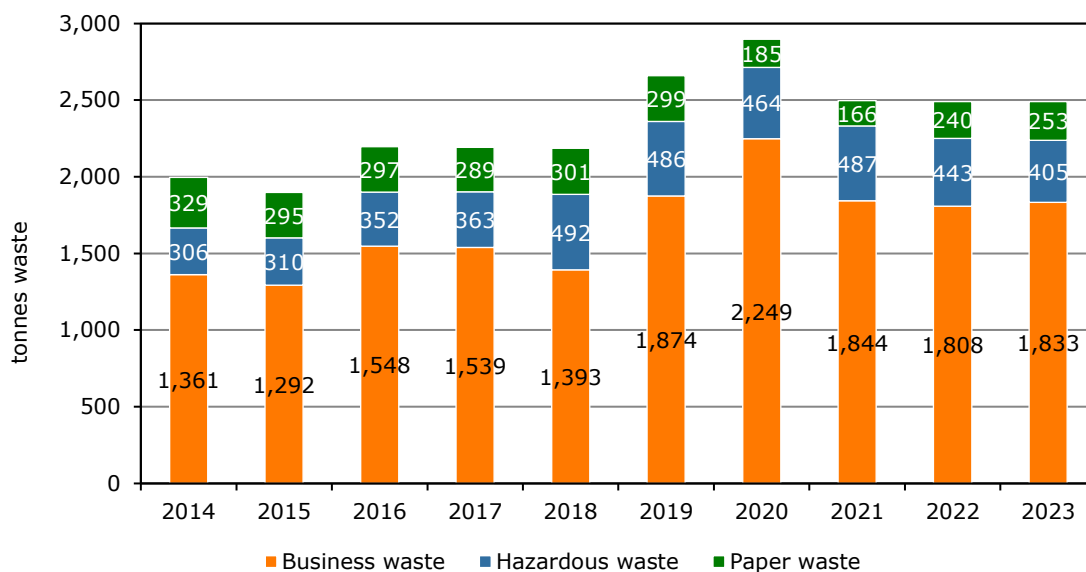


Figure 2.10 Amount of waste produced in tonnes, 2014-2023

Energy

The energy and climate crisis made it essential to accelerate plans for the energy transition. WUR, for instance, decided to connect buildings to the ATES loop sooner than planned, making it possible to achieve the targeted 90% gas reduction on campus as early as 2025. Preparations were made to connect the remaining buildings to the ATES loop with energy buildings for sustainable energy generation and exchange at Zodiac, Gaia/Lumen and Axis in 2024. The energy-saving measures implemented in 2022 will continue until spring 2025. The impact of these measures was clearly visible in 2023, resulting in substantial energy savings compared to 2022: 20% less gas and 1.4% less electricity. In addition, a portfolio roadmap was drawn up in 2023 under the 'duty to report and inform

on energy efficiency', containing a sustainability plan for all buildings based on WUR ambitions and legal requirements for the period 2023-2026.

The [WUR 2050 Energy Transition outline](#) describes WUR's energy targets and how we will achieve them. Concrete measures are included in an implementation agenda. The main focus is on achieving energy savings of 72% by 2050 compared to 2005 by phasing out the use of natural gas and continuously committing to sustainable energy generation. Key elements in this are the expansion of the [ATES loop](#) on Wageningen Campus and the use of the nearly 17,000 solar panels on WUR buildings and fields in Wageningen and Lelystad. The solar panels generated 4.5 million kWh of energy in 2023.

The result of energy-saving measures and the connection of the Atlas and Radix-West buildings to the ATES loop was a considerable saving. In terms of weather conditions, 2023 had a warm winter and a colder summer compared to the previous year. When corrected for the influence of climate, the energy consumption of WUR buildings worked out at 10.4% lower in 2023 than in 2022. Of the total energy consumed by WUR, 84% was generated using sustainable methods. As for electricity, 35% more renewable electricity was generated than consumed. Table 2.14 shows the changes in energy consumption based on the scope and targets of the Energy Transition outline.

Table 2.14 Changes in energy consumption 2005-2023

Energy consumption	Base year 2005	2015	2020	2021	2022	2023
Electricity (kWh)	66,019,426	61,674,576	52,072,490	56,123,986	53,292,589	52,562,852
Natural gas (Nm ³)	12,828,768	7,562,462	5,826,025	6,141,043	5,926,451	4,767,786
Total energy (MWh)	178,784	128,149	103,283	110,104	105,387	94,472
Primary energy (GJ)	1,000,205	794,423	653,046	699,480	667,208	625,017
CO ₂ (tonnes)	67,307	13,547	10,437	11,001	10,617	8,541
CO ₂ as a percentage of 2005	100	20	16	16	16	13
Energy consumption as % of 2005 (% MWh)	100	72	58	61	59	53
Annual energy reduction (% MWh)						10.4

Sustainable mobility

The policy for sustainable (transport) mobility has been formulated in the [2030 Mobility Vision](#). The focus is on stimulating public transport for business trips in the Netherlands and Europe, promoting cycling when commuting, and reducing the use of fossil fuels involved in transport.

Commuting compensation schemes include a commuting allowance for the office or an allowance for working from home. Employees indicate the days they have worked in the office or at home on a monthly basis. Commuting by public transport is fully reimbursed. Now that the coronavirus pandemic is over, it looks like hybrid working is here to stay. However, based on the number of office days and home working days declared, it is evident that, compared to 2020-2022, the number of days spent in the office was higher in 2023, increasing the amount of commuting combined with the growth in the number of employees.

The number of international journeys by staff and students also rose in 2023, though not yet to 2019 levels. Compared to 2019, 45% fewer kilometres were flown. The number of business trips within the Netherlands increased further compared to 2020-2022. In the process, a greater proportion of business trips were made using 'Mobility as a Service' electric shared cars and there was more travel by public transport. At the end of 2023, a study was launched, focusing on behavioural change. The aim is to gain a better understanding of what motivates employees to make their transport choices. The outcome of the research will contribute to the formulation of new policies to promote sustainable mobility.

The aim of the mobility vision is to reduce the CO₂ emissions of all WUR transport by an annual minimum of 2%. During the period 2020-2022, transport emissions were significantly lower due to the pandemic. 2023 was the first full year without coronavirus measures and international travel restrictions. This is reflected in the CO₂ emissions from transport. These amounted to 14.1 ktonnes CO₂ equivalents in 2023 (up from 11.2 ktonnes in 2022). This equates to a 41% share of the total calculated CO₂ emissions. CO₂ emissions for mobility were 27% higher than in 2022. Transport emissions are not yet back to pre-coronavirus levels: compared to 2019, CO₂ emissions are 27% lower.

CO₂ footprint

Each year, WUR calculates its CO₂ footprint in accordance with the ISO 14064-1, and based on the Greenhouse Gas Protocol. Direct and indirect greenhouse gas emissions are used to calculate the footprint. Calculating emissions provides an insight into what can be done to reduce and compensate for emissions. Up to 2022, we only incorporated part of the indirect emissions. In 2023, we decided to extend the calculation of our CO₂ footprint to include as complete a picture as possible of all indirect downstream and upstream emissions, as is common nowadays. This is so that we can use Science Based Targets (SBT) for climate to determine whether we are on track for the Paris targets. In order to achieve the Paris targets, we need to roughly halve our total emissions by 2030 and reduce them to zero by 2050, with 2019 as the base year.

According to the original calculation, the CO₂ footprint in 2023 was 34.7 ktonnes CO₂-eq. This is a reduction of 16% compared to the new reference year of 2019. When compared to 2022, CO₂ emissions increased (4%; 1.2 ktonnes CO₂). Figure 2.11 shows the extent to which the sources of emissions contributed to CO₂ emissions in 2023. The major sources are the buildings (especially natural gas), commuting, the use of agricultural land and business air travel. A lower consumption of natural gas meant that the buildings' share fell from 37% to 29%. Emissions from mobility increased, in particular from commuting and air travel.

However, if emissions in the purchasing chain (the products and services we purchase) are included, in accordance with the new approach, the CO₂ footprint totals 72.1 ktonnes of CO₂: more than double. Figure 2.11 shows the impact of adding the (provisional) calculation of the purchasing chain emissions for the years 2019 and 2023.

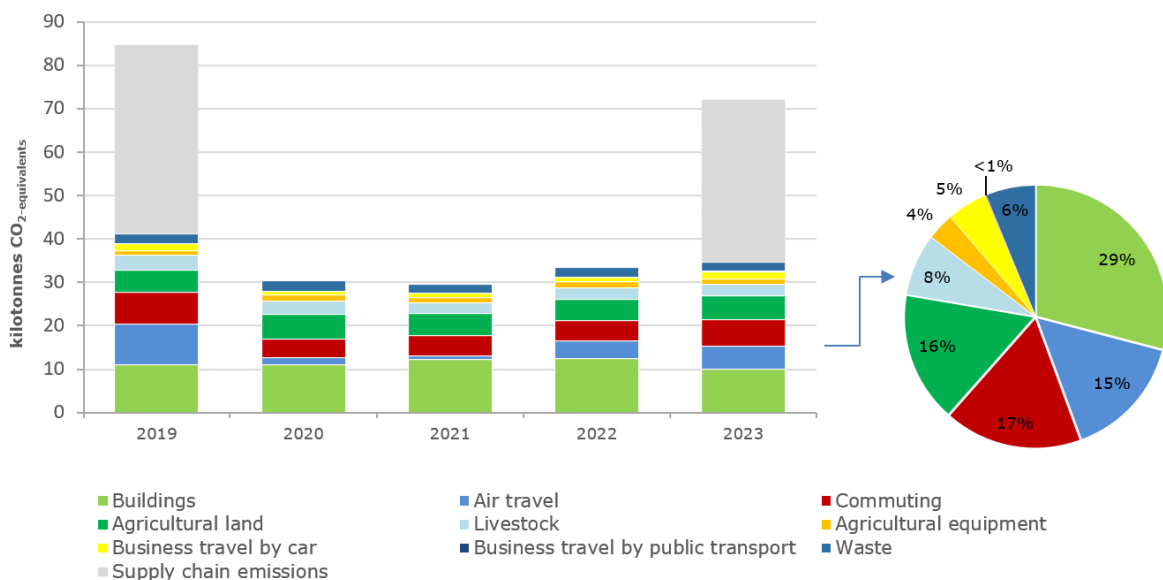


Figure 2.11 The CO₂ emissions in ktonnes, 2019-2023

2.8.6 Purchasing 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 perform our procurement tasks responsibly, the integrity of the purchasers must be beyond doubt.

For this purpose, the code of conduct of the Dutch Association for Procurement Management (the NEVI Code of Conduct) is 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 Purchasing Conditions (ARIV) also apply.

In addition to the existing laws and regulations, WUR also upholds its own purchasing 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 were adopted by the Executive Board. The sustainability criteria of the Dutch government, as published at mvicriteria.nl, are applied as much as possible. Additional sustainability criteria, including the International Social Criteria (ISC), are considered and upheld for each procurement, where possible. WUR continues to play a leading role in sustainability, CSR and inclusiveness. With our procurement activities, we challenge chains to operate transparently, sustainably, circularly and free of modern forms of slavery. The results are discussed regularly with the directors of operational management and the responsible member of the Executive Board.

WUR's purchasing policy was updated in 2023. The threshold amounts used within WUR were increased to better reflect current prices. In addition, the legal thresholds were raised. Collaboration with other universities was intensified by making joint efforts, based on equal purchasing requirements, to further eliminate child labour and modern slavery. The Purchasing department also drew up a vision document in which sustainability plays a prominent role, with the aim of achieving an increasing trend of inclusion of (social) sustainability in WUR tendering, whereby this is conditional with processes within Facilities and Services.

More information about the activities and the results of the purchasing policy in relation to sustainability can be found in the [Sustainability Report](#).

2.9 Compliance

2.9.1 Governance

Wageningen University (WU) and Wageningen Research Foundation (WR) cooperate as separate legal entities under the name Wageningen University & Research (WUR). In terms of administration, this collaboration has been shaped by a governance union: the Executive Boards of WU and WR consist of the same members; this guarantees maximum administrative unity between the university and the research institutes. The Executive Boards and Supervisory Boards of WU and WR together form the Executive Board and Supervisory Board of WUR.

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 is advised by the WUR Management Board, the body in which the five sciences groups are represented by their managing directors and the Wageningen Food Safety Research unit by its director.

The participational bodies are important partners in policy formation for the Executive Board and the management boards of the organisational units. Each sciences group has a joint works council for employees of WUR who work within this sciences group. Additionally, there are separate works councils for Wageningen Food Science Research, 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 (SR) and the Student Staff Council (GV) are participational bodies of the university. The GV consists of members of the

Central Works Council, supplemented by two directly elected employees, two directly elected PhD candidates and members of the SR. Students and staff have an equal number of votes in the GV.

The COR and GV 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 SR. The WUR Council does not have any authority, as this remains with the COR and GV.

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 [Code for Good Governance in Dutch Universities as applied to Wageningen University & Research](#), effective 2020. The code is composed of the Code for Good Governance in Dutch Universities and supplemented by the provisions of the Dutch Corporate Governance Code 2022 that are relevant to WR. This transparency is also demonstrated through the Administration and Management Regulations of [WU](#) and [WR](#), the [Personal Data Protection Regulations](#), the [Camera Surveillance Regulations](#), the [Social Safety Code of Conduct](#), the endorsement of the [Code for Transparency in Animal Testing](#) by WUR and various complaints regulations, and the codes and schemes aimed at ensuring the independence of research (see 2.9.2).

2.9.2 Independence and integrity

The independence of scientific research is an important principle. At a time when universities are cooperating more than in the past with government agencies and public bodies, 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](#)
- [The Anti-Corruption Code](#)
- [Regulations for side activities](#)
- [Guidelines for Appointing Professors](#)
- [Wageningen University & Research Whistleblower 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 (see 2.7.9). Complaints will be assessed on the basis of the [Scientific Integrity Complaints Regulations](#).

In addition to these WUR guidelines, peer reviews are conducted, there is legal supervision, and national and international on-site visitations are carried out periodically. These official inspections to assess the quality of study 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. Commissioning parties and/or other stakeholders have no influence on the findings. The report always mentions the providers of finance. More information can be found on our [website](#).

WUR not only carries out research independently, but also collaborates with businesses, government agencies and public bodies, 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 providers of finance. The full list of these chairs is published on our [website](#).

WUR 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 side activities

in order to prevent a possible conflict of interest. The approved side activities can be found at we@wur.

In order to guarantee that the work within WUR is carried out and published both independently and with integrity, we as an organisation apply a number of principles in the form of codes, regulations and agreements. Employees declare to be familiar with these principles and to act accordingly this by signing their employment contract. Employees are also given the opportunity to attend workshops on integrity.

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 for 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 social environment in which WUR operates is known for its high dynamics, in which the government is faced with a number of complex issues. These issues have a major impact on society, requiring government interventions. For 2023, these included the climate crisis, the nitrogen crisis and the war in Ukraine, which posed major national security and energy security challenges, as well as the geopolitical relations with China, among others, and high inflation. Addressing these problems demands a lot from society, but society's confidence in the government's ability to solve them is low, and society's ideas of the solutions are far from unified or clear-cut. At the same time, the government is not losing sight of the long-term perspective and is willing to invest in innovation and strengthening the Dutch knowledge economy. In this social context, WUR faces many challenges. The government asks WUR to contribute to solving the problems by actively participating in new research programmes and public debate. At the same time, WUR is itself facing the consequences of several crises and developments such as high inflation, pressure on knowledge security and the tight labour market. All these developments result in a higher risk profile for WUR.

At the same time, WUR faces issues of increased complexity due to regulatory pressure from the government and uncertainty about the rules for programmes in which WUR is asked to participate. For example, regulations regarding knowledge security and sanctions mean that WUR has to put much more energy into customer acceptance and set up a 'Know Your Customer' process. New grant programmes often require WUR's own contribution and put a strain, sometimes too great, on the organisation's free resources. Also, the rules to be followed when spending the funds are often not written clearly or appropriately for a research organisation, causing WUR to deal with issues of taxation, accountability and procurement.

WUR acknowledges that it plays an important role in addressing the identified problems and that it contributes to the society of the future through its education and research. The social demand articulated to WUR has led to strong growth in the organisation in recent years. At present, there is less certainty about the choices that the government will make on these issues in the coming years and what contribution WUR will be asked to make. Growth facilitation and uncertainty regarding future growth pose financial risks, for example because of the need to invest more in buildings and (digital) facilities and to hire more employees on permanent contracts. WUR is willing to take these risks. This is a carefully considered decision because WUR has sufficient equity capital and liquidity to cover any temporary deficits. WUR is less willing to take additional risks associated with co-funding new research programmes, partly because of sometimes insufficiently clear – financial – regulations. WUR's own resources are limited and necessary to maintain its innovative capability. WUR is therefore reluctant to enter into new research programmes that are risky due to insufficient co-funding. Risk tolerance is low in the areas of compliance and image.

WUR has grown significantly in recent years due to additional resources made available by the government and the increase in work commissioned by third parties. In the coming years, the financial scope will be reduced due to cost increases as a result of labour cost developments, higher energy bills and rising housing expenses. It will also be impacted by the political uncertainty, for example with regard to international students. The organisation will therefore have to pay more attention to costs and make conscious choices about what activities are and are not carried out. The sound financial situation offers enough room to respond to changing circumstances, without having to make savings in a hurry.

2.9.3.2 Risks of strategic objectives

The 2019-2024 Strategic Plan for WUR was launched 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 institution, 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. This way, the Executive Board monitors the strategic 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 forecasts 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 and developments in research turnover, and support decisions for large investments, such as the third education building as well as the progress of the Strategic Plan. The results for WU are shared in the Continuity section.

The main strategic risks facing the organisational units are discussed in the quarterly meetings between the management boards of the units and the Executive Board. The Executive Board discusses the 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. During this planning and control cycle, operational risks with an impact on results and assets are identified and provided with appropriate measures. The planning and control cycle includes:

- Annually drawing up a framework letter (multi-year framework; defines tasks for upcoming financial year);
- Formulation of an annual budget statement for each unit;
- Quarterly reports on the balance sheet and results developments and the risks;
- Monthly monitoring of financial and liquidity developments per organisational unit and department (Early Warning System);
- A budget allocation and project system process has been set up for Ministry of Agriculture, Nature and Food Quality (LNV) project budgets. These are used to inform cluster leaders and financial departments about the depletion of the LNV project budgets. Additional attention was given to managing the item of 'Unfinished projects' in the second half of 2023 as the LNV allows only limited annual underspending;
- Subsequent costing of the costs 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 boards. These are organised four times each year.

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

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

Operational risks include those relating to the quality of internal processes and internal reporting. These risks are controlled first of all using the classic tools of administrative organisation such as the division of duties. WUR has also been using BRIX as a system to monitor the quality of internal processes based on data analysis since 2020. BRIX detects and investigates unusual transactions and patterns in operational management systems. By quickly detecting and resolving errors and deviations, the quality of processes is continuously improved. 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.

Managing grant projects poses significant risks due to the complexity of regulations and the high importance of grant projects to WUR's financial situation. Complying with increasingly stricter conditions from providers of finance requires adequate support for project leaders by well-trained project controllers, good knowledge of funding schemes and a mature system of cost allocation to projects. WUR manages these risks by investing heavily in high-quality project controllers and high-quality second-line support that ensures good provision of information, standardisation of working methods and appropriate working arrangements with providers of finance and auditors.

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.

2.9.3.4 Cybersecurity

The WUR-wide status in the field of information security (also known as cybersecurity) is placed on the agenda every quarter at the regular management board meeting, chaired by a member of the Executive Board and the IT Portfolio Board. In 2023, we started to put information security risks on the agenda of the quarterly discussion between the management board members and the Executive Board. The Information Security Officers (ISOs) report on the status within the sciences groups on a quarterly basis, and they join the department consultations within their group. In 2023, interactive e-learning was developed for employees in collaboration with our education specialists. This was made obligatory by the management boards, and monitoring and follow-up were subsequently established. Participation increased significantly compared to previous years, which led to an increase in awareness of information security, as also shown by other measurements.

WUR collaborates closely with other educational and research institutions, including in relation to information security, privacy and knowledge security. This collaboration is often organised through UNL, SURF and TO2. Over the past year, a lot of time and attention was devoted to improving the quality of the joint monitoring service (SURFsoc). WUR also learnt from, and contributed to, the best practice processes of other institutions to achieve the level of ambition in cybersecurity. Cooperation with suppliers in the field of cybersecurity is becoming increasingly important, and for IT assets (hardware/software) we took measures within the purchasing process to safeguard information security. However, the monitoring of suppliers in this regard is not yet at the desired level, but this is envisaged for 2024.

WUR is an organisation that uses a lot of data as a platform for delivering innovative and relevant research and education. The threat picture drawn up jointly through SURF shows that external threats are increasing. At the same time, we realise that in an open educational/research institute, far-reaching security is not always desirable and necessary, and that we can also accept the associated risks in some cases. The instrument we use in this trade-off is data classification. The focus over the past year was on the most critical data, so that this is purposefully protected. Quarterly IT planning is based on a continuous analysis of risks relating to this data, and at the end of the quarter the measures taken are evaluated.

The maturity measurement conducted externally at the end of 2023 shows that WUR scores well across the board for operational resilience but has not yet reached the ambition level. This is mainly due to less attention being paid to process documentation and policy monitoring.

At WUR, a Portfolio 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 actively participates in the dialogue on knowledge security organised by OCW (for universities) and EZ (for TO2 institutions). WUR also participates in the platform for integrated safety in higher education. Insights from these dialogues 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.

2.9.3.5 Tax, legality and fraud risks

Tax laws demand a great deal of effort from the organisation. The main tax risks related to VAT concern the correct assessment of the VAT to be applied in the activities WUR undertakes and the correct calculation of recoverable VAT. Agreements have recently been reached with the tax authorities on the latter issue, reducing this risk. The correct application of VAT legislation is monitored by the tax controller, who, among other things, provides for training courses for the financial employees.

WR is subject to corporation tax (VPB). The main risks for the VPB are the correct allocation of costs to WUR and the use of the correct transfer rates in the case of the mutual provision of services. To prepare the annual accounts for tax purposes, WUR obtains advice from the external tax consultant. WUR regularly pays natural persons with whom there is no employment relationship such as students, guest lecturers and PhD candidates. The correct application of tax laws for these payments is complex. WUR has regular meetings with the tax authorities to discuss such cases.

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 EU procurement directives and, on the other, careful documentation of the legality of the other purchases. This matter is complex and requires an adequate information system and 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, and residual risks have been reduced.

The Ministry of Agriculture, Nature and Food Quality (LNV) has taken a clear stance that the spending of and accounting for all funds provided under the TO2 scheme is the direct responsibility of WR and that funds awarded under so-called partner contracts in the past must also pass through WR's profit and loss statement and TO2 accounting. This makes the management of LNV funds more complex and risky. WR is currently considering how best to deal with this matter. LNV has agreed that partner funds from collaborations concluded before 2021 will continue to be accounted for in the old way in 2022. The impact of this adjustment on the result is non-existent, but it does have an effect on the presentation of income and expenses and on the control to be exercised over these expenses.

LNV has also indicated that the distinction between NAPRO (funds intended for projects still to be completed) and surplus (funds that have not been spent and for which there is no immediate destination) is not in line with the TO2 scheme. This may result in WR exceeding the norms for surplus in the scheme and having to repay the excess against the balance sheet item created. WR has agreed to a two-year period with the Ministry to resolve the consequences of this modified interpretation in 2021.

WUR conducted a fraud assessment, which identified fraud risks related to the misappropriation of assets - and in the area of financial reporting - based on the fraud triangle. The management measures, aimed at preventing fraud and reducing impact, were then assessed. The ensuing residual risks were discussed with the organisation in 2023, weighing whether the residual risks are acceptable

or whether additional measures are needed. WUR has a regulation for reporting and following up on suspected (financial) fraud.

2.9.3.6 Risk management implementation and improvements in 2023

In 2023, the organisation prioritised improving financial operations and the IT systems deployed. Further standardisation and professionalisation of the financial and administrative processes, and better streamlining of the systems supporting project management, will contribute to better risk management in these areas in the future. Strategic risk management and supervision of operational risk management by the risk committee received less attention in 2023.

The changing financial outlook, with the years of strong growth gradually coming to an end, calls for good anticipation of the possible scenarios. The multi-year forward view by both WU and WR has therefore received special attention. The main issue here is how to respond responsibly to the growing need for housing, without overburdening the resources of future years.

2.9.3.7 Looking ahead to 2024

The growth of the organisation described in the previous paragraphs, in conjunction with the increasingly more stringent conditions and checks of our main providers of finance and increasing laws and regulations, create a higher risk profile. Therefore, the risk management process must be further developed. As such, it is especially important that risks are detected and discussed by the line management transparently and in a timely fashion.

The key areas for attention for further risk management in 2024 are as follows:

- Deepening the risk assessment and risk appetite for the strategic risks as part of the drafting of the new Strategic Plan;
- Strengthening IT control measures. These are focused on being better prepared for the increasing threats in the area of cybersecurity on the one hand, and on the auditor's recommendations regarding the general IT controls that guarantee the correctness and quality of the information systems on the other;
- Stronger concentration of high-quality content expertise is needed to address increased complexity;
- Attention to the cultural aspects, social safety, ethics and knowledge security within the organisation. Organisations in a dynamic environment require an open culture with sufficient checks & balances built in; this prevents tunnel vision. For such a culture to exist, it is necessary that management provides space for critical voices and is willing to include independent opinions in the decision-making.

These points of interest are addressed in close consultation with the financial department and directors of operational management.

2.9.4 Remuneration of senior executives

The remuneration of WUR's senior executives and members of the Supervisory Board is established in accordance with the standards of the Senior Executives in the Public and Semi-Public Sector (Standards for Remuneration) Act (WNT). In compliance with Article 1.1 of the WNT, WUR has included the remuneration of the Executive Board members and the Supervisory Board members in Tables 2.17 and 2.18.

Table 2.15 Classification of Wageningen University

2023 Classification	Results	Complexity Points
A. Turnover 2021 (* €1,000)	431,400	10
B. Number of students 2021	11,829	4
C. Number of education disciplines or sectors	3	5
Total		19

The maximum remuneration for 2023 is €223,000.

Table 2.16 Remuneration of Executive Board members

Overview 2023 (amounts in €)	Heimovaara	Mol	Buchwaldt
A. Remuneration	223,000	223,000	223,000
Minus additional tax liability for car	-	-	-
A1. Remuneration	223,000	223,000	223,000
B. Compensation in the event of termination of contract	-	-	-
C. Personal expenses			
Representation costs	2,400	2,400	2,400
Domestic travel expenses	27,352	12,486	16,085
International travel expenses	12,627	10,913	1,650
Other expenses	0	0	0
C1. Total personal expenses	42,379	25,799	20,135
D. Total expenses	265,379	248,799	243,135
Distribution across components¹⁾			
A. Remuneration minus additional tax liability			
WU	117,383	117,383	117,383
WR	105,617	105,617	105,617
B. Compensation in the event of termination of contract			
WU			
WR			
C. Personal expenses			
WU	34,866	19,142	18,110
WR	7,513	6,657	2,025

¹⁾ The Executive Board's commitment is 50% for both WU and WR. Due to the maximum amounts set out in the WNT for charged-on employees, not all costs are charged on to WR equally.

Tables 2.17 and 2.18 contain the consolidated information on the remuneration of the personal union of WUR. These tables provide the user of the annual accounts with the required insight into the total cost of the senior executives and members of the Supervisory Board. This list differs from the statutorily prescribed statements as the legislation requests information by entity. The statutory statements are included in WU and WUR's annual accounts. These are consistent with the consolidated statements shown below.

Table 2.17 Remuneration of senior executives (amounts in €)

The WNT applies to WU and WR. The applicable maximum remuneration for WU and WR for 2023 is €223,000 (general remuneration limit).

	S. Heimovaara	A.P.J. Mol	L.A.C. Buchwaldt
Job title	President of the Executive Board	Executive Board member	Executive Board member
Period of employment in 2023	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	200,433	200,428	200,428
Remuneration payable in the future	22,567	22,572	22,572
<i>Subtotal</i>	<i>223,000</i>	<i>223,000</i>	<i>223,000</i>
Individually applicable remuneration cap	223,000	223,000	223,000
-/- Unduly paid amount and not yet recovered amount			
Remuneration	223,000	223,000	223,000
The amount of the excess and the reason why the excess has or has not been authorised			
Explanation of claim for undue payment	N/A	N/A	N/A
Data from 2022			
Period of employment in 2022	1-7 to 31-12	1-1 to 31-12	1-1 to 31-12
Scope of employment in FTE	1	1	1
Remuneration			
Remuneration	96,805	191,659	191,659
Provisions for remuneration payable in the future	12,083	24,341	24,341
Total remuneration	108,888	216,000	216,000
Individually applicable remuneration cap	108,888	216,000	216,000

Within our organisation, those who are identified as senior executives with an employment contract do not have an employment contract with any other public or semi-public institution(s) under the WNT as managing senior executives (who entered employment from 1 January 2018).

Table 2.18 Remuneration for Supervisory Board members (amounts in €, excluding VAT)

	E. Dijkgraaf¹⁾	M.A. Verhoef	T. Klimp	K.D. Schuijt	B. Jansen ²⁾	F.P.T. Baaijens
Job title	Chair	Member	Member	Member	Member	Member
Period of job performance in 2023	1-1 to 31-12	1-1 to 31-12	1-1 to 31-12	1-1 to 31-12	1-1 to 31-12	1-9 to 31-12
Remuneration						
Remuneration	19,302	12,868	12,868	12,868	13,024	4,289
Individually applicable remuneration cap	33,450	22,300	22,300	22,300	22,300	7,454
Reason for exceeding 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 2022						
Duration of appointment in 2022	1-1 to 31-12	1-1 to 31-12	1-1 to 31-12	1-7 to 31-12	1-1 to 31-12	
Remuneration						
Remuneration	12,859	12,345	12,345	6,172	12,478	
Individually applicable remuneration cap	22,517	21,600	21,600	10,889	21,600	

¹⁾ Remuneration to Dijkgraaf Strategisch Advies B.V.

²⁾ Remuneration to Wellant BV.

Table 2.19 Remuneration for non-senior executives

Job title	Professor
Period of employment in 2023	1-1 to 31-12
Extent of employment in FTE	1
Remuneration	
Remuneration and taxable expense reimbursements	215,033
Remuneration payable in the future	27,388
Remuneration	242,421
Individually applicable remuneration cap	223,000
Reason for exceeding norm and other notes	Incidental remuneration for exceptional achievements
Data from 2022	
Period of employment in 2022	1-1 to 31-12
Remuneration	
Remuneration	278,964
Provisions for remuneration payable in the future	29,080
Total remuneration	308,044
Individually applicable remuneration cap	216,000

2.9.5 Side activities of Supervisory Board members and Executive Board members

2.9.5.1 Relevant side activities as of 31 December 2023 - Supervisory Board

Prof. E. Dijkgraaf (1970), Chair

Principal appointment: Professor of Empirical Economics of the Public Sector, Erasmus University Rotterdam

Appointed as of 1 April 2021, end of current term: 1 March 2025

Committees: Education and Research Committee, Audit Committee

Relevant side activities:

- Member of the Advisory Board of the Stewardship Foundation
- Member of the board of Noaber Foundation
- Member of the board of Eleven Flowers Foundation
- Owner of Dijkgraaf Strategisch Advies B.V.
- Member of the Advisory Board of Van Westreenen
- Member of the Supervisory Board of BrandMR Groep
- Non-executive board member of De Vries en Verburg
- Chair of the Supervisory Board of Lelie Zorggroep
- Member of the Supervisory Board of New Amsterdam Invest
- Member of the Expertisekring Begrotingsadvisering Raad van State
- Chair of the Reflectieraad Landbouwakkoord
- Member of the board of George Avenue Foundation
- Chair of the PBL Advisory Board

Prof. F.P.T. Baaijens (1958)

Principal appointment: Professor at Eindhoven University of Technology

Appointed 1 September 2023, end of current term: 1 September 2027

Committees: Education and Research Committee (Chair), Appointments Committee

Relevant side activities:

- Member of the Scientific Advisory Board, LifeMatrix Technologies AG
- Visiting professor, University of Zurich
- Member of the Advisory Board of the Department of Bioengineering at Imperial College London
- Member of the Advisory Board of the Life Sciences & Health Top Sector
- Member of the TNO Strategic Advisory Council
- Chair of the Knowledge Programme on Mining Impacts, EZK

Mr B.C. Jansen (1959)

Principal appointment: -

Appointed as of 1 April 2021, end of current term: 1 March 2025

Committees: Audit Committee, Appointments Committee

Relevant side activities:

- Chair of the Supervisory Board of Koninklijke Zeelandia Groep B.V.
- Member of the Supervisory Board of Darling Ingredients International Nederland Holding B.V.
- Member of the Executive Board of Royal Cosun

Ms T. Klimp (1972)

Principal appointment: CFO at Vion Food Group

Appointed 1 September 2018, end of current term: 1 September 2026

Committees: Audit Committee (chair)

Relevant side activities:

- Member of the Supervisory Board of TopigsNorsvin

Dr K. Schuijt (1974)

Principal appointment: Director-General of WWF International

Appointed 1 September 2022, end of current term: 1 September 2026

Committees: Education and Research Committee

Relevant side activities: -

Ms. M.A. Verhoef (1959)**Principal appointment: Levvel Executive Board**

Appointed: 1 January 2017, end of current term: 1 January 2025

Committees: Appointments Committee (chair)

Relevant side activities:

- Member of the Social Security Bank (SVB) Audit Committee
- Dean of the Nederlandse School voor Openbaar Bestuur (NSOB) administrative learning network
- Member of the board of Samenwerkingsverband Effectieve Jeugdhulp Nederland (SEJN)
- Chair of the Supervisory Board of Garage2020
- Independent chair of AVA Hiemstra & de Vries

An [up-to-date overview of the side activities](#) of the members of the Supervisory Board can be found on the website.

2.9.5.2 Relevant side activities as of 31 December 2023 - Executive Board**Dr S. Heimovaara (1965), President**

Appointed: 1 July 2022, end of current term: 1 July 2026

- Vice-chair of Advisory Council for Science, Technology and Innovation (AWTI)
- Member of Netherlands Academy of Technology and Innovation (AcTI)
- Member of Advisory Committee of museum Staal
- UNL:
 - member of the Steering Committee on Strategy, Public Affairs & Governance
 - member of Algemene Presidenten Vergaderingen (APV)
 - member of the board
- Wageningen Ambassadors
- Member of the board of 4TU
- Member of the Scientific Advisory Committee of the UN Food System Coordination Hub
- Member of the Supervisory Board of the Institute for Sustainable Process Technology (ISPT)

Prof. A.P.J. Mol (1960), Vice-President and Rector Magnificus of Wageningen University

Appointed 28 May 2015, end of current term: 10 March 2024

- Editor of book series New Horizons Environmental Politics (Edward Elgar)
- Member Editorial Board Journal of:
 - 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 Advisory Board of Centrum '45 Foundation
- Member of the Supervisory Board of Wetsus
- Member of the international Advisory Board of Montpellier University
- International advisor to the Executive Board of Jingwa Agricultural Science and Technology Innovation Center, Beijing
- UNL:
 - Member of Rectorencollege
 - Member of the Education and Research Steering Committee
- President Association of European Life Sciences Universities ICA
- 4TU Federation:
 - member of the Education Committee
 - chair of the Research Committee
- Chair of the Board of Euro League of the Life Sciences ELLS
- Member of the Supervisory Board of the IHE Delft Institute for Water Education
- Member of the Guidance Committee of the Netherlands Environmental Assessment Agency
- Member of Regieteam Groenpact 2.0 (structural consultation between the Ministry of LNV, employers in the green sector and the green education sector)

- Member of the board of the OnePlanet Research Centre foundation
- Chair of the TO2 Federatie Board
- Member of the European Bioeconomy University Board
- Member of the board of EWUU Alliance (Eindhoven University of Technology, WUR, University of Utrecht and the University Medical Centre Utrecht).

L.A.C. Buchwaldt MBA (1961)

Portfolio of Finance, Business & Services

Appointed 1 September 2017, end of current term: 1 September 2025

- Member of Member's Council Coöperatie SURF
- Member of the steering committee Operational Management and Finance UNL
- Member of the DUWO Advisory Board (student housing)
- Member of the Supervisory Committee of the EFRO 2021–2027 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 Foodvalley.nl foundation
- Chair of the Advisory Council of the Belmonte Arboretum foundation
- Member of the Board of ACCEZ (ACCElating Circular Economy Zuid-Holland)
- Member of the Administrative Steering Committee of Th!nk East Netherlands

2.10 Economic Performance Indicators

Direct economic values

WUR is a non-profit entity. Positive returns are added to the organisation's equity capital. The table below shows the main sources of turnover for WUR, 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 accounts (see Chapter 3).

Table 2.20 WUR key figures (amounts in €1 million)

	2021	2022	2023
Wageningen Research (WR) research turnover			
Contract research	96.5	93.3	91.6
Top sectors (including LNV part)	71.3	72.5	75.5
Matching funds market and NWO	29.3	30.9	37.1
LNV programme research (excluding top sectors, including BO and WOT) & NVWA	136.4	148.9	162.8
Wageningen University turnover			
Turnover from direct and indirect government funding	341.9	364.4	388.3
Turnover from contract funding	68.0	72.6	83.7
Solvency as percentage of total equity			
Wageningen Research	62.4%	63.1%	63.1%
Wageningen University	53.2%	50.9%	59.3%

Pensions

The pension scheme for the whole of WUR was (compulsorily) placed with ABP. There is no obligation to make up any shortfall as a result of ABP's policy coverage ratio. This is why no provisions have been made. Pension accrual takes place on the basis of the average earnings system

('middelloonsysteem'). The General Pension Fund for Public Employees (ABP) indexes the pension benefits if the policy coverage ratio exceeds the required minimum. On 31 December 2023, this ratio was 113.9% and indexation starts from 110.5%. ABP increased pension benefits once in 2023.

Government funding

WUR receives financial support from the government. The extent of these contributions in 2023 is shown in Table 2.21.

Table 2.21 Overview of the government's financial contribution to WUR (* € 1 million)

Legal entity	Unit	Income	Government contribution
Wageningen University	Government funding	306.6	306.6
	Indirect government funding and contract funding, including target funding	121.1	40.6
	Tuition and course fees	44.3	0.0
	Other income	22.7	1.4
Wageningen Research	LNV and NVWA research programmes	206.8	83.1
	Contract research incl. NWO	160.2	19.5
	Other income	51.3	0.0
Total		913.0	451.2

The central government's contribution consists of funds that have been provided but from which it does not directly benefit and which it does not manage directly. This includes government funding for education and research of Wageningen University, the contribution from LNV for the knowledge base and top sectors, indirect government funding via contract research (NWO), and the TKI supplement for top sectors and other subsidies. LNV applied the TO2 grant conditions to programme research (BO and WOT), while retaining control over the use of these funds.

2.11 Wageningen University Continuity Section

In accordance with the guidelines set down by the Ministry of OCW, the Continuity Section of Wageningen University is part of this annual report. For the financial outlook for WR in 2024, refer to the financial report of Wageningen Research foundation.

Table 2.22 Key figures for Wageningen University, forecast for 2024-2028 (excluding Expat Center)

	2023	2024	2025	2026	2027	2028
Government funding (in € millions)	306.6	327.3	335.4	348.3	356.7	364.6
Tuition fees (in € millions)	44.3	49.3	53.5	54.8	54.9	55.2
Direct government funding and contract funding (including target funding) (in € millions)	121.1	139.8	143.3	146.8	150.5	154.3
Housing ratio ¹⁰	10.3	9.7	9.7	10.2	10.6	10.5
Investments	22.0	32.1	78.2	44.5	32.2	41.9
Average number of employees (FTE) and allocation	3,943	4,085	4,093	4,088	4,058	4,059
Support staff (%)	5.2	5.2	5.2	5.2	5.2	5.2
Overhead staff (%)	16.3	16.3	16.3	16.3	16.3	16.3
Primary staff (%)	78.5	78.5	78.5	78.5	78.5	78.5
Number of enrolled BSc and MSc students	13,108	12,899	12,875	12,810	12,695	12,585
Number of PhD degrees obtained	285	298	324	337	346	349
Net result excl. sale of assets (in € millions) ¹¹	-9.3	-6.5	-5.1	-2.6	-2.0	-2.7
Net result incl. sale of assets (in € millions)	-9.3	-6.5	-1.2	14.7	-1.4	0.8
Wageningen University CAPITAL						
Capital in fixed assets (in € millions)	304.5	298.4	339.3	341.7	336.1	340.9
Equity capital (in € millions)	248.0	245.4	244.2	258.9	257.5	258.3
Total liabilities (in € millions)	536.8	507.2	506.0	521.7	518.3	519.1
Solvency Ratio 1 (%) ¹²	46.4	47.8	47.7	49.1	49.1	49.2
Solvency Ratio 2 (%) ¹³	49.0	50.4	50.3	51.6	51.7	51.7
Wageningen University LIQUIDITY						
Liquid assets (in € millions)	145.9	158.0	115.9	129.1	130.7	126.7
Current ratio	0.85	0.84	0.67	0.72	0.73	0.72

¹⁾ Result excluding a one-of tax refund

The multi-year forecast takes into account indexation of 2.5% per year, with the exception of depreciations, which are not indexed, and tuition fees where, as a result of the increase in tuition fees for 2024-2025, indexation of 5% has been included for 2025 and the years thereafter have been indexed at 2.5%. Wageningen University's current ratio is higher than the OCW's signalling value (< 0.5).

2.11.1 Principles of the financial policy

Wageningen University is entering the plan period in 2024 with a budgeted negative operating result of -€6.5 million. In recent years, Wageningen University has funded many projects using the quality agreements (QA funds), Van Rijn funds, Natural Science and Technology Sector Plan, and start-up and incentive grants. A significant portion of the additional funds associated with the latter two

¹⁰ Housing ratio: (depreciation costs buildings and land + housing costs -/- rental of buildings) / total expenses.

¹¹ 2022 result excl. one-off VAT refund for 2016-2022.

¹² Solvency ratio 1: equity capital / total liabilities.

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

programmes has not been spent yet and remains outstanding on the balance sheet at the end of 2023. The operating result is projected to be negative for virtually the entire duration of the plan period, with an envisaged recovery at the end of the period. Wageningen University considers this justified, given the favourable equity position. Solvency will remain above 48% throughout the entire plan period.

The composition of the operating result in the projections changes due to a number of factors:

- Regular student growth and PhD graduation growth: this is the development of direct income and expenses without incidental developments. In 2025, compared to 2024, regular student growth will result in a €1.5 million loss. This is due to an expected dip in the number of funded enrolments in 2025 compared to 2024. In 2026 and 2027, regular student growth compared to 2024 will result in a positive adjustment in the result of around €3.4 million. This is mainly due to an increase in PhD reimbursements as a consequence of the additional PhD programmes in recent years plus an increase in tuition fee income. This is because the impact of the halving of the regular statutory tuition fees for first-year students will disappear in 2025. The lost revenue from this measure was estimated in the 2024 budget at around €1.1 million.
- New programmes after 2024: the new and old sector plan funds and start-up grants are fully included in the 2024 budget and therefore no longer cause any changes to the result over the 2025-2028 period.
- Expiry of old programmes: this concerns the reduction of the existing research programme, including the phasing out of various preliminary investments from our own reserves. This also includes the decline in underinvestments. This is caused by programmes having picked up steam and a positive result then no longer being expected due to the delayed start-up. In the projected period, the expiry of the old programmes will create an annual positive adjustment of approximately +€3.7 million in 2025 to +€8.4 million in 2028 compared to the 2024 budgeted result.
- Operating expenses for new investments will produce €6.6 million in additional costs in 2028 (including the impact of phasing investments):
 - Strategic Housing Plan (SHP): this concerns the impact of the real estate investments still to be carried out under the SHP on the operation of Wageningen University. From 2026, these property investments will weigh on the result, rising to approximately -€5.6 million additional housing expenses in 2028 (including research building and buffer space). The current total expected size of the investments under the SHP is approximately €72 million (including VAT gap) for Wageningen University and approximately €147 million (including VAT gap) for WUR as a whole (according to the SHP framework, approved by the Supervisory Board in May 2023, including the preliminary decision by the Executive Board with regard to the new research building).
 - Sustainability: the Multi-Year Plan (MYP) takes into account sustainability investments as estimated by Facilities and Services' Real Estate & Housing department. A total of €28.7 million is earmarked for this over the period 2024-2028. The investments will lead to €1.2 million in additional housing expenses in 2028. As a result of finalising the connection of the campus buildings to the ATES loop and other investments in sustainability, the projection takes into account savings on energy costs from 2025 (€0.25 million in 2025, rising to €1.1 million in 2028). It is assumed that these investments will have a positive impact on the energy bill as well as a positive impact on the footprint.
 - Unifarm: another major investment envisaged in the MYP in the period 2025-2027 concerns the investment in Unifarm (mainly the realisation of the Serre Green and Yellow greenhouses). Based on a market consultation, Unifarm expects that investment of €30.4 million will be necessary to achieve the plans (not yet formally approved) for the renewal of the Unifarm facilities. This investment will result in €1.5 million of additional depreciation charges at the end of the plan period (2028).
 - Phasing: given the uncertainties regarding future government demand, the associated scale of the organisation, the size of planned investments and the resulting fall in liquid assets, this MYP maintains a general phasing of the investments totalling €35 million in the period 2024-2028. The precise details of this phasing (in this case -€5 million in 2024, -€15 million in 2025 and 2026, -€10 million in 2027, +€10 million in 2028) will be worked out in the coming period.

-
- Average wage costs:
 - The average wage costs are considered to be in line with the wages compensation offered by OCW such that, in any case, budget neutrality is established for the direct government funding part.
 - Tenure track: the past few years have seen a lot of new incoming staff, including tenure trackers. The wage costs of the newcomers will rise as they move up the scales in the coming years. The present MYP therefore anticipates an increase in average wage costs for these new hires from 2025 onwards. As a result, a deterioration in the results is included in the MYP of -€0.5 million per year from 2025, rising to -€2.0 million in 2028.
 - The remainder of the changes compared to the 2023 budget is the balance of non-recurring income and expenses, in particular as a result of the valorisation of surplus fixed assets.

The organisation experienced significant growth in 2023, and the average staffing levels increased by 208 FTEs to 3,943 FTEs. This achieves the growth in staff numbers envisaged in the 2023 budget. The additional funds (Sector Plan Funding and Start-up Grants) provided under the current coalition agreement will require even further growth in staffing levels temporarily. Wageningen University therefore expects a further increase in average staffing levels of 142 FTEs to 4,085 FTEs in 2024. No major growth in staffing levels is expected in subsequent years as there is a general expectation that funding will stagnate. Based on current projections, including the legacy of the earlier funding programmes and the CAO effects, personnel costs will increase by about €26 million in 2024. From 2025, personnel costs will stabilise in real terms and demonstrate only nominal growth due to indexation.

To accommodate the growing organisation, expand the research infrastructure and, at the same time, make buildings and premises more sustainable, a number of additional investments have been and will be made. Wageningen University is investing in the Strategic Housing Plan (SHP) to address the space requirement for laboratory facilities and office workplaces over the long term as well. With this, Wageningen University wants to offer employees and students a good and modern working environment that also responds to the needs of hybrid working: working partly from home and partly on campus. This does result in additional investment in regular growth of workplaces, but not as much as the rate at which employee numbers are expected to grow and have grown. Wageningen University expects to invest €96 million in the period 2024-2028 (after phasing) within the framework of the SHP, for Unifarm and in respect of the sustainability programme. Investments in equipment, inventory and major building maintenance are expected to amount to an average of €24 million per year.

Wageningen University will continue to valorise surplus real estate. Some valorisations with book profits are still expected in the plan period, especially for years 2025 and 2026, including the last phase of Kortenoord (smaller part) and De Dreijen (larger part). These book profits will be used partially to fund the new real estate and investments in existing real estate of Wageningen University.

WUR has a Planning & Control cycle in which frameworks based on the Strategic Plan are set annually in the spring for the following year, which are then used to draw up budgets in the autumn. For Wageningen University, the focus here is on the components of central and specified funds for education & research, funds for teaching and funds for conducting research.

Chapter 3, most notably sections 3.1.3, 3.2.3.4 and 3.2.4.2, explains the shaping of national policies and their funding with specified funds of the Ministry of OCW.

BALANCE SHEET FOR Wageningen University, FORECAST 2024-2028 (in € millions)

	2023	2024	2025	2026	2027	2028
Intangible fixed assets	2.4	2.4	2.4	2.4	2.4	2.4
Tangible fixed assets	300.1	294.0	334.9	337.3	331.7	336.5
Financial fixed assets	2.0	2.0	2.0	2.0	2.0	2.0
Total fixed assets	304.5	298.4	339.3	341.7	336.1	340.9
Inventory	0.0	0.0	0.0	0.0	0.0	0.0
Receivables	86.4	50.8	50.8	50.8	51.5	51.5
Short-term securities	0.0	0.0	0.0	0.0	0.0	0.0
Liquid assets	145.9	158.0	115.9	129.1	130.7	126.7
Total current assets	232.3	208.8	166.7	179.9	182.2	178.2
Total assets	536.8	507.2	506.0	521.7	518.3	519.1
General reserve	232.0	225.5	224.3	239.0	237.6	238.4
Appropriated reserve	14.7	14.7	14.7	14.7	14.7	14.7
Other reserve	2.3	2.3	2.3	2.3	2.3	2.3
Total equity capital	249.0	242.5	241.3	256.0	254.6	255.4
Provisions	14.3	13.2	13.2	13.2	13.2	13.2
Long-term debts	1.7	1.7	1.7	1.7	1.7	1.7
Short-term debts	271.8	249.8	249.8	250.8	248.8	248.8
Total liabilities	536.8	507.2	506.0	521.7	518.3	519.1

PROFIT AND LOSS STATEMENT FOR Wageningen University, FORECAST 2024-2028 (in € millions)

	2023	2024	2025	2026	2027	2028
INCOME						
Government funding	306.6	327.3	335.4	348.3	356.7	364.6
Tuition fees	44.3	49.3	53.5	54.8	54.9	55.2
Indirect government funding and target funding	37.4	45.1	46.2	47.4	48.6	49.8
Co-funding and subsidies	30.7	37.0	37.9	38.9	39.8	40.8
Contract research	53.0	57.7	59.1	60.6	62.1	63.7
Side activities and other income	22.7	21.5	22.0	22.6	23.2	23.7
Total income	494.8	537.9	554.1	572.6	585.3	597.8
EXPENSES						
Personnel costs	354.7	378.2	388.9	398.6	406.0	416.8
Depreciations	32.3	34.9	34.5	36.8	37.9	36.9
Housing costs	40.6	41.2	42.7	45.0	47.2	49.0
General costs	40.9	44.3	45.4	46.1	47.2	48.4
Specific costs	41.9	51.3	50.4	51.2	51.2	51.7
Total expenses	510.4	549.9	561.9	577.7	589.5	602.8
Operating result	-15.6	-12.0	-7.8	-5.1	-4.3	-5.0
Financial income and expenses	6.3	5.5	2.7	2.5	2.2	2.2
Result from standard operational activities before tax	-9.3	-6.5	-5.1	-2.6	-2.0	-2.8
Result participating interests, incidental entries and valorisations ¹⁴	0.0	0.0	3.9	17.3	0.6	3.6
Net result	-9.3	-6.5	-1.2	14.7	-1.4	0.8

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

The operating statements included in the multi-year plan are partly derived from the 2024 budget. Both the 2024 budget and the multi-year forecast were adopted in December 2023 by the Executive Board and the Supervisory Board. The multi-year plan incorporates the expected developments mentioned under "Principles of the financial policy". The actual 2023 result differs from the 2023 forecast on which the 2024 budget and the 2025-2028 multi-year plan are based. This has consequences for the starting position of equity capital and short-term debts. These consequences are reflected in the figures for 2024 onwards.

2.11.2 Internal risk management

The presence and function of the internal risk management and control system is described in section 2.9.3 This section also includes a description of risks that have no direct impact on the multi-year plan.

2.11.3 Risks and uncertainties

The results of Wageningen University will be influenced by several uncertain factors, both exogenous and endogenous, in the years to come.

Development of student numbers (exogenous factor)

The number of incoming Bachelor's students has declined relatively in recent years. Further growth in incoming student numbers is not expected in the first few years based on interest from potential students and the government's recent demand to recruit less actively in the international market. The organisation is now well aligned with expected student numbers both in terms of employee numbers and educational facilities.

Development of non-EEA student numbers (exogenous factor)

Approximately 11% of the students participating in study programmes at Wageningen University are international non-EEA students who make a large contribution to the general cost coverage by paying institutional tuition fees, which are based on the full costs for this group of international students. The annual income that could be directly linked to these students was €21.1 million in 2023. This equals about 4% of the total income and about 14% of the size of the available liquid assets at the end of 2023. In the event of an unexpected sharp decline in this student category (for example, in the context of a new coalition agreement), there may be a few financially more difficult years to come until Wageningen University's cost level is adjusted to the new situation.

Risk assessment about the additional resource allocation included in the projections (exogenous factor).

- **Quality Agreements (QA):** the resources for the quality agreements will be fixed at the level of the 2024 budget from 2025 onwards. It is not yet clear at this stage what conditions will be attached to the allocation of these resources from 2025 onwards.
- **Relative market share of Wageningen University:** the question for Wageningen University is how the market share in the student-related funding of the OCW funding model will develop in the coming years. After a long period of growth, it seems that the total student population at Wageningen University will stabilise in 2024, though Wageningen University's share of student-related funding will decline in 2024. If other universities continue to grow faster than Wageningen University on average in the coming years, then this could lead to a further decrease in the share of student-related funding. Whether the development in the OCW's macro framework after 2024 is sufficient to absorb this possible decrease will become clear in the coming years. The projections assume constant prices for variable funding. This means that the government adjusts the macro framework to the total population of students.
- **Continuation of the Natural Science and Technology Sector Plan:** Wageningen University assumes that the associated funds will be incorporated into the direct government funding after the programme ends in 2025 and thus become a regular part of the direct government funding thereafter.
- **Other new initiatives:** participation in the Growth Fund among others is under way. These additional resources were not included in the projection due to too much uncertainty.

- **Government funding redistribution issues:** the current multi-year forecast only takes account of redistribution of the compensation for first-year tuition fees among universities.
- **Risk of declining student numbers:** the growth in the number of students was principally caused by growth in the number of MSc students. The intake of BSc students declined and may be a precursor to contraction if further recruitment efforts fail to deliver. The development in the number of non-EEA students is relatively volatile and, due to the level of institutional tuition fees (€20,600), has a material impact on the development of direct government funding. The 2024-2028 MYP distinguishes for the first time between EEA and non-EEA students in revenue development from tuition fees. The number of non-EEA students is expected to match 2025 in 2026, after which this number will fall in 2028 compared to 2024, with the result that the total institutional tuition fees as part of the revenue from tuition fees will stabilise in 2025-2026 and fall in 2028 compared to 2024.
- **Intake of international students for the BSc reduced to 0 (both EEA and non-EEA).** One of the other possible scenarios is that it will no longer be possible to offer English-language BSc study programmes to new students. Such a measure would very likely see the intake of international students for the BSc eliminated completely. At present, the number of international students covers about 11% of the total intake for the BSc (of which 6% EEA and 5% non-EEA). With the current number of EEA (299) and non-EEA students (182) for the BSc, the student-related OCW funding and tuition fees currently amount to approximately €5 million to €6 million. This income would gradually disappear (assuming that the measure only applies to new students). In part, internal investments for education will also be reduced. This will slowly impact on the actual costs.

Valorisation of real estate in the plan 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. Three significant valorisations are scheduled in 2025, 2026 and 2028. 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 the planned years, then the cumulative result over these years will be €25 million less. For each major investment, the impact on solvency, the result and liquidity will be included in the decision-making process and, if developments in the external environment warrants it, the investment may be adjusted.

2.12 Reporting criteria and scope

With regards to the accountability for the social impact of WUR, the materiality analysis took precedence in setting the limitations and scope of this report. In this analysis, topics relevant and material to WUR were determined on the basis of the Strategic Plan for the 2019-2024 period. Through identification, prioritisation and validation, these topics were then assessed on the basis of their significance both for WUR and its stakeholders. This annual report focuses on these material topics. These topics form WUR's CSR agenda (see Figure 2.1 of section 2.3.3).

This report covers the 2023 financial year. Because the majority of the activities of Wageningen University and WR take place in the Netherlands, the sustainability reporting focuses on the activities in the Netherlands.

3 Specific Ministry of Education, Culture and Science accountabilities

3.1 Quality Agreements report

3.1.1 Process

The quality agreements for 2019-2024 were adopted by the Executive Board and approved by the WUR co-participation council (the Student Staff Council) and the Supervisory Board in 2019. We have been implementing the Quality Agreements programme to strengthen the quality of our education for five years now. The results of these efforts are summarised periodically in dashboards. Using these dashboards, the steering committee manages, monitors and reports on the implementation. The Executive Board, Student Staff Council and Supervisory Board evaluate and discuss the progress regularly.

Overall, the realisation of the quality agreements is on track: almost all projects have achieved the objectives successfully. The projects remain highly relevant, even accounting for the situation changing in recent years due to the coronavirus pandemic. Therefore, no major changes were necessary in 2023.

The funding we receive from the Ministry of OCW is spent entirely according to the established Quality Agreements 2019–2024. The financial table in Chapter 3.1.3 shows that WUR fully spent the funding received from OCW in the period 2019-2023 and for the plans for 2024.

In 2022, we received the news from the Ministry that funding will be continued after 2024. The exact conditions and process have not been decided on yet. Meanwhile, the steering committee initiated discussions with the Executive Board, the sounding board group and other interested parties about how to continue the current projects funded through the Quality Agreements.

3.1.2 Progress

Wageningen University invests in five of the six quality themes. For each theme, different projects have been defined, each with concrete goals and budgets. For each project, we give an overview of the progress, along with an explanation of the receivables and some reflections. According to our 2019–2024 Quality Agreements plan, we are not investing in the 'study success of students' theme. Our high study success rates make additional investments less urgent.

WU also evaluates the measures' effectiveness. This impact analysis is used for internal discussions and can lead to changes in projects to increase the impact when necessary. The positive impact analysis from February 2022 did not lead to adjustments of the plans for 2023. The next impact report will be ready and discussed in the first quarter of 2024.

3.1.2.1 Small-scale education

Project	Annual objective 2023	Objective achieved?
Thesis supervision	All chair groups will continue to offer intensive thesis supervision despite growing student numbers.	Based on the positive outcomes of ten random interviews per year with professors holding a chair, we conclude that all chair groups retained or implemented intensive supervision.
Additional teaching staff for chair groups	25 FTE additional staff will be appointed to 84 chair groups.	25 FTE additional staff were appointed to 84 chair groups (including four chair groups that appointed double the number of staff).

The chair groups have noticed a clear reduction in the (administrative) tasks lecturers have to perform, and lecturers now have more time for education and their students. With that extra time, they have strengthened and increased small-scale education in our Bachelor's and Master's programmes.

Chair groups have hired extra staff to intensify thesis supervision. This is partly funded by extra funding from the quality agreements for thesis supervision. The additional staff to unburden thesis supervisors enables them to improve student counselling or keep the same level of intensive supervision despite the increased number of thesis students. An additional positive effect is that many chair groups invested in improving the coordination, procedure and process for thesis students. At many chair groups lecturers started thesis rings or other forms of support for groups of thesis students on a variety of topics like writing, motivation, thesis planning, progress and stimulating students to help each other. In general, many professors holding a chair find that students are more satisfied with their thesis supervision. The corresponding student satisfaction survey supports this conclusion. The survey shows a continuous high satisfaction score for the availability of thesis supervisors. The overall student satisfaction with thesis supervision increased from 3.9 in 2018 to 4.2 in 2022-2023 (on a five-point scale).

In both 2019 and 2022, professors holding a chair were able to obtain funding of €30 thousand for small-scale education in courses. A total of 84 out of 94 chair groups received this funding (including 4 chair groups that received double the amount). They hired extra staff with this funding. All these chair groups reported that they realised the approved plans for expanding and maintaining small-scale education. With the extra staff, the chair groups were able to increase supervised group work and the number of supervised individual assignments, and decrease the group size in group work, lab work and field trips so that the lecturer could better supervise the students. Some chair groups also redesigned courses to be more intensive.

3.1.2.2 More and better study counselling

Project	Annual objective 2023	Objective achieved?
Dealing with Stress Campaign	Organise a mental health week and at least four other activities . Continued presence of additional student psychologist (0.4 FTE) organising the events.	All activities were organised , including the 'Surf your Stress' week. A 0.4 FTE coordinator was appointed to organise the activities.
More study advisors	4.7 FTE additional study advisors	5.8 FTE additional study advisors appointed.
More student psychologists	2.4 FTE for additional student psychologists.	2.0 FTE additional student psychologist appointed (0.4 FTE of which were FTE flexible capacity) and 0.4 FTE unburdening support for psychologists so they have more time for students.
Student initiatives for students	12 student initiatives funded.	4 longer-term student initiatives were funded. In addition, 56 short-term initiatives were realised.
Virtual training centre	Take on a coordinator. Further improve and promote website	A coordinator has been appointed. The website ' Student Training & Support ' has been promoted and updated.
Training for staff	At least two training courses per year to recognise problems that students face and guide them.	The student psychologists offered lecturers three sessions , and there is a weekly drop-in consultation service.

As of 2019, students have been able to attend the events and activities offered by the stress-prevention campaign. Students and other stakeholders (e.g. psychologists and Student Life Coaches) were involved in organising and developing the activities, ensuring that the activities match with students' needs. The 'Surf-your Stress' week was organised, with a total of 25 activities. The emphasis was on stimulating an open discussion on the topic of stress and wellbeing, on creating awareness about the healthy and unhealthy symptoms of stress and on providing tools to increase resilience. The evaluation surveys for the 'Surf your Stress' week show that students appreciated the activities; they gave the programme a score of 8.1 out of 10.

In 2021, extra study advisors were hired to support students. Every study programme, and therefore every student, benefits from this. This extra help was much needed as students were facing the consequences of the coronavirus restrictions on their education, study planning and career preparation. New study advisors completed a special training course. Since the 2021-2022 academic year, Study Advisor Competence Supporters have provided an elaborate training programme, coaching and peer consultation to every study advisor. The study advisors evaluated these services and training courses positively.

Students can request help from an expanded group of student psychologists. Additional psychologists were hired, with some of the FTEs able to be used flexibly, enabling WUR to deal with peaks in student demand. The student psychologists adjust their services and support to students based on the needs they signal. In 2023, the project was expanded to include a broader support structure, including group training, life coaches and peer coaches. When students register, they are assessed to see where they can best get help. By adopting this structure, WU has managed to reduce the waiting list for student psychologists and to ensure that students get the right help faster.

Students (and student organisations) carried out four long-term projects to help other students increase their wellbeing and the number of social interactions they have. These were projects that were started back in 2019 or 2020, after being approved by an assessment committee comprising students and a staff member. The rest of the project budget was used to fund smaller student initiatives. We aligned this project with a project launched in 2021 with the National Programme for Education. Some 56 applications for smaller student initiatives that met the criteria were approved by the assessment committee. A wide range of social activities was organised. With the smaller projects more students are reached, and these projects are easier to organise for students or student

organisations. Examples include celebrations of certain public holidays (e.g. Día de Muertos), a potluck and stargazing event, a pub quiz and a Rummikub tournament (RummiCup).

The Virtual Training Centre has become the Student Training & Support (STS) team. The team focuses on providing personal assistance and promoting contact between students through group training and support groups for and by students. Activities are successfully brought to the attention of students through a newsletter per term, social media, the myWURtoday app and banners in education buildings.

In 2023, three sessions were provided for lecturers about possible signals that may point to mental health issues in students. The student psychologists gave a presentation on how to detect student issues, what lecturers can do themselves and who they can approach for help. After the presentation, the questions and cases of lecturers were discussed. In total, 107 lecturers joined the sessions. There have been weekly drop-in consultations since July last year. Lecturers and staff members can discuss the cases of students whose mental wellbeing they are concerned about during these consultations.

3.1.2.3 Education differentiation

Project	Annual objective 2023	Objective achieved?
Student Challenge	WU organises at least one Student Challenge per year.	Two Student Challenges were launched.
Skills development	New skills implemented in study programmes, supported by instructional designers. Six training courses for student assistants.	All programmes started implementing the skills trajectories . Five training courses have been organised for student assistants.
	Expanding digital learning environment on skills.	The use of the digital learning environment and digital tools for skills education has been expanded.
Expand extracurricular activities	Increase in Career Service Centre activities and appoint 1.0 FTE for career coaching . Tailor-made 'Bildung' programme for multiple study programmes. More extra-curricular workshops/training programmes for all students: at least seven extra .	More activities by Career Service Centre and 1.0 FTE career coach has been hired . 'Bildung' pilots implemented in five programmes . A total of 55 training courses available for students via the virtual Student Training & Support Centre.

Several Student Challenges took place or were launched in 2023. The ReThink Waste Challenge (190 participants) and the Dutch 4TU Impact Challenge (20 participants; organised in collaboration with the other Dutch universities of technology) were organised, and the Nature-based Future Challenge (758 participants) kicked off in November. In addition, the Student Challenges team supported two teams that participated in challenges organised by other universities.

All programmes started implementing the skills trajectories, and most programmes defined a skills profile. This profile defines core skills, supportive skills and implicitly taught skills, with the final level indicated for each skill. Several programmes implemented solutions to make their skills learning trajectories more explicit and visible to students. The study materials for the different skills trajectories are gathered in the library so that lecturers can learn and benefit from each other's materials. Two programmes are piloting a portfolio tool.

Student assistants are trained to support lecturers in offering education. This training is organised at the request of lecturers. This year, five different training workshops were offered: three for mentors/buddies and two for student assistants in specific courses.

Student Career Services organised 105 career activities (including those funded by the extra funding from the National Programme for Education). Attention to the activities and support is raised through the WUR Career Platform, social media and posters, as well as through study advisors and study associations. Again, more students were reached, and the activities were evaluated positively. There is an increasing interest among employers and students in finding and meeting each other.

Five study programmes participated in the extracurricular 'Bildung' reflection programme (approximately 225 students). These tailor-made programmes are designed with the input of students from the respective studies. The programmes were rated very positively by the participating students, and they indicated that their experience and development at the university had been fundamentally enriched by this reflection programme. Thanks to the programme, they understood themselves and the world around them better and were prepared for a career after their studies in which their specialised knowledge is a small part of a complex equation.

In addition, WUR also offered 55 extracurricular training courses. These courses seek to help students with their development and wellbeing. In total, 1,067 students participated in the extra training courses. The training courses were rated positively by the students, usually with an 8 or higher. Students and other stakeholders were consulted to keep the portfolio of training courses current. The team's focus is now more on retaining and improving what is available than on expanding the offering: the activities introduced have proven to be valuable.

3.1.2.4 Lecturer professionalisation

Project	Annual objective 2023	Objective achieved?
Training for PhD candidates	At least 140 PhD candidates with a teaching position are receiving didactic training.	242 PhD candidates with a teaching position have received didactic training.
Professionalisation fund	At least 20 requests for compensation funded. At least 8 peer reviews (of a cluster) compensated.	16 compensations requests were funded. 66 courses were peer reviewed with funding from the Quality Agreements.
Unburdening and supporting lecturers	16 FTE for additional staff to unburden lecturers.	17.6 FTE additional staff have been appointed.

In 2023, more PhD candidates participated in the education training courses. A total of 242 PhD candidates successfully completed a training course for mentoring Bachelor's and Master's students. On average, the PhD candidates rated the training courses positively, with an average of 4.5 out of 5.

With the professionalisation fund, lecturers were able to make additional efforts to improve their didactic skills. Some 16 applications were approved in 2023. In addition to the compensation requests, a pilot has been developed and realised for a Senior University Teaching Qualification. Simultaneously, 66 study programme teams organised a peer review for their course with internal and external colleagues, in which 59 courses were peer reviewed individually and 7 courses were peer reviewed in two clusters. Two trainers were hired to further train study advisors and make them more professional.

In 2019, the decision was taken and approval was given to combine the former project 1.2 (extra staff for small-scale education) with the project for unburdening and supporting lecturers. It was decided to do this in 2022. Lecturers were unburdened by the extra staff hired by sciences groups. Some sciences groups organised education support hubs at the sciences group level, with staff available to help, support and facilitate lecturers in their teaching. Other sciences groups organised the support decentrally, with support staff for each chair group or cluster of chair groups. This support has led to more supervisors being available during practicals and fewer administrative tasks for lecturers (e.g. planning field trips). This support has enabled lecturers to spend more time on individual and content-related questions from students, share best practices to improve their teaching or focus on STQ/UTQ (Senior University Teaching Qualification / University Teaching Qualification) trajectories and professionalisation.

3.1.2.5 Education facilities

Project	Annual objective 2023	Objective achieved?
Bring Your Own Device = Study Anytime Anyplace	Available WUR AppStore.	The WUR AppStore is available and is used by students. The range of CANS articles and laptops was improved.

The WUR AppStore has been improved further and installed on 10,688 devices, with 9,007 unique users (some students use it on multiple devices). Every software students need for online computer practicals is available through this platform. The total number of purchased CANS articles (for arm, neck and shoulder complaints) that students can purchase at discounted rates to prevent RSI was 490 (laptop holders, keyboards and mice). We changed laptop supplier in 2023. This led to a cheaper offering for students with laptops of better quality. Since the offering became available in September 2023, 465 laptops have been sold (compared to 212 laptops in total in 2022).

3.1.3 Budget

WU received for the year 2023, including wage compensation, a total of €8,885,513 from the Ministry of OCW for the Quality Agreements. Since 2023, WUR has also received €234,318 from the Ministry of OCW for the National Framework for Student Wellbeing. Several projects within the Quality Agreements also fit within themes set out by the Ministry for the Framework. Therefore, in consultation with members of the Student Staff Council, the decision was taken to add this funding to the budget for the Quality Agreements for 2023. Separate projects for the Framework will be launched in 2024. This means that the total budget available for 2023 was €9,119,831. WUR spent all of the funding received from the Ministry of OCW for the Quality Agreements.

In 2019 and 2020, WUR contributed €2.7 million of its own to continue a few projects begun in 2018 and to help implement the new plans from the Quality Agreements. WU spent just over €33.5 million in the period 2019-2023. On the one hand, this is €2.7 million more than what has been received from OCW so far for the Quality Agreements. However, on the other hand, it is almost €0.2 million less than planned, mostly due to our own contributions that were not fully effectuated. We plan to fully spend the underspending on this contribution in 2024, leading to a total expenditure of €43.8 million (including the extra funding from the National Framework for Student Wellbeing in 2023 and partly in 2024).

In the table below, the financial report on the use of the Quality Agreements is listed for the whole 2019–2024 period, in accordance with the Quality Agreement monitoring criteria.

Quality Agreements 2019-2024									
In €1,000	2019	2020	2021	2022		2023	Total 2019-23	2024	Total 2019-24
1. Small-scale intensive education	Realisation	Realisation	Realisation	Realisation	Budget	Realisation	Realisation	Plan	Realisation & plan
1.1 Thesis supervision	1,799	1,907	2,113	2,283	2,224	2,265	10,367	2,353	12,720
1.2 Sciences groups measures	500	500	513	-	-	-	1,513	-	1,513
1.3 Additional teaching staff for chair groups	127	959	1,329	2,669	2,913	2,995	8,079	3,084	11,163
Total Small-scale intensive education	2,426	3,366	3,955	4,952	5,137	5,260	19,959	5,437	25,396
2. More and better study counselling									
2.1 Dealing with Stress Campaign	50	68	53	48	54	57	276	57	332
2.2 More study advisors	30	153	547	473	500	493	1,696	529	2,225
2.3 More student psychologists	50	185	207	197	215	314	953	227	1,180
2.4 Student initiatives for students	5	8	11	41	54	43	108	40	148
2.5 Virtual training centre	10	88	51	51	54	50	250	57	307
2.6 Training for staff on student issues	24	10	34	44	42	37	149	44	193
Total More and better study counselling	169	512	903	854	918	995	3,433	953	4,386
3. Education differentiation									
3.1 Student Challenges	300	300	308	313	322	479	1,700	540	2,240
3.2 Skills development	143	164	350	332	376	323	1,312	397	1,709
3.3 Expand extracurricular activities	57	131	346	328	370	625	1,487	804	2,291
Total Education differentiation	500	595	1,004	973	1,068	1,427	4,499	1,741	6,240
4. Professionalisation									
4.1 Training for PhD candidates	73	31	64	82	81	74	324	85	409
4.2 Professionalisation fund	0	110	181	230	322	270	791	451	1,242
4.3 Unburdening and supporting lecturers	75	218	637	1,344	1,413	1,441	3,715	1,493	5,208
Total Professionalisation	148	359	882	1,656	1,816	1,785	4,830	2,029	6,860
5. Adequate facilities									
Bring Your Own Device	200	319	191	108	54	46	864	-	864
Total Adequate facilities	200	319	191	108	54	46	864	-	864
6. To be planned								13	13
TOTAL EXPENSES	3,443	5,151	6,935	8,543	8,993	9,514	33,586	10,173	43,759
Subsidy of OCW ('23-'24 indicative)	3,010	3,835	6,689	8,444	8,405	8,886	30,864	9,574	40,437
Expected wage indexation ('23)					128			354	354
Planned own contribution	1,175	1,502					2,677		2,677
National Framework for Student Wellbeing						234	234	56	290
TOTAL AVAILABLE FUNDING	4,185	5,337	6,689	8,444	8,533	9,120	33,775	9,984	43,759
Difference available funding and expenses: underspending (-)/overspending (+)	-742	-186	246	99	460	102		189	-

3.1.4 Student Staff Council and Supervisory Board

The progress of the Quality Agreements, presented in the monitoring dashboard, is regularly discussed by steering committee representatives 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 by the Executive Board with the Supervisory Board (at least twice a year). WU consists of one faculty and therefore has one central co-participation council called the Student Staff Council. The progress of all the projects is discussed regularly and in detail with the Student Staff Council sounding board group. The Board of Education also receives the monitoring dashboards three times a year and can discuss the outcomes with the chair and secretary of the steering committee. The steering committee can strengthen the projects based on input from these bodies. Any comments from these bodies can also be used to further improve the dashboard reports.

Every year, the steering committee presents an impact report, with a more in-depth analysis of the evaluations and results of the projects based on the evaluations and the input of project leaders. This impact report is discussed internally. The steering committee, together with the project leaders and Student Staff Council sounding board group concluded that, based on the positive outcomes of the projects in the impact report, no major changes were necessary in the plans for 2022-2024.

The project leaders also ensure, and report on, the involvement and contribution of students and staff in the implementation of projects. Students and/or staff members participate through committees or broader evaluation surveys in the projects.

Every year, new members of the Student Staff Council are offered a workshop or an introductory training course on the Quality Agreements. In 2023, the new students in the Student Council participated in this introduction training course. Members of the Student Staff Council or any other body within WUR can request information about the Quality Agreements or a meeting with members of the steering committee.

The Supervisory Board's reflections on the Quality Agreements have been included in the WUR annual report. The Student Staff Council's reflection is presented in the next section.

3.1.5 Reflections from the WUR co-participation council (the Student Staff Council)

From: The Student Staff Council, part of the central participational body of WUR (WUR Council).

Date: 23 February 2024

Involvement of the Student Staff Council

The Student Staff Council was sufficiently involved in the implementation of the Quality Agreements project in 2023. The Student Council was invited to a presentation on the project in November, during which the key information regarding the Quality Agreements was explained. The goals and progress made were clearly explained, and Student Council members had the opportunity to ask questions about any matters that were still unclear. In addition, the members of the Student Council were asked to provide input on what they were still missing in the original plans for the Quality Agreements. The Student Council appreciated this level of involvement in this important topic.

During the first half of 2023, a delegation from the Student Staff Council, comprised of both staff members and students, met with the representatives of the Quality Agreements steering committee to discuss the progress made with the budget expenditure. The composition of the Student Staff Council was changed during the summer. Since November 2023, a delegation of the new Student Staff Council has continued these meetings. Members of the delegation were also able to raise ideas and adjust the allocation of the budget, and they were given the opportunity to give feedback on the implementation and development of measures that had been realised earlier with help from the QA budget. A lot of attention was also paid to questions from the delegation members, resulting in clear understanding and thus fruitful discussions on the subject. Nevertheless, due to the project's size, it was not always entirely clear what the meetings' overall goals were. In terms of the Student Staff Council delegation,

this was because the organisation of the expenditure of the budget was in an advanced stage of implementation and, as such, the delegation occasionally only acted in a monitoring role. The sounding board group stresses that this makes sense because the last phase of the Quality Agreements had been initiated at the start of the academic year.

Overall, the involvement was very well organised, the sounding board group was invited regularly, and their input was properly taken into account. To conclude, the Student Staff Council delegation felt they were taken seriously during the discussions. The input they gave was well considered and referred back to in subsequent meetings. In addition, the delegation is satisfied with how the budget was allocated. They would like to see that the money that becomes available from 2025 onwards does not disappear but remains visible in the Quality Agreements. We would like to see a continuation of the cooperation between the sounding board group and the steering committee to ensure that the coming years run as smoothly as recent years.

Progress of the Quality Agreements

The Student Staff Council delegation is happy to see that the completion of the projects is going well. The steering committee expects that all the project goals will be realised in 2024. First of all, the delegation greatly appreciates the progress made in terms of the small-scale education pillar. We are proud of the projects concerning better thesis supervision and additional lecturers for chair groups. Over the past few years, the WU participational bodies and the Student Council in particular have received several complaints about the quality of thesis supervision. Organising thesis rings and more intensive supervision during thesis lab work are concrete steps towards improving that supervision. As students are now a lot happier with the thesis supervision, this is a project that the Student Staff Council is very satisfied with.

We are pleased to see WUR investing in improving small-scale education, which the steering committee believes is a key element in the success of WU. The second pillar of more extensive and better study counselling is important for the Student Staff Council. Without high-quality study counselling, students and staff are unable to reach their fullest potential and be successful in their future careers. Projects that help students cope with stress and mental health issues and which facilitate student initiatives were well received by the steering committee. We are especially pleased with the shorter waiting times (2-3 weeks) for student psychologists in 2023, and the Student Staff Council aims to maintain these waiting times so that students can make an appointment with a psychologist quickly. We therefore appreciate the way in which the money from the Quality Agreements was used to further improve the mental wellbeing of students at our university.

Study counselling is combined with education differentiation. The Student Staff Council believes that the skills development programme is a particularly important step towards improvement. It will make the goals of individual study programmes clearer, and it will help students understand better what they are expected to learn and do during their studies. This year, the Student Staff Council was informed about the realisation of this project, and some clear ideas about the project were established, to the satisfaction of the Student Staff Council. The Student Staff Council also noticed a clear improvement concerning opportunities for extracurricular activities for students. Student Career Services organised a lot of different career activities and encouraged students to attend training sessions and other career events. As far as the Student Staff Council is aware, these events and training sessions were well attended. And they were deemed useful by the people who attended.

Conclusion

To conclude, the Student Staff Council sounding board group is very satisfied with the allocation of the budget for this year. The group believes a great deal of progress was made in realising the objectives, thereby improving the quality of education at WUR in 2023. We hope that this improvement in our education will continue in the coming year. Finally, we really appreciated that the Student Staff Council was involved in the implementation of the plans, and we aim for the same degree of collaboration in 2024.

3.2 National Programme for Education/Coronavirus section

In the coronavirus section, WUR is asked to report for WU on: 1) the impact of the coronavirus pandemic and restrictions, 2) the progress and expenses of the National Programme for Education and 3) realised measures using funding received from specific subsidies. The guidelines for reporting on the coronavirus section are followed. The National Programme for Education provides WU with funding from the coronavirus envelope for education and from the support programme for recovery and prospects for researchers.

The National Programme for Education (NPO) is a nationwide programme for all levels and forms of education with the aim of repairing all disadvantage caused by the coronavirus pandemic, supporting those who have been adversely affected and offering prospects for the future. The funding was available on a temporary basis for 2021 and 2022, with the possibility of drawing down the funding in 2023 and 2024 as well.

WUR drew up a plan in 2021 for spending NPO funds for student wellbeing and study progress and to compensate for delays affecting researchers with temporary appointments. WUR drew up one integrated plan for education and research. The NPO plan for WUR was drafted for the entire institution, with scope for diversity at the chair group and study programme levels. In this chapter, we report on the realisation of the ambitions and budget set in WUR's NPO plan using the monitoring framework provided by the Ministry of Education, Culture and Science.

3.2.1 Coronavirus impact

The coronavirus measures have had severe consequences for education, research and the wellbeing of our students and staff. Although we have been able to offer our education online or as blended learning, we have not been able to provide students with the learning experience that is typical of WU. Many researchers also faced delays in their research, its continuation and the associated consequences for their careers. Funding through the NPO and our own efforts managed to solve some of the problems faced by students, lecturers and researchers, or meant that researchers could be compensated when it was not possible to prevent delays.

3.2.2 NPO planning and monitoring process

The WUR NPO Plan was adopted by the Executive Board and approved by the Student Staff Council (a central participational body within WUR) in the summer of 2021. The plan was also discussed with the education and research committee of the Supervisory Board. The NPO plan is the result of an interactive process between academic staff, students, the Student Staff Council, the Steering Committee and the Executive Board of WUR. The plan of action for developing the NPO Plan was discussed by the Executive Board and the Student Staff Council. The Executive Board set up a steering committee to oversee the process, as well as two project groups to develop concrete proposals for the NPO Plan. One project group set up a plan for NPO funding for research and another did the same for education. In these two project groups the involved internal stakeholders were represented, including students, lecturers, PhD candidates, researchers, programme directors and study advisers. The two project groups consulted researchers, lecturers and students and used their input to develop plans that have to meet the needs in our education and research. The Student Staff Council appointed its own committee to act as a brainstorming partner for the Steering Committee. Together, all these stakeholders ensured the feasibility of the plan and its suitability for our organisation.

Following the final approval of the NPO Plan in August 2021, implementation began at full speed. Our ambition was to ensure that researchers and students could benefit from the NPO funding as soon as possible. Two project coordinators, one for research and one for education, are leading the implementation together with the project leaders of the individual projects. The project coordinators report progress to the Steering Committee using progress reports. The Steering Committee meets every eight to ten weeks to discuss the progress and informs the Executive Board via its member in charge of the education and research portfolio. The Student Staff Council and the Supervisory Board

are regularly updated on the progress, and the progress is discussed with the committee of the Student Staff Council.

Changes to the established frameworks in the NPO Plan will first be presented to the Executive Board by the Steering Committee. These changes are also discussed with the Student Staff Council. Following the Executive Board's adoption of the change, approval is sought from the Student Staff Council. No changes were made to the established and agreed frameworks and plans at any time during the NPO period. Some changes were made at the project level within the agreed frameworks and agreements. The budget for the educational peer guidance project was over-budgeted. At the request of the Steering Committee, the Executive Board decided to take away the unutilised €118,000 from this project and add it to the ongoing projects on career preparation and training and support for student wellbeing. The participational body was informed. This adjustment allowed the last two projects to run for longer in 2023. Some minor changes were also made. In autumn 2023, the decision was taken to move an additional €21,000 out of the peer guidance project. This budget was added to the confidential contact/counsellor project with the aim of continuing this in 2024.

An adjustment to the Ministry of Education, Culture and Science's policy frameworks and criteria for NPO funding targeted at education gives WUR the opportunity to extend projects and advance funds to 2023 and 2024. Projects not yet completed may extend into the 2023-2024 academic year. This spreads the services and support they provide to students more evenly across the 2022-2023 and 2023-2024 academic years.

WUR was selected for the fourth interim NPO implementation monitoring sample by consulting firm Berenschot in 2023. Given that WUR had already spent a large portion of the coronavirus envelope at the time of the interim measurement, Berenschot, in consultation with the Ministry of Education, Culture and Science, decided to use the interview as a final evaluation. WUR has provided extensive reporting, and there was constructive discussion in September on the progress up to the reference date of 1 July 2023. All results have been incorporated into an overarching, national report that cannot be traced back to the institution.

3.2.3 NPO for education implementation progress

The NPO education plan consists of several ambitions and projects. This section summarises the progress of the various projects and expenses. The project objectives have not been changed or modified since they were set in August 2021. Most projects were completed in 2023, but several have been delayed due to coronavirus measures or capacity problems. The projects generally match well with students' demands and needs. Some projects were still in search of an appropriate offer given the wide variety of student needs. It was also a challenge to get new services, training or activities well promoted to students.

WUR's NPO Plan identifies projects for the three themes of the NPO Education Protocol in line with the inspectorate's letter: 1) transitions and study progress (3.2.3.1), 2) student wellbeing and social cohesion (3.2.3.2) and 3) the teacher training programme (3.2.3.3). WUR does not receive funding for other themes and topics because they are not applicable to universities or to WUR. The measures/ambitions in our NPO Plan are summarised by project for 2021 and 2022, followed by information on the results achieved in 2023. The last part of this chapter provides an overview of the expenses.

3.2.3.1 Theme: transitions and study progress

Sub-theme: sufficient graduation projects and internship supervision

Project	NPO Plan objective	2023 results
a. Graduation guidance	Chair groups provide graduation guidance and internship supervision to more students to accommodate the expected increase from September 2021 to May 2022.	<i>Not applicable: completed in 2022.</i>
b. Writing lab	Additional services from the writing lab to support Master's students in writing their thesis.	<i>Delayed and ongoing.</i> The writing lab offered additional services to students. 157 students were helped by these additional services.
c. Finding internships	More support from Student Career Services to help students find internships.	<i>Realised and completed.</i> Through Student Career Services, more internships were found and highlighted, and there were more one-on-one meetings with students to help them find internships.

a. Graduation guidance

In 2022, the project was successfully completed and the budget was exhausted. Fifty chair groups provided guidance to 330 additional graduating students and 296 additional internship students.

b. Writing lab

The writing lab helps graduating students write their thesis. This lessens the workload of supervisors, allowing them to focus more on helping with the content and less on the writing. Students writing their thesis during the coronavirus measures benefited greatly from this additional support. The additional capacity enabled the writing lab to organise three additional writing weeks and 40 peer feedback groups in 2023. A number of planned activities in 2023 were not able to go ahead due to the absence of the coordinator and the subsequent lack of capacity. The project was delayed and the organisation of activities will continue in 2024.

c. Finding internships

As a result of the coronavirus measures, students have experienced difficulties in finding a national or international internship, which is required in many study programmes. Students have had to postpone their internships, or there has been a delay in finding one. Therefore, Student Career Services has hired more staff to provide additional support to students and internship coordinators of the chair groups in finding internships. Student Career Services offers the following additional help:

- Proactively seeking internships and announcing them on the new career platform for students; in 2023, 602 internships were announced.
- Having one-on-one discussions with students on finding an internship or job; in 2023, 414 students received support through these one-on-one discussions and students rated this support positively.
- Providing all students with information on how to find internships.
- Offering job application workshops, also relevant for applying for internships.
- Checking the students' CV, cover letter or LinkedIn profile. This was used by 567 students in 2023, with approximately a third using this support to find an internship.

The NPO budget for additional guidance for internships was fully exhausted in 2023. The project will continue in 2024 with additional funding from the quality agreements.

Sub-theme: more field trips and contact with the professional field

Project	NPO Plan objective	2023 results
a. Study associations	More funding and support for study associations to organise more field trips and interaction with the professional field through the study association fund (current Kickstart Career fund).	<u>Realised and largely completed in 2023.</u> 17 of the 19 study associations that applied in 2022 still organised activities in 2023 with the remaining budget. The project was completed in 2023 at 13 associations.
b. Studium Generale	Additional FTEs for Studium Generale to accommodate the peak of Bildung Reflection programmes in the second half of 2021 and to offer an additional programme in 2022.	<u>Partially realised and completed in 2023.</u> It was not possible to offer the entire additional programme in 2023 due to capacity shortages.
c. Student Career Services	Additional capacity of Student Career Services to organise more opportunities for students to explore the professional field.	<u>Realised and completed in 2023.</u> Student Career Services organised 13 additional opportunities/events for students with the additional capacity.
d. Soft skills	An inventory and overview of available soft-skills courses to inform students about opportunities to gain more experience practising those skills to boost their confidence. No objective for 2022 and 2023.	<u>Not applicable: completed in 2021.</u>

a. Study associations

Study associations were able to request a budget to organise additional field trips and interaction with the professional field. The assessment committee approved the plans of 17 study associations based on the criteria. Following the approval of the plan, the associations received €2,800. The implementation of the plans was scheduled to run until the end of the 2022-2023 academic year. The reports provided showed that many study associations struggled to use the budget properly due to capacity issues. With additional support, 13 of the 17 study associations still managed to use the budget in full in 2023. By agreement, the other four associations scheduled activities for winter 2023 and spring 2024.

b. Studium Generale

Studium Generale offered five Bildung Reflection programmes along with five study programmes. These programmes encouraged students' academic and personal development and supported them in developing competencies for reflecting on themselves, their environment, the world and science. The funding for additional staff would be used to offer an additional Bildung Reflection programme in 2023. This unfortunately did not happen as there was a capacity shortage despite additional staff due to illness and pregnancy. However, the budget was exhausted due to the additional costs involved. The programmes will continue through the quality agreements.

c. Student Career Services

Additional Student Career Services staff help students find internships, but also organise various additional events and activities for students to connect with the professional field. Examples include career days (in person and online) and networking drinks with companies and alumni. More companies are approaching Student Career Services because they want to make contact with our students. In 2023, thirteen activities and events were organised. The NPO budget for the additional employees was fully exhausted in 2023. The project will continue in 2024 with additional funding from the quality agreements.

d. Soft skills

This project was completed in summer 2021. The inventory and overview were fully realised. The overview has been shared with all WUR students via our website.

Sub-theme: more guidance on study progress and transition

Project	NPO Plan objective	2023 results
a. Peer guidance	Additional support for study programme teams to provide students with more opportunities to receive peer guidance. All students have some type of peer guidance available within their study programme.	<i>Delayed and continuing in 2024.</i> The study programme teams organised additional forms of peer-guidance opportunities or cohort-formation activities for the students in their study programmes. In addition, a university-wide festival was organised.
b. Prerequisite knowledge	Study programme teams inform their students on how they can improve their prerequisite knowledge to feel more confident.	<i>Not applicable: completed in 2021.</i>

Both projects are carried out by the study programme teams of our Bachelor's and Master's programmes. The situations and needs of students turned out to be very different across study programmes. The study programme teams offered different formats and activities, with varying degrees of success, partly because, as time went on, what students actually need became clearer. Students were also still searching for this themselves.

a. Peer guidance

The study programme teams use the funding to hire student assistants and to cover other costs for organising and facilitating peer-guidance and cohort-formation activities. The funding method was adjusted in 2023 to respond more flexibly to different needs. Study programme teams provided plans and a budget for activities, which were then approved by a Steering Committee delegation. The new approach worked well, and students were able to participate in activities such as mentoring programmes with peer guidance or activities aimed at getting to know the cohort (such as outings, drinks or lunch). In addition, a university-wide festival was organised in the summer. A small budget remains for activities in 2024.

b. Prerequisite knowledge

Since 2021, most study programmes have been providing information on how students can brush up on any prerequisite knowledge; it is used to very different degrees. Study programme teams monitor what additional prerequisite knowledge is needed and, if necessary, help students with how to improve their prerequisite knowledge.

3.2.3.2 Theme: student wellbeing and social cohesion

Sub-theme: more training and facilitating interaction

Project	NPO Plan objective	2023 results
a. Training courses and support	Additional capacity to offer more workshops and initiatives to improve student wellbeing.	<u>Realised and ongoing.</u> New activities and training workshops for students have been set up. Furthermore, 247 students also received life coaching from fellow students.
b. Social activities	Student organisations help organise more activities to connect students.	<u>Not applicable: completed in 2022.</u>
c. Sports activities	More frequent sports events on campus, supported by Sports Centre De Bongerd.	<u>Realised and completed in 2023.</u> Sports activities are organised on campus during breaks from March to October.
d. Outdoor facilities	Optimal use of the campus by creating more outdoor meeting areas with tables and seating.	<u>Not applicable: completed in 2022.</u>
e. Communication and coordination	Better inform students about opportunities to meet others and improve their wellbeing.	<u>Not applicable: completed in 2022.</u>

a. Training courses and support

A greater number of courses and more support are offered to students that are focused on their wellbeing and social network. A total of 55 training sessions were provided (together with the quality agreements). An information desk was also opened (every working day at lunchtime) to raise more awareness of the offering. International students were able to attend a presentation on the healthcare system in Wageningen and the support provided by WUR. A number of successful pilots and activities have been included in the quality agreements since 2023, such as peer coaching, life coaching and extra support during exam weeks. The budget was fully exhausted in 2023, and activities will continue with an additional budget from the quality agreements.

b. Social activities

Student organisations, groups of students and individual students received funding based on their (approved) proposals in 2022. Various activities were organised. The funds were exhausted in 2022, and the project was completed. New rounds of funding for social activities will be pursued using the quality resources.

c. Sports activities

Social sports activities were organised on campus by WUR's sports centre, from the end of March until the middle of October. The aim is to make participation possible for all students by organising activities during lunch breaks on campus. The activities were very diverse, ranging from smaller activities like volleyball to major ones like renting a surf simulator. Students made use of the activities (especially in good weather). The budget was exhausted in autumn 2023, bringing the project to a close.

d. Outdoor facilities

On campus, student interaction was stimulated by providing more outdoor meeting places. Fourteen picnic tables and 39 seats were realised in 2022.

e. Communication and coordination

Part of the NPO funding was used for the communication about all the activities and bringing them to the attention of students. Reaching students remains a challenge that requires extra effort. The funds were exhausted in 2022, and the project was completed.

Joint projects

Universities discussed national projects focused on student wellbeing and the transition from previous education to university in 2022. Lessons were learned from other universities, and tools and knowledge were exchanged. As a result, two projects were launched at WUR, which were completed in 2023:

- Transfer between previous education and a Bachelor's degree at a university: a tool has been developed to strengthen the learning and study skills of secondary school students. A successful course for teachers has been organised in which they were trained to use this tool. The aim is to better prepare secondary school students for studying at a university.
- Social safety: social safety training courses already offered to student organisations at other universities have also been purchased by WUR. These training courses are being attended by student associations and other student organisations.

3.2.3.3 Teacher training programme

Together with Radboud University, WUR offers a teacher training programme. WUR also received some NPO funding for its contribution to this programme. The amount of €14,000 per year (for 2021 and 2022) was used to fund an additional staff member to catch up on internships. The funds were exhausted in 2022.

3.2.3.4 Financial realisation of NPO education

WUR received a funding sum of €2,660,000 in total across the years 2021 and 2022 from the Ministry of Education, Culture and Science for the education projects in the adopted NPO Plan. Implementation began in August 2021, after the NPO Plan was approved. Funding from the Ministry ceased as of 2023. The remaining 2022 funds were spent in 2023, with some projects running over into 2024. The budget is shown in the table on the next page.

2021-2024 WUR NPO education								
In €1,000	2021		2022		2023		2024	Total '21-'24
	Budget	Realisation	Budget ¹⁵	Realisation	Budget	Realisation	Budget	Realisation and plan
Theme 1. Smooth process for incoming and transitioning students (transitions and study progress)	985	555	985	961	314	285	66	1,867
Theme 2. Student wellbeing and social cohesion within study programme	315	277	315	262	141	154	0	693
WUR & RU teacher training programme	14	14	14	14	0	0	0	28
Other (outside themes)	16	0	16	20	12	31	21	72
Still to be allocated (compensating expenses of previous year)			484		90			
TOTAL: planned/realised expenses	1,330	846	1,814	1,257	557	470	87	2,660
<i>Underspending (-) and overspending (+)</i>		-484		-557		-87		
Funding from the Ministry of Education, Culture and Science								
WO teacher training programme	14	14	14	14				28
Coronavirus envelope	1,239	1,239	1,393	1,393				2,632
TOTAL: funding	1,253	1,253	1,407	1,407				2,660

¹⁵ 2022, 2023 and 2024 budgets including unspent funds from previous years.

3.2.4 NPO research

3.2.4.1 Introduction

The NPO funds enable WUR to help researchers with temporary appointments whose research was delayed due to the coronavirus pandemic to complete their research. This is also important for tenure-track researchers supervising PhD and postdoc projects because the research of the PhD candidates and postdoctoral researchers in their teams is part of the criteria in their tenure-track evaluations (research output, management output). The needs of researchers are diverse, and therefore the funding is used for customised solutions to solve or prevent delays within the NPO's criteria.

WUR expected 20-25% of PhD candidates to experience some delay due to coronavirus measures because, for example, fieldwork or experiments could not be performed, courses were postponed or employees stayed at home with their children. In all cases, supervisors and managers were encouraged to look for solutions, such as adjusted work schedules, within the means of their chair groups and departments so that the project could be completed within the original timeframe. WUR also took measures to help and support the chair groups. Nevertheless, NPO funding was much needed to compensate for the costs incurred by temporary researchers to complete their research.

WUR received a budget of about €2,673,000 in both 2021 and 2022 (the total funding was €5,346,000). This funding has now been fully allocated to temporary researchers through two internal calls. Chair groups were able to apply for NPO funding for temporary researchers in their group. They used the funding for contract extensions and to compensate for research costs. The proposals from chair groups that applied for the funding were assessed based on the NPO criteria for research.

3.2.4.2 NPO measures and budget utilisation in 2023

WUR received €5,346,000 from the NPO research fund. This entire amount was allocated to chair groups for delayed researchers within the chair group.

A funding round was held in 2021 for researchers whose contracts ended in 2021 or 2022. Following the completion of the first call, compensation was awarded in 2021 to a total of 17 researchers who had completed their projects in 2021 or 2022. The remainder of the NPO budget from the first round was awarded in 2022. The total allocated funding helped 116 researchers to complete their projects in 2022.

After this first round of funding, there was €2,200,000 left for a second round of funding. The second round of funding was launched in 2022 for researchers whose contracts expired in 2022 and who had not yet applied for compensation in the first round or whose contracts expired in 2023. The call was distributed through the graduate schools, PhD councils and, where they existed, postdoc councils. When this call had just been sent out, it was announced that the budget also had to be used to cover delays caused by new lockdowns, whereas the budget originally applied only to delays caused by the first lockdown in 2020.

The coronavirus delays proved to be longer than anticipated in the NPO programme due to the multiple lockdowns. The graduate schools were mindful of these effects and therefore found it necessary to support all PhD candidates who needed it to avoid substantial drop-outs. It was also considered essential to ensure equal treatment of all PhD candidates.

Given the available NPO budgets, the assessors (graduate schools) had to be very strict in assessing the applications in this second round of funding to enable a fair distribution of funds. Postdoctoral researchers, in view of the minor consequences of not being able to complete their research, received only a small portion of compensation and PhD applications did not receive compensation for the full maximum of six months in any of the cases. Most of the applications were reduced to three months of compensation at this stage of assessment.

Unfortunately, after this rigorous assessment phase, the budget was still not enough to make the desired allocations. The graduate schools therefore had to reduce a large proportion of the

applications to 1.5-month extensions. Due to the limited budget, only 38% of the requested amounts could be awarded and the NPO budget was completely exhausted with this second round of funding. So there was no more room for a third round of funding for researchers whose contracts expire in 2024.

The timing of when the chair groups spend the funding from the second round of funding depends on the planning of the final phase of delayed research by temporary researchers. The allocated funds were paid in two instalments: 1) €677,000 in 2022 to compensate 55 researchers whose projects ended in 2022 and 2) €1,496,000 in 2023 to compensate 112 researchers whose projects ended in 2023.

Summary table according to NPO protocol

WUR NPO research	a. NPO support programme for recovery and support for researchers	b. WUR resources, financial and non-financial measures (approximation)
2021		
Number of supported researchers	17	See the qualitative description of measures in 3.2.4.3.
Total spent (in thousands of €)	209	
2022		
Number of supported researchers	116 (first call) 55 (second call)	See the qualitative description of measures in 3.2.4.3.
Total spent (in thousands of €)	3,201	
2023		
Number of supported researchers	112	
Total spent (in thousands of €)	1,807	

3.2.4.3 Other financial and non-financial measures

Financial measures

Scholarship PhD candidates are, in principle, not eligible for NPO funding. WUR strives to treat all PhD candidates equally, whether they are employed PhD candidates or Scholarship PhD candidates. Therefore, for all financial measures, WUR has made its own budget available to supplement the internal calls for employed PhD candidates with internal calls for Scholarship PhD candidates. From the first funding round, WUR awarded compensation to a total of 30 Scholarship PhD candidates in 2021 (€178,000) and to 74 Scholarship PhD candidates in 2022 (€729,000). During the second funding round, 58 Scholarship PhD candidates received funding for projects in 2022 (€300,000) and 57 Scholarship PhD candidates received funding for projects ending in 2023 (€300,000).

Non-financial regulations

The non-financial regulations, made by WUR centrally and locally to mitigate the negative effects of the coronavirus measures, are described in more detail in the various sections of the WUR annual reports for 2020 and 2021. They include the "match point" to share the workload, ICT services such as the accelerated introduction of MS Teams, the vitality programme, extended testing facilities, online (PhD candidate) teaching and flexibility in the design of research projects and tenure-track evaluations. The regulations, facilities and measures were available to all researchers to help them complete their research. Due to the many, varied measures, it is difficult to specify and verify to what extent the measures have prevented the delay.

3.3 Green Deal for Nature-Inclusive Agriculture Green Education

Wageningen University & Research is a partner in the Green Deal for Nature-Inclusive Agriculture in Green Education (Green Deal). In this three-year collaboration, WUR, together with educational institutions from VMBO, MBO and HBO, the central government and the Association of Provinces (IPO), is working hard to embed nature-inclusive agriculture into green education.

In 2023, the BSc Plant Sciences programme was revised to further strengthen the focus on ecology in relation to agriculture in this study programme. The new programme will start in September 2024 with the subject Ecology 1, there will be a new learning trajectory relating to crop knowledge and cultivation that will run throughout the first year, and there will be two updated subjects with more attention to the nature-inclusive perspective on agriculture: Agroecology and Agronomy 1 and 2. Both subjects will involve lecturers from the Farming Systems Ecology (FSE) chair group. The MSc Organic Agriculture programme was renamed Resilient Farming and Food Systems. This new name better reflects the fact that this Master's programme looks at a combination of agroecology and social sciences in the context of the entire food system. In the 2022/23 academic year, the number of students who graduated from this MSc study programme was 90, the highest number in the last five years.

In the context of Lifelong Learning, two courses focusing on nature-inclusive agriculture were provided by Wageningen Academy. The Lighthouse Farm Academy course explores different ways of farming sustainably using examples from around the world. The new masterclass in Food & Agri Principles for Financials is aimed at professionals in the financial sector and covers the link between investments and sustainable food systems. The Nature-Inclusive Farming course, which was set up together with universities of applied sciences and senior secondary vocational schools (MBO) and uses the Subsidy Module Agricultural Business Advice and Education (SABE) scheme, did not continue in 2023 because of insufficient registrations.

In 2023, the reader 'Gewasdivers Telen' (on crop diversification), aimed at MBO arable farming students, was published based on a 'Kennis op Maat' project with lecturer-researchers from Wageningen Plant Research. This was created in collaboration with the sector (arable farmers and branch organisations) and green education (CIV Groen). By using the reader, (future) growers can learn in practice how to adopt nature-inclusive agriculture with mixed crops.

WUR scientists regularly communicate in the various media about their work in sustainable agriculture. In terms of WUR communication, sixteen stories related to nature-inclusive agriculture have been published on the WUR website, and several posts made on WUR's social media channels, including a number of posts about strip intercropping. WUR's expertise in nature-inclusive agriculture is also picked up externally; in 2023, WUR was mentioned a total of 320 times in the media (print, RTV and online news) in items about nature-inclusive agriculture and agroecology.

Greendeal Natuurinclusieve Landbouw

Theory of change

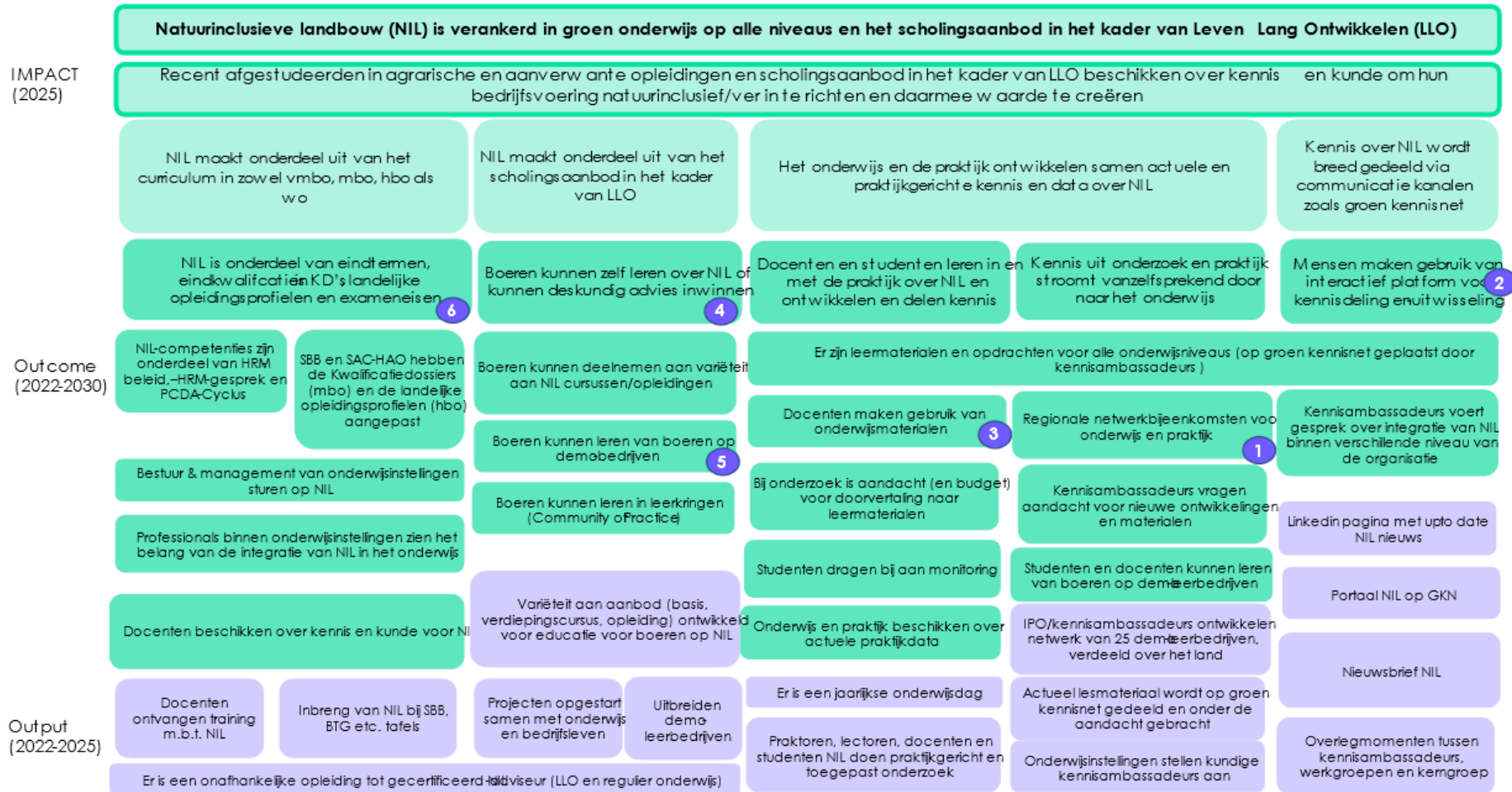


Figure 3.1 Theory of Change, Green Deal for Nature-Inclusive Agriculture in Green Education, Stage 2. Numbers 1 to 6 are monitored in the Green Deal Impact Monitor

3.4 Smarter Academic Year pilot

We are actively participating in the 'Smarter Academic Year' pilot. The aim of this pilot, funded by the Ministry of OCW, is to create more breathing space in the academic year for both students and lecturers. The following three projects were launched in 2023:

- The Bachelor's programmes in Forestry and Nature Management and Plant Sciences will accurately map the curricula using the course library. The objective is to avoid unwanted overlap between subjects as much as possible and (in the next phase) create more scope for personal development and reflection. In 2023, work was done on the technical development of the course library.
- Digital testing really took off during the coronavirus pandemic. We are using the resources of the Smarter Academic Year pilot to make the most of the possibilities offered by digital testing. In 2023, the 'Flexible Viewing' pilot was launched, which allows students to have access to their work at a time that suits them without the lecturer having to be present.
- As of the 2023-2024 academic year, the whole university will have a new resit policy. In close consultation with the participational bodies, the number of resits has been reduced and the resit weeks have been rescheduled. As a result, more breathing space has been introduced into the academic calendar and a longer, uninterrupted summer holiday period has been created for both students and lecturers.

3.5 Report on the Administrative Agreement

This section reports on the indicators to be included in the annual report in accordance with Annex 2b to the 2022 Higher Education and Science Administrative Agreement.

Objective 1: Reinforcing the foundations

Start-up and incentive grants

The Ministry of OCW made €9.0 million available in the financial year under the Start-up & Incentive Grants, as a result of the Administrative Agreement. In 2022, the first year, €2.8 million had been made available, which meant that cumulatively there was €11.8 million available within this programme. In Wageningen, the entire start-up and incentive budget allocated annually (€3.5 million for start-up grants and €5.6 million for incentive grants, altogether €9.0 million) is used exclusively for start-up grants. Even then, there is not enough to give every assistant professor in permanent employment a start-up grant for the envisaged amount of €0.3 million. As Wageningen considers it important to support all assistant professors in permanent employment and not to distinguish between them, a decision has been taken for the time being to give start-up grants to pairs, with a lead applicant and a co-applicant. In this way, team science and interdisciplinarity are also encouraged. In 2023, 14 pairs (15 women and 13 men) received a start-up grant of €375,000 per pair. All were covered by the Higher Education and Research Plan (HOOP) area of Agriculture.

Not all the resources made available could be used in 2023. This was mainly due to delays in implementation, in particular due to restrictions on practical use (forming of pairs). At the end of 2023, a balance sheet reserve of €11.3 million was therefore available for current and future start-up grants. As of April 2024, the conditions imposed by the Ministry of OCW on allocation will change. The future shortfall will increase with the obligation to provide every new assistant lecturer with a start-up grant of at least €150,000 as of April 2024. The balance sheet reserve will be used in the coming years to cover, as far as possible, the expected shortfall in the grants to be provided.

The system used for the costs indirectly associated with the research is as follows:

- Within Wageningen University, the full cost is determined annually at the department level. This is based on subsequent costing for the preceding year. This cost is also used to determine the eligible costs. Every year, the external auditor checks the subsequent costing and the structure of the cost rates and sets this out in an assurance report.
- Within the calculation of the full costs, surcharge percentages are determined for indirect costs. This concerns a surcharge percentage on wage costs. The surcharge percentages are based on the subsequent costing of the past year. Surcharge percentages for indirect costs will vary in 2024 within Wageningen University from 64% to 82% per department. Within Wageningen University, the funds for the start-up grants are allocated at the grant level and are passed on in full to the

decentralised units. There is therefore no centralised skimming for indirect costs. At the decentralised level, the start-up grants are allocated at project level and 20% is attributed for indirect costs. This attributed surcharge covers the decentralised overheads (e.g. decentralised staff, IT infrastructure costs passed on, decentralised workplace costs, SLAs, etc.). The decentralised overhead costs, which are essentially closely linked to decentralised operations, are also directly attributed to the primary process at departmental level.

- The difference between the actual surcharge percentages for indirect costs based on subsequent costing and the compensation included of 20% for these indirect costs is a charge that is borne by the entire organisation itself.

Natural Science and Technology Sector Plans

Since 2022, funds have been made available to WU annually by the Ministry of OCW under the sector plans to strengthen the education and research base and to create 'peace and space'. In 2023, €14.4 million was made available (excluding wage and price compensation: €13.5 million). Added to this is an amount of €1.7 million, as an own contribution from the fixed basic research amount of the government funding, taking the amount available to €16.1 million. In 2022, the first year, €4.3 million had been made available, which meant that cumulatively there was now €20.4 million available within this programme.

The funds for 2023 were allocated to the implementation of the sector plan objectives of the disciplines of Biology at €4.9 million, Earth and Environmental Sciences at €3.1 million and Technology at €5.5 million.

In 2023, by realising positions in the chair groups, a commitment was achieved for Biology at €3.1 million, Earth and Environmental Sciences at €1.6 million and Technology at €2.0 million. Friction in recruitment has led to a delay in the use of the funds, and the remaining still unused funds per discipline will be devoted to general investments in support of the objectives under the sector plans. The resulting balance sheet reserve for the sector plans of €14.5 million at the end of 2023 will largely be devoted to the latter objective in the coming years.

Objective 2: Providing opportunities for talent

Work pressure

WU academic staff excl. PhD candidates	
FTEs as of December 2023	Total
Temporary employment contracts for equal to or shorter than 4 years	441.1
Temporary employment contracts for longer than 4 years	24.6
Temporary appointment with the prospect of a permanent contract*	105.3
Permanent contract	839.1
Total	1,410.1
Temporary employment contracts for equal to or shorter than 4 years	31.3%
Temporary employment contracts for longer than 4 years	1.7%
Temporary appointment with the prospect of a permanent contract*	7.5%
Permanent contract	59.5%
Total	100.0%

* temporary tenure track appointments

Diversity

Diversity among students and employees is maintained in accordance with the Administrative Agreement.

First, we show the intake (first-year students) and the total number of students by gender.

Number of students, first-year at WU and in total, at Wageningen University by study phase and gender on 1 October 2023 (source: Osiris)

Types of Enrolment	First-year			All students		
	Male	Female	Total	Male	Female	Total
BSc	646	831	1,477	2,636	3,025	5,661
Pre-MSc	41	58	99	45	67	112
MSc	522	837	1,359	3,049	4,235	7,284
Total	1,209	1,726	2,935	5,730	7,327	13,057

Diplomas obtained in 2022/2023

	Male	Female	Total
BSc	535	773	1,308
MSc	937	1,422	2,359

Number of Bachelor's students at Wageningen University who drop out by gender on 1 October 2023

BSc-WU 2022	First-year	First-year drop-out - N	First-year drop-out - %
First-year registration for BSc (N)	1416	183	13%
Male	611	85	14%
Female	805	98	12%

Number of Master's students at Wageningen University who drop out by gender on 1 October 2023

MSc-WU 2022	first-year	first-year drop-out - N	first-year drop-out - %
First-year registration for MSc (N)	2403	94	4%
Male	971	41	4%
Female	1432	53	4%

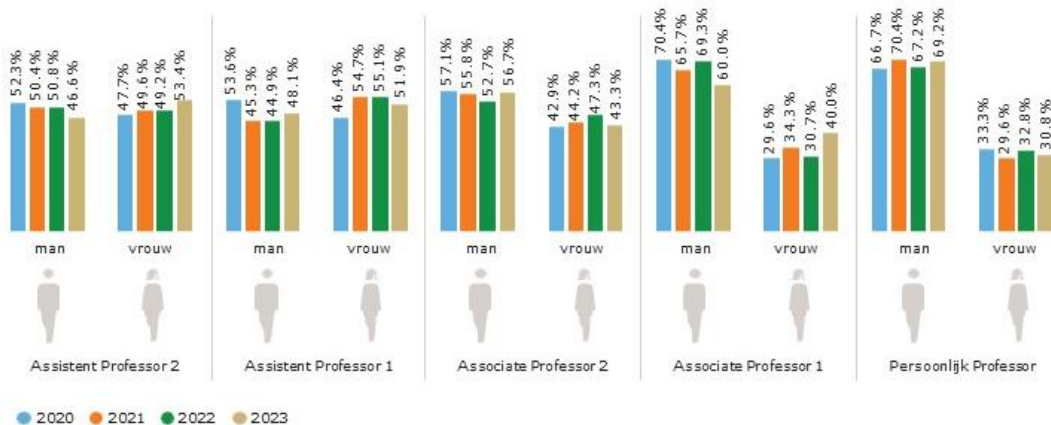


Figure 3.2 Male/female ratio WU per job category in tenure track

3.6 Wageningen University 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 circumstances beyond one's control, including informal care, recognised administrative activities and professional sport.
2. WU study financing for students following a two-year Master's programme in Social Sciences (MCH, MDR, MID and MME) who are entitled to Dutch study finance.
3. WU Fellowship Programme (WUFP): grants & waivers for non-EEA students.
4. Social Emergency Fund.

Table 3.1 Overview of Wageningen University Profiling Fund 2023

Category	Number of applications	Number of allocations	Total allocations (€)	Average payment (€)	Total duration (months)	Average duration (months)
1. FOS regulation ¹⁾						
1.1 Circumstances beyond one's control	245	245	246,173	1,005	717	2.9
	489	489	782,683	1,601	1,925	3.9
1.2 Administrative/participational body	3	3	4,148	1,383	12	4.0
1.3 Elite sport						
Total FOS regulation	737	737	1,033,004	N/A	2,654	N/A
2. Social Sciences masters, 2-year ²⁾	12	12	42,436	3,536	144	12
3. Fellowships ³⁾						
3.1 WUFP grants ⁴⁾	N/A	74	1465100			12
3.2 WUFP tuition fee waivers ⁴⁾	N/A	107	698,038			12
4. Social Emergency Fund ¹⁾	22	13	16,012	1232	N/A	N/A
Total incl. WUFP	N/A	943	3,254,590	N/A	N/A	N/A
Total excl. WUFP	771	762				

1) EEA + non-EEA.

2) EEA.

3) Non-EEA.

4) WUFP: selection of accepted MSc students.

Note:

1. A total of 737 students utilised the FOS regulation, including 46 non-EEA students (24 due to circumstances beyond one's control and 22 due to recognised administrative activities). The application process is organised in such a way that only students who are actually eligible for the regulation can apply (via the student dean and the head of the university sports centre).
2. A total of 12 students successfully applied for the two-year 'Social Sciences Master's' regulation.
3. Only non-EEA students are eligible for WUFP grants. Total expenditures from the WUFP were €2,163,138 in 2023. This includes discounts and top-ups for scholarship programmes and bilateral agreements.
4. Donations from the Social Emergency Fund were granted to students who were in acute financial distress due to situations with circumstances beyond one's control. In 2023, the Social Emergency Fund was added to the Louise O. Fresco Fund.

3.7 Clarifications

Outsourcing of one or more components of CROHO registered study programmes¹⁶ to a private organisation (plus 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 earlier 'division of duties & concentration' operations) is contracted from higher education institution partners and not from private institutions.

Tailor-made course programmes for companies/organisations

Wageningen University does not provide any tailor-made course programmes for companies and/or organisations in the form of CROHO registered study programmes leading to a certificate. Under the umbrella of Wageningen University, customisation in the form of post-initial courses is provided by Wageningen Academy (WA).

Exchange agreements

Wageningen University has 283 exchange agreements with 177 institutions. The total number of incoming students is 411 and the total number of outgoing students is 661.

Allocation of government funding for private activities

Some of Wageningen University's activities fall under the definition of private activities as per the 2021 policy rule on investing public funds in private activities. In this annual report, Wageningen University reports on the use of public funds for private activities.

Wageningen University has five categories of private activities:

1. Activities that are very closely related to the funded educational task and aimed at optimising the performance of education and students.
2. Activities in the research domain carried out in collaboration with or commissioned by third parties within the framework of Wageningen University's valorisation assignment.
3. Activities related to our core tasks of research and valorisation.
4. Activities aimed at generating additional income for the organisation.
5. Activities carried out at the instruction or request of a private organisation.

Re. 1. Education-related activities include facilities in our education rooms such as copying facilities, restaurant services and sports facilities for students. Rates for these activities take into account the students' financial means. Employees can use the sports facilities at a market-oriented rate. The Executive Board annually assesses the proportionality of the used government funding. Wageningen University committed €2.9 million to these facilities in 2023. The user contribution was €1.6 million. This category also includes student accommodation and a lounge for international (MSc) students. Although the provision of student accommodation is not one of the university's primary duties, the acute need for accommodation nevertheless resulted in the Executive Board's decision in 2009 to invest in temporary accommodation (Haarweg) for international students. The Supervisory Board agreed to this, in light of the exceptional state of Wageningen's housing market, particularly for students. Accommodation is rented out at fair market value prices (total income: €1.7 million). The objective is to achieve break-even operations with these investments. No investments were made in temporary student accommodation in 2023.

These activities are vested in Facilities and Services and the corporate staff. The risks are managed through the planning and control cycle, which determines the amount of public funds deployed annually.

Re. 2. The research activities co-funded by external organisations can be divided into activities not carried out in a market and activities carried out in a market. These projects involve an increase in public research capacity through the (co-)funding of research by third parties.

Wageningen University applies the following policy rules:

¹⁶ Study programmes included in the Central Register of Higher Education Programmes (CROHO).

A Research activities not carried out in a market

- Use of the government funding for subsidised projects is outside the scope of the scheme. Subsidised projects include all projects for which a public body has provided a subsidy to Wageningen University, such as the EU, Dutch Research Council (NWO), Netherlands Enterprise Agency (RVO) and Top Consortium for Knowledge and Innovation (TKI).
- Wageningen University treats projects for which a subsidy is received from a private charity fund or a foreign grant organisation as equal to projects funded by Dutch subsidy providers. This means that costs are claimed on the basis of the full cost rates agreed with the RVO, but that a contribution from Wageningen University is allowed. As a prerequisite, publishing rights and IP must remain entirely with Wageningen University or be available to the public (for example, through open access).
- Wageningen University carries out projects in collaboration with other government-funded institutions in the public domain (universities, research institutions, hospitals). The use of government funding for these projects is justified if the project targets the public duties of Wageningen University and the institutions. If the institutions jointly carry out activities commissioned by an external party, the project is assessed as such. In other words, the costs of projects carried out together with other government-funded institutions commissioned by a market operator are passed on at no less than the Internal Cost Price.
- In the case of projects for which the research questions are determined entirely by Wageningen University and all rights remain with Wageningen University, Wageningen University deems these to be public activities even if external sponsors contribute to the project costs. For such projects, costs are also claimed at the rates agreed with RVO, but a contribution from Wageningen University is allowed. As a prerequisite, publishing rights and IP must remain entirely with Wageningen University or be available to the public (for example, through open access).
- Supervising PhD candidates is a funded activity. The costs incurred for this may be borne by Wageningen University.

B Research activities carried out in a market

- For projects that are carried out at the request of external organisations (in the private or public domain) and which predominantly deliver added value to the external organisation, the conditions of the policy rule relating to the allocation of the full costs are applied. This means that at least the full costs of the project are passed on to the client on the basis of the Internal Cost Price, including the corporate overhead contribution.

These activities are vested in the decentralised units. For each project involving the use of government funding, Wageningen University determines whether the commitment is proportional. The primary responsibility for this lies with the chair group holder of the group conducting the research. Assessment of the risks is carried out by the line organisation with advice and monitoring by the decentralised staff.

The use of public funds in externally funded research in 2023 was as follows:

* €1 million	Project costs	External funding	Use of direct government funds
<i>Projects not carried out in a market</i>			
Indirect government funding	64.3	36.6	27.7
EU and international organisations	47.6	32.2	15.4
Non-profit organisations and public institutions	21.1	14.9	6.2
Government agencies and public bodies	17.0	14.1	2.9
Other projects	9.8	8.7	1.1
<i>Projects carried out in a market</i>			
Business community	13.1	12.2	0.9

In this table, the costs of projects carried out by the departments with external funding have been calculated on the basis of the hours recorded by employees, multiplied by the full cost for the employee concerned. Projects have been allocated on the basis of the dominant provider of finance.

Re. 3. One of Wageningen University's statutory tasks is knowledge valorisation. Knowledge valorisation is the process of creating value from knowledge by making knowledge suitable and/or available for economic and/or social exploitation and translating it into products, services, processes, policies, protocols and new business activities. Through education and valorisation, Wageningen University aims to disseminate knowledge gained with public funds in society and to enable it to be applied in society. After all, research results only have impact when they are applied in society. WUR therefore works intensively with businesses, government agencies and public bodies and civil society organisations to valorise these results. The collaboration with WR as WUR during the performance of these activities delivers added value.

Wageningen University & Research seeks to turn the results of research into practical solutions that have a positive impact on, and contribute to, social needs. An important contribution by Wageningen University consists of making knowledge available, either freely available through publications in the domain or available through targeted knowledge transfer to a specific party. This is always done with an 'at-arm's-length' fee, for example via a licence or via an IP sales transaction. Furthermore, Wageningen University (via the WUR incubator StartHub) provides space and (via the StartLife foundation) sometimes start-up loans to young entrepreneurs connected to Wageningen University for a fee. Wageningen University invests €0.8 million annually in StartLife and StartHub. Wageningen University itself participates in start-ups and enterprises to a very limited extent in terms of risk as a shareholder, but it does not invest any liquid assets in enterprises. These participating interests are then always via in-kind appreciation of the knowledge contributed by Wageningen University. Wageningen University does not aim to be a long-term participant in the start-ups to which knowledge has been contributed, and does not provide additional capital if needed for further development of the start-up.

These activities are vested in the corporate department Corporate Value Creation. This department reports annually to the Executive Board on value development, milestones, risks and exit strategy per participating interest. The revenue from licences in 2023 was €0.5 million.

Re. 4. Activities aimed at acquiring additional income include the contribution to the independent Wageningen University Fund foundation (UFW). The UFW raises and manages donations and funds from individuals and charities for the benefit of WUR research and education. UFW staff capacity is provided by WUR. In return, WUR acquires additional funds from donations made to the UFW. The Executive Board periodically reviews whether the resources, used for the benefit of UFW, outweigh the additional funds obtained from it. The cost of supporting UFW is €831,000, of which €472,000 is contributed by Wageningen University. UFW secured new, often multi-year, contracts for €12.8 million in 2023.

Re. 5. As for activities commissioned by third parties, Wageningen University applies the criteria set out in the policy rule. For contract research, Wageningen University's policy is to charge at least the full cost. Wageningen Academy (WA) develops and organises training programmes and courses for business community and government professionals. WA aims to break even on these activities, but is currently not succeeding. In 2023, WA incurred a loss of €139,000.

Other activities that Wageningen University carries out on behalf of third parties are the provision of services by Facilities and Services to third parties (revenue: €2.5 million), leasing of temporarily vacant property (€2.1 million), the reference lab Wepal (€0.6 million), deployment of experimental farms for third parties (€0.5 million), secondment of employees (€0.6 million), collaboration with NTU-Singapore (€0.3 million) and the provision of research equipment to third parties (€0.7 million). These activities are related to the funded activities of Wageningen University and are charged on to clients at an amount that at least covers costs or is in line with the market. €0.3 million in government funding is deployed for these activities. Among other things, these activities serve to achieve a favourable economic impact with the resources available. If there is structurally redundant capacity, then we make plans to divest this. The activities and associated risks are carried out and controlled by Facilities and Services and the departments.

Wageningen University works closely with WR under the banner of WUR. Collaboration includes joint use of facilities as well as shared staff and facility services. External markets are also jointly approached. All joint costs and reciprocal services are settled based on transfer prices and on actual

consumption. These transfer prices are determined based on the at-arm's-length principle (cost including risk premium).

In the past, WUR received subsidies from the province of Gelderland to strengthen the infrastructure. They were used to invest in research equipment at divisions of WUR, but also at other organisations. Positive results from the use of this equipment for projects are added to the equity capital and are available for funding new equipment. The subsidy was held administratively by Wageningen University. In 2023, the share of equity capital (€2.465 million) created by the equipment purchased for WR was transferred to WR. As a result, the equity capital relating to these subsidies was divided into a public part, included in the annual accounts of Wageningen University, and a private part, included in WR's annual accounts.

3.8 Treasury policy

Wageningen University has incorporated the conditions of the 'Beleggen, Lenen en Derivaten OCW 2016' (2016 OCW Investing, Borrowing and Derivatives) regulations as a policy in the Treasury Charter. Temporarily surplus liquid assets are deposited into savings accounts or held in deposits with financial institutions that have headquarters in an EU Member State and at the very least have an A rating from two of the three large rating firms. As of 31 December 2023, there was €58 million held in deposits with the Ministry of Finance through treasury banking. Wageningen University has no investments and has not negotiated any derivatives. This is equivalent to the situation on 31 December 2022.

4 Abridged WUR annual accounts

4.1 Wageningen University

4.1.1 Financial Report

Results developments

In 2023, Wageningen University recorded a result of -€9.3 million, which is down €23.4 million from 2022 and €3.3 million lower than was expected in the budget. The result includes non-recurring items of -€4.2 million (2022: €10.5 million).

Over the past few years, Wageningen University has experienced significant growth in FTEs and turnover. In particular, the direct government funds have increased in recent years due to the transition to the Ministry of Education, Culture and Science (OCW), quality agreements, Van Rijn resources, sector plan resources and increased student numbers. The direct government funds have also increased further in 2023 compared to 2022. This concerns funds taken into account in the budget or which compensate for CAO adjustments and inflation. Additionally, the turnover from indirect government and contract funding rose further in 2023 by €12.6 million. Opposite the additional income (€36.8 million) are higher operational expenses of €47.8 million. The departments strive to translate the growth in funding into additional manpower. This led to an increase in staffing level by 208 FTEs to 3,943 FTEs.

Table 4.1 Wageningen University result (in € millions)

	2023	2022
Reported result	-9.3	14.1
Less: incidental results		
- Pro rata VAT over the years 2016-2022	1.9	13.7
- Redistribution of compensation for statutory tuition being halved in previous years		-2.3
- Addition made to the appropriated reserve for project costs in later years	-0.7	1.1
- Distribution of SRF equity capital	-2.5	
- Provision for Vitality Pact	-2.9	
Operating result	-5.1	1.6
Less: non-budgeted 2023 results		
- Pro rata VAT for 2023	0.3	2.9
- Higher interest income	4.6	
- Total additions to provisions regarding WIA and WGA	-0.8	-1.0
- Results of units	-3.2	3.7
Budgeted operating result	-6.0	-4.0

The departments achieved a joint annual result of -€6.1 million, which is €10.3 million lower than in 2022. All departments recorded a negative result. The negative results are largely due to increased energy costs (€6.6 million).

The operating result of the central departments, including SRF and ISRIC, amounted to €1.0 million. This is €3.6 million higher than in 2022. This is mostly due to the higher interest income.

The incidental result for the Executive Board consists of a positive effect due to a receivable from the Dutch Tax and Customs Administration regarding an additional VAT refund for the concluded fiscal years 2016-2022 (€1.9 million) as a result of a ruling by the Dutch Supreme Court. The Executive Board and corporate staff also processed a number of negative result items amounting to €0.7 million

that were or will be offset by positive results in other years. On the one hand, this concerns the funding allocated in 2019 and 2020 on the basis of the Van Rijn Committee report and the funding for natural science and technology research that was spent in 2023 (-€1.2 million) as well as income on internal projects for which expenses will be incurred in the coming years (€0.5 million). It was not possible to fully utilise the Van Rijn funding and the science and technology research funding in 2022. However, the annual reporting guidelines do require that this income be properly accounted for in the year of receipt in the income statement. The funding was partly spent in 2023, and will lead to a lower result. Wageningen University has set up an appropriated reserve for these funds.

As the guidelines prescribe, Wageningen University provides accounting for the government funding in the year in which it is granted as income. Government funding related to project costs that will be incurred in later years is recorded as a positive result in the reporting year and as a negative result in later years. The distortion this causes is neutralised via the appropriated reserve. In accordance with this approach, €0.5 million of the result was added to this appropriated reserve in 2023.

Wageningen University has built up equity capital of €5.8 million in relation to investment subsidies received from the province of Gelderland. This equity capital is of a revolving nature, i.e. results from the operation of subsidised equipment are intended to finance new equipment and to cover coverage losses on equipment. In 2023, the share of equity capital intended to be used for WR equipment was transferred to WR. As a result, Wageningen University posted a one-time result of -€2.5 million. The provision for the Vitality Pact was created in 2023 in connection with the instruction given by the government regarding accounting for obligations under the Vitality Pact. This led to a one-time allocation of €2.9 million.

Development of turnover and costs

Income increased by €36.8 million in 2023 in comparison to 2022. The basic funding (government funding excluding target funding and tuition fees) rose from €328.4 million to €350.9 million.

Compared to 2022, government funding increased by €11.0 million to €306.6 million in 2023. Lower input parameters - in this case the numbers of funded enrolments, degrees and PhDs - and adjustment of the reference frameworks caused the government funding to fall by approximately €1.9 million.

The normative part of the additional funds made available in the context of the NPO disappeared in 2023. This concerns compensation for the halving of statutory tuition fees in the 2022/2023 academic year (-€9.2 million). Spending of the non-normative part of the NPO funding for specific objectives related to education and research fell by €2.2 million in 2023 compared to 2022.

On the basis of the current coalition agreement, additional non-normative funds were received for the sector plans and start-up and incentive grants. Corresponding spending increased by €4.5 million compared to 2022. Additional resources were allocated for several specific topics such as cybersecurity, knowledge security, social safety and the Delta Climate Centre. This involved a total amount of €1.3 million.

Finally, the compensation for increased wages and prices led to an adjustment of +€18.5 million.

The income from work commissioned by third parties increased by 12% from €108.6 million to €121.1 million. This income consists of programme funding (indirect government funding and target funding), which increased by 4% to €37.4 million; co-funding projects and matching funds market funding, which increased by 36% to €30.7 million; and turnover from contract research and top sectors, which increased by 6% to €53.0 million.

In comparison to 2022, personnel costs increased by €33.9 million to €354.7 million. This was due to a higher number of employees (+208 FTEs, €16.3 million), 4.2% higher salary costs per FTE (€12.9 million), as a result of CAO adjustments, increases in pension contributions and higher average grading, and a €1.4 million increase in miscellaneous personnel costs due to higher commuting costs (€0.8 million) and higher allocations to the provisions (€4.4 million). In 2023, the staffing level (on the basis of the allocation) increased from 3,735 FTE to 3,943 FTE.

Other expenses rose by €32.2 million. This is mainly due to additional housing costs of €11.8 million as a result of increased energy prices and VAT effects (€16.6 million, in particular as a result of the one-off refund in 2022) and rising travel and accommodation costs (€2.0 million).

Income was €11.9 million lower than budgeted. This is partly caused by lower government funding (€7.2 million) because a smaller part of the additional resources for sector plans was used than budgeted. In addition, income from work for third parties was €2.9 million lower than budgeted, and income from secondary activities and miscellaneous income excluding sales proceeds from fixed assets was €2.0 million lower than budgeted.

Costs were €5.1 million lower than budgeted. This mainly concerns lower energy costs as the budget was based on peak gas and electricity prices in autumn 2022. Staff costs were €15.6 million higher than budgeted due to higher costs for temporary agency workers, the one-time provision set up in relation to the Vitality Pact and higher allocations to the provisions for disability (WIA) and illness (ZW). Salary costs were up on the budget by €2.5 million due to the CAO increase. The staffing level matched the budget. The rise in personnel costs was offset by lower general and specific costs. This is because costs for new activities are budgeted under general costs.

Development of balance sheet items

The liquidity of Wageningen University increased in 2023 from €116.7 million to €145.9 million. The factors that affected this increase in liquidity are listed in Table 4.2.

Table 4.2 Wageningen University liquidity development

	2023
Result excluding participating interests and interest	-15.6
Cash flows from fixed assets (depreciation and sales less cash flow from investments)	10.6
Increase in receivables	-6.3
Increase in debts	34.1
Increase in provisions	2.9
Interest received	3.5
Total increase in liquid assets	29.2

Investments in buildings, equipment and intangible assets (€22.0 million) are lower than the depreciations (€32.3 million) and the book loss from divested assets (€0.4 million). The increase in receivables is mainly caused by an increase in the receivable from the WR foundation. This receivable will be settled in 2024. The increase in short-term debts is due to a higher tax debt as taxes and contributions are only paid after 30 days from 2023 onwards and due to an increase in the unspent government funding for Sector Plans. The total liquidity position of €145.9 million includes project advances of €124.8 million, of which €11.9 million are funds to be passed on to partners. These funds to be passed on to partners were received because Wageningen University is the lead party for a number of consortia. These funds will be passed on to partners in 2024.

Wageningen University's solvency ratio was 46.4% on 31 December 2023. This was 50.9% on 31 December 2022.

Changes in the legal structure and capital interests

There were no changes in the legal structure and capital interests in 2023.

Outlook for 2024

Wageningen University has budgeted an operating result of -€6.5 million in 2024. The result will decrease compared to 2023 due to additional costs incurred by the departments. The departments expect further growth in their staffing levels by approximately 140 FTE.

Turnover is expected to increase to €537.8 million in 2024. This €43.0 million increase is caused by an increase in basic funding of €25.7 million to a total of €376.6 million and a decrease in indirect government funding and contract funding of €18.6 million to a total of €139.7 million. The other income and secondary activities will decrease by €1.2 million to €21.5 million.

Government funding will increase by €20.7 million to €327.3 million. Of this amount, €10.0 million relates to the expected wage and price compensation and €0.7 million to additional resources for the

2019-2024 quality agreements. The government funding will decrease due to changes in the funding variables including adjustment of the macro framework by OCW (€4.8 million), due to the expected offsetting of excess compensation received for the halving of tuition fees for first-year BSc students for 2023 and 2024 (€0.8 million) and due to the removal of one-time additional government funding for the Delta Climate Centre (€1.2 million). In addition, a lot of additional expenditure will be incurred for the sector plans, including use of the non-normative government funding received for this. This income will be taken into account in the year in which the expenses are incurred. Together with the miscellaneous effects, this results in an additional income of €16.8 million.

Tuition fees will increase by €5.0 million to €49.3 million. This increase includes €0.9 million for the statutory tuition fees as a consequence of indexation and the elimination of the effect of halving the tuition fees in 2022-2023 and €4.1 million for the institutional tuition fees. The total student population (BSc + MSc) will fall slightly to 12,900 students in October 2024.

Personnel costs will increase by €26.4 million to €378.2 million. This is caused by an increase in staffing levels by 142 FTE to a total of 4,085 FTE, a decline in other personnel costs by €8.4 million due to a decrease in the number of temporary agency workers and a 6.9% rise in average salary expenses due to increases and wage cost developments.

Liquidity will decrease by €1.0 million to €145.0 million. With this cash position, the continuity of operational management in 2024 is guaranteed. However, should an additional need for liquidity arise, Wageningen University also has the option of requesting peer funding from WR or access to treasury banking.

Investments for Wageningen University are budgeted at €32.1 million. These are mainly investments in the context of the strategic housing plan for remote working (€4.9 million), in the Zodiac building (€2.6 million) and in thermal energy storage (ATES, €1.7 million). As well as investments in new construction for the greenhouses at Unifarm (€2.2 million) and a new research building (€2.7 million). Major necessary maintenance (€1.0 million) will be carried out on buildings, land and installations. Facilities and Services will invest €9.9 million, mainly in IT hardware, expansion of data storage, and inventory.

Decentralised investments are budgeted at €5.9 million, of which Agrotechnology and Food Sciences will invest €2.9 million in laboratory equipment.

For further information on the development of the results in the coming five years, we refer to the continuity section in the management report.

4.1.2 Abridged Wageningen University Annual Accounts

Consolidated balance sheet after the allocation of the net result

	31-12-2023	31-12-2022
ASSETS		
FIXED ASSETS		
(1) Intangible fixed assets	2,381	3,354
(2) Tangible fixed assets	300,145	308,436
(3) Financial fixed assets	1,968	2,284
Total fixed assets	304,494	314,074
CURRENT ASSETS		
(4) Inventory	5	5
(5) Receivables	86,335	76,936
(6) Liquid assets	145,949	116,698
Total current assets	232,289	193,639
TOTAL ASSETS	536,783	507,713
LIABILITIES		
EQUITY CAPITAL		
General reserve	231,956	239,626
Statutory reserve	2,293	3,240
Appropriated reserve	14,704	15,409
(7) EQUITY CAPITAL	248,953	258,275
(8) PROVISIONS	14,254	11,341
(9) LONG-TERM DEBTS	1,721	3,061
(10) SHORT-TERM DEBTS	271,855	235,036
TOTAL LIABILITIES	536,783	507,713

Consolidated profit and loss statement

	Results for 2023	Budget for 2023	Results for 2022
(11) INCOME			
Government funding	306,617	313,800	295,650
Tuition fees	44,307	44,100	32,798
Indirect government funding and target funding	37,376	43,400	35,990
Co-funding and matching funds market	30,733	28,000	22,650
Top Sectors	11,177	7,200	6,877
Bilateral market	41,828	45,400	43,035
Secondary activities	18,120	15,200	15,726
Other income	4,604	9,600	5,265
Total income	494,762	506,700	457,991
EXPENSES			
(12) Personnel costs	354,712	339,100	320,763
(13) Depreciations	32,286	33,700	31,368
(14) Housing costs	40,979	47,400	29,214
(15) General costs	40,575	47,200	20,792
(16) Specific costs	41,855	45,200	42,135
Total expenses	510,407	512,600	444,272
OPERATING RESULT	-15,645	-5,900	13,719
(17) Financial income and expenses	6,312	-100	381
RESULT FROM STANDARD OPERATIONAL ACTIVITIES BEFORE TAX	-9,333	-6,000	14,100
Taxation on standard operational activities	0	0	0
(18) Result from participating interests	11	0	20
RESULT FROM STANDARD OPERATIONAL ACTIVITIES AFTER TAX	-9,322	-6,000	14,120
Third-party share	0	0	0
NET RESULT	-9,322	-6,000	14,120

Consolidated cash flow statement

	2023	2022
OPERATIONAL ACTIVITIES		
Operating result	-15,645	13,719
Adjustments for:		
Result from sale of assets	399	-470
Depreciations and impairments	32,286	31,368
Changes in provisions	2,914	-579
	19,954	44,038
Changes in working capital:		
Change in inventory	0	0
Changes in receivables	-6,323	-21,294
Changes in short-term debts	34,112	36,988
Cash flow from operating activities	47,743	59,732
Interest received	3,555	428
Interest paid	0	-47
Cash flow from operational activities	51,298	60,113
INVESTMENT ACTIVITIES		
Investments in intangible assets	0	-375
Divestment in intangible assets	0	0
Investments in buildings and land (incl. WIU)	-3,135	-8,810
Investments in other tangible assets	-18,919	-18,449
Divestments in tangible assets	0	818
Investments in participating interests and members' capital	-5	0
Divestments in financial fixed assets	11	72
Cash flow from investment activities	-22,048	-26,744
FINANCING ACTIVITIES		
Newly acquired loans	0	0
Repayment of long-term debt	0	0
Change in long-term receivables	0	0
Changes to investment grants	0	0
Cash flow from financing activities	0	0
CASH FLOW	29,250	33,369
CHANGE IN LIQUID ASSETS		
Balance of liquid assets on 1 January	116,698	83,329
Balance of liquid assets on 31 December	145,949	116,698
Change in liquid assets	29,251	33,369

4.1.3 Accounting Principles

General

Wageningen University is a legal entity on the basis of the Higher Education and Research Act. Wageningen University is located in Wageningen and registered with the Chamber of Commerce under the number 9215846. The annual accounts were prepared and adopted by the Executive Board on 29 April 2024 and approved by the Supervisory Board on 21 May 2024. The annual accounts were prepared in accordance with the accounting principles referred to below. Any departure from these principles is stated alongside the relevant financial information.

The figures for the previous financial year are in accordance with the figures in the annual accounts 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 accounts

Wageningen University is part of a group that also comprises Wageningen University Holding BV, ISRIC Foundation and Expat Center Foundation, in accordance with RJ940.

The annual accounts were prepared based on the continuity assumption.

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 accounts were prepared in accordance with Regeling Jaarverslaggeving Onderwijs (annual reporting regulations for educational institutions) and the Richtlijnen voor de Jaarverslaggeving (guidelines for annual reporting).

Use of estimates

The preparation of the annual 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 financial information of the institution, its subsidiaries and other organisations over which the institution exercises dominant control (pursuant to the actual situation) or central management. Subsidiaries are legal entities directly or indirectly controlled by Wageningen University, 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 Wageningen University, its subsidiaries and other organisations over which the institution exercises control 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 4.3 Consolidated subsidiaries

	Shareholder	Registered office	% 31-12-2022	% 31-12-2023
Wageningen Universiteit Holding BV	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 4.4 Non-consolidated participating interests

	Registered office	% 31-12-2022	% 31-12-2023
Ceradis B.V.	Wageningen	2	1
Green Dino BV	Wageningen	11	11
A-Mansia Biotech SA	Louvain-la-neuve	5	3
Innovation Industries	Amsterdam	0	0
Caribou Biosciences Inc.	Delaware	0	0
Scope Biosciences Holding B.V.	Wageningen	10	10
Plant Meat Makers B.V.	Ede	5	4

Accounting policies for assets and liabilities

Intangible fixed assets

Intangible fixed assets are valued at acquisition price or production price less cumulative depreciations and, if applicable, cumulative impairments. Development costs, patents and licences, software, goodwill and production rights are capitalised if the conditions established for them are met. Intangible fixed assets are valued at acquisition or production price. 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 cumulative depreciations. 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. Equipment of less than €25,000 are charged directly to the profit and loss statement. Until 2021, equipment of less than €5,000 was charged directly to the profit and loss statement.

Table 4.5 Depreciation periods

Unit	Depreciation
Company property/Work in progress	None
Site layout and infrastructure	30 years linear
Buildings	
Shell	60 years linear
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 network / other inventory	10 years linear
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. Funding received in respect of assets for which a cost-covering market rate must be calculated based on funding rules and expected usage are shown as liabilities and are released during the asset's useful life. 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 maintenance 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 of 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. An impairment 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, 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 impairment 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.

Financial fixed assets

Receivables

Receivables from and loans to participating interests, as well as the other receivables provided, are initially recognised 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 member's capital 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 price. 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 tax 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 inventory or inventory with a lower market value is decreased accordingly.

Receivables and accrued income

Receivables and accrued income 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 costs that are directly related to the project (such as direct personnel costs and the costs of the acquired equipment and inventory), 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 this occurs are included under short-term debts.

Liquid assets

Liquid assets are understood to mean cash and cash equivalents, the balances on bank accounts, and 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 has only public equity 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.

- *Appropriated 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 takes account of future indexations and price increases. If the effect of the time value is material, the provisions are stated at cash value. The amount of the provision included in the annual accounts 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 unemployment insurance obligations and civil 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 expenses in relation to personnel that have already left and personnel with a temporary employment contract.

Provision for WIA/ZW-flex

The provision for the flex obligations under the Work and Income according to Capacity for Work (WIA) regulation and Sickness Benefits Act (ZW) covers the WIA and ZW flex obligations as anticipated on the balance sheet date.

Provision for service bonuses

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

Provision for Vitality Pact

The provision for the Vitality Pact includes the liabilities for employees who make use of their rights relating to the Vitality Pact and the expected costs for employees who will meet the criteria for participation in the Vitality Pact over the next 10 years. The estimate of the last item takes into account the likelihood that an employee will remain in employment and the likelihood that an employee will exercise his or her right. The provision for future use will be built up in 10 years. The expected expenses are indexed in relation to expected wage developments, and the present value of the liabilities is determined on the basis of the prevailing market rate of interest for Wageningen University.

Provision 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.

Provision for product and contract risks

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

Long-term debts

Long-term debts concern liabilities that are due for a period of more than one year from the end of the relevant financial year.

On initial recognition of long-term debts, these are stated at fair value, less the directly attributable transaction costs.

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

Short-term debts

Short-term debts concern liabilities that are due within one year from the end of the relevant financial year.

On initial recognition of short-term debts, these are stated at fair value, less the directly attributable transaction costs.

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

Accounting policies 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 reporting year.

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 accounts.

Government funding and other payments

Government funding is included as income in the year in which the funding is received. Components of government funding that can be considered to have been specifically allocated (non-normative government funding) 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 institution tuition fees allocated to the reporting year are included 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. Funding to offset costs incurred by the group are systematically included as income 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. If the contractually agreed service consists of several distinguishable performance obligations, the agreed fee is divided on the basis of the cost of the performance obligations and the extent to which each performance obligation has been realised is determined.

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 accounts and the conditions for recognising provisions have been met.

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

Interest

Interest is allocated to consecutive reporting periods in proportion to the remaining principal. Premiums/discounts and repayment premiums are attributed to the successive reporting periods as interest charges so that, together with the interest payable on the loan, the effective interest is recognised in the profit and loss statement and so that the balance sheet shows the amortised cost of

the debt on balance. Periodic interest expenses and similar charges are charged to the year in which they become due.

Accounting principles for the preparation of the cash flow statement

The cash-flow statement was prepared using the indirect method.

Changes in accounting estimates

The provision in connection with the Vitality Pact is included with effect from 2023.

System changes

Not applicable.

4.1.4 Auditor's report by the independent auditor

The auditor's report by the independent auditor is included in Wageningen University's annual accounts.

4.2 Wageningen Research Foundation

4.2.1 Financial Report

Results developments

Wageningen Research Foundation (WR) obtained a net result of -€9.5 million in 2023. This result is €13.4 million lower than the net result for 2022 (€3.9 million). The pre-tax result from standard operational activities amounted to €11.2 million.

A major cause of the lower pre-tax result was the new CAO in which a higher salary increase was agreed than was incorporated into the rates and the budget (approximately 2%) and a lingering effect from the increased energy costs (due to fixed prices for the duration of a year). Finally, the higher sickness-related absenteeism at WR, especially at the end of the year, led to lower availability in terms of hours that could not be caught up.

On the other hand, one of WR's major holdings, Wageningen Business Generator BV (WBG), actually recorded a higher result (€4.4 million) due to high wind revenues at the wind farms, which neutralised some of the increase in energy costs at WR. In addition, partly because of the better-than-projected energy costs, some of the HCU operating surplus was released into the results (€3.5 million). In 2023, the Vitality Pact provision was also taken into account for an amount of €4.3 million.

Table 4.6 Breakdown of the result of Wageningen Research Foundation (in € millions)

	2023	2022
Net result Wageningen Research	-9.5	3.9
Incidental result	1.7	7.1
HCU operating surplus	3.5	8.0
Pro rata VAT over the years 2016-2022	-1.6	-0.6
Allocations to Vitality Pact	-4.3	
Miscellaneous incidentals		-2.2
Distribution of SRF equity capital	2.5	
Tax deferral	0.7	1.5
Corporation tax carry-back	1.2	
Executive Board and Holding corporation tax	-0.3	0.4
Operating result	-11.2	-3.7
Institutes and primary process	-14.2	-6.1
Central departments excluding wind farms	-7.7	-6.7
Wind farms	4.4	3.7
Result from housing, internal WW/BW premiums including cost of capital	6.1	5.3
Result from participating interests	0.2	0.1

Development of turnover and costs

The turnover for 2023 was €418.6 million, an increase of 6.2% compared to 2022. For 2022, the total turnover was €394.2 million.

An additional turnover of €24.4 million was achieved compared to 2022. The bilateral market remains slightly below the 2022 realisation. The increase in secondary activities is mainly due to higher wind farm revenues of €1.8 million. Furthermore, the LNV knowledge base includes the HCU operating contribution of €3.5 million (this was €8.0 million in 2022).

The direct personnel costs of temporary and permanent personnel increased by €21.1 million. This increase is caused by the following factors:

- Increase of staffing levels by 114 FTE.
- Increase in wages by 6.9% per FTE, mainly as a result of the CAO 2023 (salary increase of 4.7% from 1 August 2023 as well as a structural end-of-year bonus that was increased by 4% to 8.3%). Wage growth was dampened by better-than-projected pension contributions and intake of younger employees.

- Increase in social security contributions by €3.3 million compared to 2022 and decrease in pension contributions per employee by €1.8 million compared to 2022.

Development of balance sheet items

The liquid assets at the end of 2023 (€155.3 million) had increased by €18.0 million compared to 2022 (€137.3 million).

Table 4.7 Wageningen Research liquidity development (in € millions)

Net result	-9.5
Net decrease in fixed assets (investments minus depreciation and sales)	+5.3
Increase in short-term debts and increase in short-term receivables / stock	+19.3
Changes in provisions	5.4
Decrease in long-term debts and decrease in long-term receivables	-2.3
Result from participating interests	-0.2
Total increase in liquid assets	18.0

The change in fixed assets consists of €19.3 million in building and inventory depreciation; investment expenses (including participating interests and members' capital) to the amount of -€14.4 million; and divestments in the amount of +€0.4 million. The amount of the advances received, including funds to be paid to partners, amounted to €86.7 million on the balance sheet date. Solvency fell to 58.9% due to the negative result and the increase in short-term debts. At year-end 2022, solvency was 63.1%.

Changes in the legal structure and capital interests

In 2023, the capital interest in CoVaccine BV was sold and VOF Oostwaardhoeve was dissolved. There were no further changes in the legal structure and capital interests of Wageningen Research Foundation in 2023.

Outlook for 2024

Wageningen Research (WR) is budgeting a result of -€7 million. Rising costs in 2024 are expected to be offset by additional income and partly by passing on cost increases to clients.

The institutes are estimating a result of -€7.4 million for 2024. The losses will mainly be caused by (energy) price increases that cannot be fully passed on to clients as a consequence of the agreed tariff system. The central divisions are estimating a result of €0.4 million. The positive result is mainly due to higher energy revenues from the wind farms.

The budgeted income amounts to €443 million. This is an increase of 6% when compared with 2023. The increase is particularly within contract research. The co-funding & subsidy market is growing proportionately.

The budgeted costs amount to €451 million. This is an increase of 6% when compared with 2023. Personnel costs will increase, due especially to the new CAO. The fall in general costs is mainly the result of lower equipment costs. Specific costs will rise by 10%, especially for services provided by third parties.

The investment budget is €55.6 million. The budgeted investments at the corporate level amount to €47.5 million. They mainly concern investments in a business complex of ASG Research in Lelystad located on Runderweg (€7.7 million) and in thermal energy storage (€7.3 million). There will also be investments under the strategic housing plan (€6.8 million). Other investments include Smart fabric (€5.2 million) for Food & Biobased Research, Vitea Lab (€2.4 million), Lumen building (€2.1 million) and greenhouses in Bleiswijk (€1.8 million).

Major maintenance investments will amount to €5.2 million, mainly for buildings located on Runderweg and Edelhertweg and in the High Containment Unit (HCU) for ASG Research.

The institutes are estimating an investment of €8.1 million. This mainly concerns investments in laboratory equipment by the institutes Food Safety Research (€2.5 million), Plant Research (€2.4 million) and Food & Biobased Research (€1.7 million).

Wageningen Research expects a cash position of €120 million by the end of 2024. This is €23 million lower than the expected final position for 2023. The decrease in cash in 2024 is mainly the result of higher investments than depreciation.

Solvency (equity capital / total assets) is 59% (rounded).

4.2.2 Abridged Wageningen Research Annual Accounts

Consolidated balance sheet after the allocation of the net result

Balance sheet	31-12-2023	31-12-2022
ASSETS		
FIXED ASSETS		
(19) Intangible fixed assets	5,548	5,364
(20) Tangible fixed assets	289,313	294,955
(21) Financial fixed assets	30,366	33,900
Total fixed assets	325,227	334,219
CURRENT ASSETS		
(22) Inventory	5,607	5,762
(23) Receivables and accrued income	116,613	99,735
(24) Liquid assets	155,333	137,338
Total current assets	277,553	242,835
TOTAL ASSETS	602,780	577,054
LIABILITIES		
EQUITY CAPITAL		
Foundation capital	118,280	118,280
Designated fund	11,544	8,001
Statutory reserve	5,529	5,338
Other reserves	216,715	227,837
Appropriated reserve	2,745	4,813
(25) Total equity capital	354,813	364,269
THIRD-PARTY SHARE	0	0
GROUP CAPITAL	354,813	364,269
(26) PROVISIONS	17,340	11,979
(27) LONG-TERM DEBTS	21,812	27,983
(28) SHORT-TERM DEBTS	208,815	172,823
TOTAL LIABILITIES	602,780	577,054

Consolidated profit and loss statement

	Results for 2023	Results for 2022
INCOME		
	38,792	41,705
	125,874	109,017
	35,559	29,021
	75,521	72,521
	91,609	93,298
	46,559	44,743
	4,690	3,863
(29) Total income	418,604	394,168
EXPENSES		
(30) Personnel costs	282,372	253,277
(31) General costs	93,907	84,157
(32) Specific costs	54,885	51,689
Total expenses	431,164	389,123
Other income and expenses	0	0
OPERATING RESULT	-12,560	5,045
(33) Financial income and expenses	1,329	-3,169
RESULT FROM STANDARD OPERATIONAL ACTIVITIES BEFORE TAX	-11,231	1,876
(34) Taxation on standard operational activities	1,583	1,938
(35) Result from participating interests	192	132
RESULT FROM STANDARD OPERATIONAL ACTIVITIES AFTER TAX	-9,456	3,946
Third-party share	0	0
Extraordinary income and expenses	0	0
NET RESULT	-9,456	3,946

Consolidated cash-flow statement

	Results for 2023	Results for 2022
OPERATIONAL ACTIVITIES		
Operating result	-12,560	5,045
Adjustment for sale of assets	-244	-133
Depreciations and impairments	19,377	20,323
Changes in provisions	5,361	-1,601
	11,934	23,634
Changes in inventory	155	-1,469
Changes in receivables	-16,220	-6,539
Changes in short-term debts	39,559	6,936
Cash flow from operating activities	35,428	22,562
Interest received	4,157	451
Interest paid	-3,486	-3,620
Income tax paid	-2,815	-6,777
Cash flow from operational activities	33,284	12,616
INVESTMENT ACTIVITIES		
Investments in intangible assets	-883	-2,209
Investments in buildings, sites and WIU	-8,100	-9,483
Investments in other tangible assets	-4,353	-3,213
Investments in participating interests and members' capital	-265	104
Divestments of fixed assets	610	483
Cash flow from investment activities	-12,991	-14,318
FINANCING ACTIVITIES		
Change in long-term receivable LNV	3,944	3,944
Change in long-term debt LNV	-3,944	-3,944
Changes in infrastructure fund	-2,163	4,806
Changes in other long-term debts	-135	-1,569
Decrease in lease obligations	0	0
Changes in equity capital	0	0
Changes in third-party share	0	0
Cash flow from financing activities	-2,298	3,237
CASH FLOW	17,995	1,535
CHANGE IN LIQUID ASSETS		
Balance of liquid assets on 1 January	137,338	135,803
Balance of liquid assets on 31 December	155,333	137,338
Change in liquid assets	17,995	1,535

4.2.3 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 accounts were prepared and adopted by the Executive Board on 29 April 2024 and approved by the Supervisory Board on 21 May 2024. The annual accounts were prepared in accordance with the accounting principles referred to below. Any departure from these principles is stated alongside the relevant financial information.

The figures for the previous financial year are in accordance with the figures in the annual accounts 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 accounts

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

The annual accounts were prepared based on the continuity assumption.

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 accounts are prepared pursuant to the Netherlands Civil Code, Book 2, Title 9, and the accounting standards issued by the Dutch Accounting Standards Board, in particular guideline 630.

Use of estimates

The preparation of the annual 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 accounts of Wageningen Research, its subsidiaries and other organisations over which the institution exercises dominant control (pursuant to the actual situation) or central management. The subsidiaries are legal entities directly or indirectly controlled by Wageningen Research, 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 Wageningen Research, its subsidiaries and other organisations over which the institution exercises control 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 4.8 Fully consolidated subsidiaries

	Shareholder	403	Registered office	% end of 2022	% end of 2023
Agri New Ventures BV	WBG	N	Wageningen	100%	100%
Wageningen Research Holding BV	Wageningen Research	N	Wageningen	100%	100%
Exploitiemaatschappij Windmolenparken Lelystad B.V.	WBG	N	Wageningen	100%	100%
Wageningen Business Generator B.V.	Holding	N	Wageningen	100%	100%
Windmolenpark Neushoortocht B.V.	WBG	N	Wageningen	100%	100%
Windmolenpark Mammoethocht B.V.	WBG	N	Wageningen	100%	100%
Stichting Akkerweb	n/a	N	Wageningen	N/A	N/A

Table 4.9 Non-consolidated participating interests valued at acquisition cost

	Shareholder	Registered office	% end of 2022	% end of 2023
Isolife BV	WBG	Wageningen	5%	5%
Wageningen Science & Technology Consulting Services Ltd.*	Holding	Beijing	100%	100%

* in connection with small size, processed at acquisition price

Table 4.10 Non-consolidated participating interests valued at net asset value

	Shareholder	Registered office	% end of 2022	% end of 2023
CoVaccine BV	WBG	Lelystad	25%	0%
Fresh Forward Holding B.V.	WBG	Wageningen	49%	49%
VOF Oostwaardhoeve	ANV	Slootdorp	50%	0%

ACCOUNTING POLICIES FOR ASSETS AND LIABILITIES

Intangible fixed assets

Intangible fixed assets are valued at acquisition price or production price less cumulative depreciations and, if applicable, cumulative impairments. Development costs, patents and licences, software, goodwill and production rights are capitalised if the conditions established for them are met. Intangible fixed assets are valued at acquisition or production price. Depreciation is linear over five years except for the data warehouse Open Up which is depreciated over 10 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 cumulative depreciations. 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 in equipment of less than €25,000 are charged directly to the profit and loss statement. The limit for equipment capitalisation was increased from €5,000 to €25,000 in 2022. Previously capitalised assets have not been removed from the assets.

Table 4.11 Depreciation periods

Unit	Depreciation
Company property/Work in progress	None
Site layout and infrastructure	30 years linear
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 network / other inventory	10 years linear
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 5 years.

The expenditures for major maintenance 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 of 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. An impairment 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, 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 impairment 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.

Financial fixed assets

Deferred tax assets

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 recognised 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 members' capital 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 price. 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 products, livestock and 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 harvested agricultural produce is based on market prices.

The value of unmarketable inventory or inventory with a lower market value is decreased accordingly. On the basis of the average annual use in the last 10 years, antisera is provided that according to this calculation has been in stock longer than 3 years.

Semi-finished products are valued in accordance with the FIFO method at the acquisition cost or production cost, including a supplement for the indirect costs.

Receivables and accrued income

Receivables and accrued income 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

- Designated fund
An HCU designated fund was created in 2022 from the miscellaneous reserve. This designated fund will be released to the miscellaneous reserve once the purpose of the fund (new HCU construction) is met.
- 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.
 - Other 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 accounts.

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 takes account of future indexations and price increases. The amount of the provision included in the annual accounts 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;
- the settlement of obligations that will probably 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 expenses in relation to personnel that have already left and personnel with a temporary employment contract.

Provision for WGA/ZW-flex

The provision for the flex obligations under 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.

Provisions for 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 Wageningen Research Foundation.

Provision for Vitality Pact

The provision for the Vitality Pact includes the liabilities for employees who make use of their rights relating to the Vitality Pact and the expected costs for employees who will meet the criteria for participation in the Vitality Pact over the next 10 years. The estimate of the last item takes into account the likelihood that an employee will remain in employment and the likelihood that an employee will exercise his or her right. The provision for future use will be built up in 10 years. The expected expenses are indexed in relation to expected wage developments, and the present value of the liabilities is determined on the basis of the prevailing market rate of interest for WR.

Provision 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.

Provision for product and contract risks

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

Long-term debts

Long-term debts concern liabilities that are due in more than one year from the end of the relevant financial year.

On initial recognition of long-term debts, these are stated at fair value, less the directly attributable transaction costs.

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

Short-term debts

Short-term debts concern liabilities that are due within one year from the end of the relevant financial year.

On initial recognition of short-term debts, these are stated at fair value, less the directly attributable transaction costs.

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

ACCOUNTING POLICIES 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 reporting year.

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 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.

Income from the Ministry of Agriculture, Nature and Food Quality (LNV) falling under the ministry's funding scheme for institutes for applied research 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.

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. If the contractually agreed service consists of several distinguishable performance obligations, the agreed fee is divided on the basis of the cost of the performance obligations and the extent to which each performance obligation has been realised is determined.

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, Wageningen Research has made a number of deferred tax assets. Firstly, it concerns a deferral 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 and the limitation of fiscal depreciation to the value of buildings to the value for the purposes of the Valuation of Immovable Property Act (WOZ). The deferral relates to receivables and liabilities. The

term of the tax liability has been used as the calculation period for both the tax asset and tax liability. This calculation period is 12 years.

Secondly, it relates to a deferral based on the difference in settlement of equipment with a purchase value up to and including €25,000. These assets are expensed directly in the commercial annual accounts; for tax purposes, a depreciation period of 5 years is taken into account. This results in a tax asset.

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 accounts and the conditions for recognising provisions have been met.

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

Interest is allocated to consecutive reporting periods in proportion to the remaining principal.

Premiums/discounts and repayment premiums are attributed to the successive reporting periods as interest charges so that, together with the interest payable on the loan, the effective interest is recognised in the profit and loss statement and so that the balance sheet shows the amortised cost of the debt on balance. Periodic interest expenses and similar charges are charged to the year in which they become due.

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

The provision in connection with the Vitality Pact is included with effect from 2023.

4.2.4 Auditor's report by the independent auditor

The auditor's report by the independent auditor is included in Wageningen Research Foundation's annual accounts.

Appendix 1

Education at Wageningen University

Table B1.1 List of Bachelor's and Master's programmes 2023 - 2024

Bachelor's	Master's
WO Development Studies	
Internationale Ontwikkelingsstudies (International Development Studies)	International 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 Metropolitan Analysis, Design and Engineering (joint degree)
WO Earth Sciences	
Soil, Water, Atmosphere	Earth and Environment
WO Management Studies Group	
Bedrijfs- en Consumentenwetenschappen (Business and Consumer Studies)	Management, Economics and Consumer Studies (consisting of 5 programmes: Sustainable Business and Innovation, Sustainable Supply Chain Analytics, Consumer Studies, Economics of Sustainability and Governance of Sustainability Transformations)
WO Communication Sciences	
Communicatie en Life Sciences (Communication and Life Sciences)	Communication, Health and Life Sciences
WO Chemistry	
Moleculaire levenswetenschappen (Molecular Life Sciences)	Molecular Life Sciences
WO Life Sciences and Natural Resources 1	
Agrotechnologie (Biosystems Engineering)	Bioinformatics
Biotechnologie (Biotechnology)	Biosystems Engineering
Food Technology	Biotechnology Food Quality Management Food Safety Food Technology Biobased Sciences
WO Life Sciences and Natural Resources 2	
Animal Sciences	Animal Sciences
Plantenwetenschappen (Plant Sciences)	Plant Biotechnology Plant Sciences Resilient Farming and Food Systems
WO Life Sciences and Natural Resources 3	
Bos- en Natuurbeheer (Forest and Nature Conservation)	Aquaculture and Marine Resource Management
International Land and Water Management	Climate Studies
Landschapsarchitectuur en Ruimtelijke Planning (Landscape Architecture and Planning)	Development and Rural Innovation Forest and Nature Conservation Geo-information Science International Land and Water Management Landscape Architecture and Planning
WO Water Technology (jd)	
	Water Technology (joint degree)
WO Biology	
Biologie (Biology)	Biology
WED Economics Group 1	
Economie en Beleid (Economics and Governance)	
WED Biomedical Sciences	
Voeding en Gezondheid (Nutrition and Health)	Nutrition and Health
Yet to be assigned to a visitation group	
Marine Sciences	Data Science for Food and Health

Table B1.2 Number of enrolled students (first-year at WU) at Wageningen University by type of enrolment and gender on 1 October 2023 (source: Osiris)

Type of Enrolment	First-year			All enrolments		
	Male	Female	Total	Male	Female	Total
Students	1,209	1,726	2,935	5,730	7,327	13,057
Other enrolments:						
Contract Students	16	7	23	21	11	32
Second Enrolment Students	55	99	154	82	129	211
Exchange student / Erasmus student	84	177	261	86	178	264
Total	1,364	2,009	3,373	5,919	7,645	13,564

Table B1.3 Number of students (first-year at WU and total) at Wageningen University by study phase and gender on 1 October 2023 (source: Osiris)

Types of Enrolment	First-year			All students		
	Male	Female	Total	Male	Female	Total
BSc	646	831	1,477	2,636	3,025	5,661
Pre-MSc	41	58	99	45	67	112
MSc	522	837	1,359	3,049	4,235	7,284
Total	1,209	1,726	2,935	5,730	7,327	13,057

Table B1.4 Number of Bachelor's students (first-year at WU and total) at Wageningen University by study programme and gender on 1 October 2023 (source: Osiris)

Study programme	First-year			All students		
	Male	Female	Total	Male	Female	Total
Animal Sciences (BAS)	37	96	133	127	341	468
Agrotechnologie (BAT)	22	8	30	99	26	125
Bedrijfs- en Consumentenwetenschappen (BBC)	36	35	71	209	153	362
Biologie (BBI)	78	72	150	353	253	606
Bos- en Natuurbeheer (BBN)	54	49	103	217	162	379
Biotechnologie (BBT)	26	25	51	161	96	257
Communicatie en Life Sciences (BCL)	2	14	16	21	61	82
Economie en Beleid (BEB)	29	14	43	95	47	142
Environmental Sciences (BES)	30	52	82	144	214	358
Food Technology (BFT)	54	69	123	183	255	438
Gezondheid en maatschappij (BGM)	8	31	39	32	118	150
International Land and Water Management (BIL)	33	20	53	151	99	250
Internationale Ontwikkelingsstudies (BIN)	10	48	58	60	183	243
Landschapsarchitectuur en Ruimtelijke Planning (BLP)	45	39	84	180	172	352
Molecular Life Sciences (BML)	33	19	52	142	101	243
Marine Sciences (BMS)	41	49	90	52	54	106
Plantenwetenschappen (BPW)	29	28	57	148	136	284
Soil, Water, Atmosphere (BSW)	27	17	44	119	77	196
Tourism (joint degree) (BTO)	8	15	23	27	54	81
Voeding en gezondheid (BVG)	44	131	175	116	423	539
Total number of enrolled students	646	831	1,477	2,636	3,025	5,661

Table B1.5 Number of Master's students (first-year at WU and total) at Wageningen University by study programme and gender on 1 October 2023 (source: Osiris)

Study programme	First-year			All students		
	Male	Female	Total	Male	Female	Total
Aquaculture and Marine Resource Management (MAM)	15	10	25	73	83	156
Animal Sciences (MAS)	16	43	59	96	266	362
Biosystems Engineering (MBE)	14	2	16	118	34	152
Bioinformatics (MBF)	15	12	27	59	37	96
Biology (MBI)	9	22	31	177	195	372
Biobased Sciences (MBS)	10	9	19	58	38	96
Biotechnology (BBT)	34	36	70	247	188	435
Communication, Health and Life Sciences (MCH)	2	3	5	15	103	118
Climate Studies (MCL)	9	16	25	66	100	166
Development and Rural Innovation (MDR)	5	12	17	29	53	82
Data Science for Food and Health (MDS)	5	10	15	13	31	44
Earth and Environment (MEE)	12	12	24	105	100	205
Environmental Sciences (MES)	40	58	98	169	251	420
Forest and Nature Conservation (MFN)	34	42	76	220	236	456
Food Quality Management (MFQ)	10	26	36	45	80	125
Food Safety (MFS)	8	21	29	28	104	132
Food Technology (MFT)	62	114	176	240	468	708
Geo-information Science (MGI)	20	20	40	109	70	179
International Development Studies (MID)	13	30	43	51	172	223
International Land and Water Management (MIL)	9	8	17	88	74	162
Landscape Architecture and Planning (MLP)	2	4	6	54	68	122
Metropolitan Analysis, Design and Engineering (joint degree) (MMD)	20	27	47	68	78	146
Management, Economics and Consumer Studies (MME)	30	56	86	225	246	471
Molecular Life Sciences (MML)	6	10	16	83	66	149
Nutrition and Health (MNH)	11	73	84	53	438	491
Plant Biotechnology (MPB)	19	15	34	79	70	149
Plant Sciences (MPS)	53	60	113	295	253	548
Resilient Farming and Food Systems (MRF) (formerly MOA)	23	52	75	90	177	267
Tourism, Society and Environment (MTO)	4	9	13	11	45	56
Urban Environmental Management (MUE)	7	17	24	73	96	169
Water Technology (joint degree) (MWT)	5	8	13	12	15	27
Total number of enrolled students	522	837	1,359	3,049	4,235	7,284

Table B1.6 Success rate of the MSc study programmes for the cohorts of 2019-2020 to 2021-2022
(Source: Osiris)

Study programme	Class of 2019			Class of 2020			Class of 2021		
	N	%			N	%		N	%
		After 2 yrs	After 3 yrs	After 4 yrs		After 2 yrs	After 3 yrs		
MAM	65	15%	65%	78%	85	16%	58%	67	24%
MAS	138	30%	75%	83%	138	31%	70%	134	25%
MBE	50	12%	68%	76%	63	17%	75%	68	19%
MBF	45	11%	51%	64%	50	20%	68%	51	25%
MBI	116	9%	47%	77%	120	8%	50%	117	7%
MBS	58	29%	69%	86%	35	11%	60%	33	24%
MBT	163	15%	64%	90%	147	10%	62%	157	18%
MCH	61	23%	61%	74%	66	18%	71%	60	15%
MCL	62	23%	65%	77%	73	19%	67%	86	24%
MDR	28	18%	71%	86%	20	20%	70%	36	14%
MEE	87	17%	63%	83%	75	16%	60%	65	5%
MES	206	21%	65%	78%	152	20%	66%	154	13%
MFN	134	16%	60%	76%	175	13%	53%	152	9%
MFQ	48	40%	79%	90%	43	33%	65%	51	33%
MFS	55	31%	71%	89%	52	23%	63%	37	11%
MFT	240	43%	82%	94%	264	39%	77%	252	32%
MGI	54	30%	70%	85%	51	12%	57%	54	15%
MID	95	16%	62%	80%	113	18%	61%	79	14%
MIL	75	20%	56%	84%	66	6%	52%	57	14%
MLP	38	11%	55%	82%	43	14%	42%	35	20%
MMD	36	31%	72%	78%	62	35%	77%	60	18%
MME	152	24%	68%	80%	148	18%	73%	152	18%
MML	52	21%	71%	85%	60	10%	47%	43	14%
MNH	205	20%	73%	89%	210	20%	70%	160	24%
MOA	101	26%	67%	77%	96	22%	69%	132	25%
MPB	67	21%	64%	78%	56	14%	61%	54	15%
MPS	199	26%	68%	82%	193	19%	73%	217	20%
MTO	30	23%	73%	80%	40	28%	73%	23	48%
MUE	63	29%	71%	84%	74	24%	76%	69	13%
MWT	15	53%	73%	73%	12	67%	75%	18	50%
Total MSc	2,568	24%	70%	86%	2,613	21%	68%	2,520	20%

- *Class of 2019: students who commenced the study programme (first-year students) in academic year 2019-2020, etc.*
- *N: number of enrolments in the relevant academic year, excluding enrolments for the DL study programmes.*
- *% after 2/3/4 yrs: percentage of students (based on N) graduating within 2/3/4 years.*

Table B1.7 Success rate of the BSc study programmes on the basis of re-enrolments in the second year for the cohorts of 2018-2019 to 2020-2021 (N in absolute numbers, dropouts in first year and graduation after x years in %)(source: Osiris)

Study programme	Class of 2018					Class of 2019				Class of 2020		
	N	%				N	%			N	%	
		Drop outs year 1	After 3 yrs	After 4 yrs	After 5 yrs		Drop outs year 1	After 3 yrs	After 4 yrs		Drop outs year 1	After 3 yrs
BAS	134	25%	34%	64%	77%	145	17%	22%	57%	138	20%	26%
BAT	52	13%	42%	67%	84%	50	10%	18%	62%	42	7%	31%
BBC	125	10%	23%	70%	87%	141	6%	23%	66%	134	9%	20%
BBI	185	16%	28%	66%	78%	159	25%	23%	63%	177	16%	19%
BBN	86	16%	39%	69%	83%	91	27%	29%	65%	104	16%	28%
BBT	98	19%	39%	59%	77%	81	25%	21%	48%	86	16%	28%
BCL	29	17%	42%	67%	88%	26	15%	23%	77%	42	17%	34%
BEB	54	17%	18%	51%	78%	47	11%	14%	67%	34	35%	9%
BES	87	18%	38%	75%	89%	130	17%	29%	71%	128	15%	34%
BFT	187	17%	42%	75%	87%	158	14%	42%	76%	127	23%	35%
BGM	67	24%	61%	94%	98%	53	19%	44%	86%	49	12%	42%
BIL	100	21%	39%	63%	89%	79	13%	13%	62%	82	20%	18%
BIN	63	14%	35%	76%	89%	70	14%	28%	73%	77	8%	23%
BLP	86	14%	26%	70%	89%	111	15%	22%	64%	112	17%	20%
BML	57	12%	46%	72%	86%	82	13%	38%	68%	85	27%	34%
BPW	109	16%	43%	74%	86%	86	15%	18%	67%	89	11%	25%
BSW	88	25%	24%	73%	79%	85	12%	23%	71%	62	16%	29%
BTO	39	18%	53%	72%	78%	48	27%	71%	89%	38	11%	47%
BVG	150	13%	42%	81%	92%	117	15%	35%	77%	174	18%	25%
Total BSc	1,683	11%	35%	69%	84%	1,597	11%	27%	67%	1,671	12%	26%

- *Class of 2018: students who commenced the study programme in academic year 2018-2019 etc.*
- *N: number of enrolments in the relevant academic year.*
- *% dropouts year 1: percentage of students who dropped out in the first year in the relevant study programme.*
- *% after 3/4/5 yrs: percentage of students (based on second-year re-enrolment) graduating within 3/4/5 years.*

Explanation of the tables:

WU migrated to a new student information system in December 2020. As of the 2021 annual report, this has meant some definitions are different from before.

- Definition of first-year students: all students who commenced their first year of study at WU between 1 September 2023 and 1 October 2023 (tables B 1.2, 1.3, 1.4 and 1.5).
- The success rate data in tables B1.6 and B1.7 of all cohorts are derived from Osiris, so the data are comparable between the cohorts.

Appendix 2

Valorisation indicators

1 Indicators for the UNL domain “People”

1.1 Research into entrepreneurship

Table B2.1 Percentage of MSc graduates who find employment per sector

	2019	2020	2021	2022	2023
Business community ¹	23%	21%	33%	33%	37%
Business services ²	12%	14%	6%	6%	4%
Government ³	8%	8%	12%	12%	9%
Other non-academic sectors ⁴	40%	41%	39%	39%	37%
Universities ⁵⁾	17%	16%	10%	10%	13%

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 Government.

4 Research institutes, universities of applied sciences, other education sectors, hospitals (including academic medical centres), health and well-being institutions, other healthcare, other sectors.

5 Academic universities (not including academic medical centres).

1.2 Entrepreneurship

Table B2.2

Course code	Course name	#Students 2022-2023
BSc. skills – Entrepreneurial skills		
FQD-24306	Case studies product quality	100
FHM-31806	Biotechnology 2	57
BSc Minor - Innovation and Entrepreneurship		
BMO-22706*	Principles of Entrepreneurship	80
BMO-51306*	Management of Science and Technology	28
BMO-57306*	Entrepreneurship-Innovation in Practice	31
BEC-52306	Financial and Business management	50
BMO-24306	Management and Marketing	149
CPT-22806	Innovation and Transformation	51
BEC-51806	Agricultural Business Economics	36
MSc. – Entrepreneurship track**		
BEC-52306	Financial and Business Management	50
BMO-55806	Entrepreneurship and Innovation in Emerging Economies	26
BMO-33806	Entrepreneurship in the circular economy	43
ELS-51306	Intrapreneurship: Impacting existing organizations	22
BMO-23406	New Venture Creation: from idea to reality	43
BMO-56806	Business Cases Agri-Food Entrepreneurship	38
ELS-59206	Responsible Learning Organization for Sustainability	32
MSc. – other courses		
ELS-66100	Developing Entrepreneurial Agency: from ideas to impact	19
ELS-66700	Pursuing and Realising Entrepreneurial projects	75
BPE-37306	Economy and Management in Biotechnology	20
YMS-31803	Entrepreneurial Thinking	45
YMS-31903	Entrepreneurial Skills	47
PhD and Postdoc – courses and workshops		
	Entrepreneurship in and outside science	12
	PhD Carousel	65
	PostDoc Day	24
	Biotech101	12
	Veni Impact	22

* mandatory courses.

** Track consisting of choice of 2 courses, an entrepreneurial Academic Consultancy Training course and an internship.

1.3 Lifelong Learning

Table B2.3 Courses for professionals

Wageningen Academy (WU)	2019	2020	2021	2022	2023
Number of open enrolments	1,047	566	2,374	1649	938
Number of open enrolments for courses	43	27	38	55	53
Number of course participants in in-company courses	805	76	175	427	259
Number of in-company courses	21	4	5	10	8
WCDI (WR)	2019	2020	2021	2022	2023
Number of open enrolments	968	784	749	584	525
Number of courses given	35	34	32	27	25
Number of completed course days*	12,225	5,465	12,460	9450	7500

*Number of course days x number of students.

2 Indicators for the UNL domain “Results”

2.1 Patents

Table B2.4 Number of new patent applications for Wageningen University & Research and total active patent families in portfolio

	2019	2020	2021	2022	2023	Total active patent families in Wageningen University & Research portfolio
WU	8	16	5	11	11	74
WR	5	4	8	2	5	53
Wageningen University & Research new applications	13	19*	13	13	13*	126*

* Due to joint WU/WR applications.

2.2 Licences

Table B2.5 Number of licences for patents, breeds, models and materials in 2023

	Number of licences
WU	40
WR	28
Total for Wageningen University & Research	68

2.3 Entrepreneurship

Table B2.6 Number of new spin-offs and (student) start-ups

	2019	2020	2021	2022	2023
Number of spin-offs	4	3	0	1*	2
Number of start-ups	3	7	1	11	5

* Vivotro: founded as a joint venture between WUR and JBI Innovations.

Since 1995, WUR has produced 43 spin-off companies and more than 70 start-ups (or 123 academic start-ups).

2.4 Customer satisfaction and knowledge utilisation Wageningen Research

Table B2.7 Customer satisfaction in 2023

Customer satisfaction	Number	Score	Total	Final score
Very satisfied	299	10	2990	
Satisfied	214	8	1712	
Neutral	28	6	168	
Dissatisfied	13	4	52	
Very dissatisfied	10	2	20	
Total	564		4942	8.8

Table B2.8 Knowledge utilisation in 2022

Project result assessment	Percentage
Useful	92.4%
Not useful	1.9%
No comment	5.6%

Of these, the project results were used for:

Knowledge utilisation in 2023	Percentage
New/renewed product	8.9%
New/renewed process	10.0%
Policy formation	11.3%
Strategic decision-making	4.2%
Legal obligation	41.1%
Basic knowledge	7.3%
Follow-up research	5.0%
Not useful / don't know	12.1%
Total	100.0%

3 Indicators for the UNL domain "Collaboration"

3.1 Collaboration

Table B2.9 Number of completed research projects for the benefit of non-affluent social organisations

Initiative	Target group	Number of completed research projects in 2023	Number of students involved (Bachelor's and Master's)	Number of WU/WR employees involved (including project leaders)	Number of external stakeholders involved in projects
Science Shop	Social organisations	14	128	30	45

Table B2.10 Number of student projects carried out in response to requests from various social stakeholders

Initiative	Target group	Number of student projects conducted in 2023	Number of students involved (Bachelor's and Master's)	Number of WU/WR employees involved in supervision
Society Based Education	SME & start-ups	81		
	Multinationals	17		
	PPP consortia	5		
	Government	14	1,608	444
	Social organisations	68		
	Knowledge institutes	33		
	Other	10		

Table B2.11 Contribution to other education: number of pupils and teachers reached, number of Wageningen University employees involved and selection of teaching materials in 2023

Initiative	Target group	Number of pupils in activities	Number of teachers in activities	Number of WU employees involved	Total selection of teaching materials	Online Websites
Science Hub	Primary education	12,564	928*	50	19	26,295
Smaaklessen support centre	Primary education	252,552	21,059	10	7	108,459
EU school fruit and vegetables programme	Primary education	498,666	23,112	10	4	134,882
Wageningen Pre-University	Secondary education (senior)	13,223	2,199	35	30	145,915
Wageningen Youth Institute	secondary education	250	50	8	6	6,288

*) including (teacher training) students.

Table B2.12 Capacity utilisation of the Shared Research Facilities equipment portfolio as well as the share of external companies and institutions

Shared Research Facilities equipment portfolio	2021	2022	2023
Average utilisation (%)	62.5%	65	80
Of which directly external users (%)	13%	8	12
Number of external users	57	63	65

Table B2.13 Number of temporary exchanges/secondments with the business community

	2019	2020	2021	2022	2023
Number of WUR employee secondments with the business community	9	8	5	12	16

3.2 Funds

Table B2.14 Wageningen University & Research turnover from the business community (in € millions)

	2019	2020	2021	2022	2023
WU					
Business community contribution to research in top sectors	0.0	0.0	0.0	0.8	4.0
Contract research for business community	17.0	14.2	18.3	16.2	12.1
Total business community contribution to WU research	17.0	14.2	18.3	17.0	16.1
WR					
Business community contribution to research in top sectors	14.1	17.1	18.6	18.7	21.4
Contract research for business community	47.6	42.7	46.3	42.8	40.9
Total business community contribution to research at WR	61.6	59.8	64.9	61.4	62.2
TOTAL BUSINESS COMMUNITY CONTRIBUTION TO RESEARCH at Wageningen University & Research	79.0	74.0	83.0	79.0	78.4

Table B2.15 Wageningen University & Research turnover from EU grant programmes (in € millions)

	2019	2020	2021	2022	2023
WU	16.6	17.0	18.0	20.5	27.5
WR	20.5	19.0	21.3	22.5	27.7
Total EU Wageningen University & Research	37.1	36.0	39.3	43.0	57.9

3.3 Publications

Table B2.16 Number of public-private Wageningen University & Research co-publications

	2021			2022			2023
	WUR	WU	WR	WUR	WU	WR	WUR
Total number of publications including:	3,779	3,018	800	3,573	2,944	736	3,561
Corporate (business)	357	247	108	309	238	68	279
Academic	3,468	2,797	706	3308	2,707	648	3,276
Government	1,488	1,104	393	1368	1,137	350	1,419
Medical	145	155	26	177	147	26	174
Remaining	238	176	58	211	187	64	228

* Source: Scopus, Elsevier B.V. All rights reserved. SciVal @, 14/02/2024.

* In 2022, for the first time a distinction has been made between WU and WR. To get an idea of the trends, WUR as a whole is also included.

Note that the total number of publications in SciVal differs from the number in Pure, because not all scientific articles are included in Scopus.

Table B2.17 Number of professional publications, publications for the general public, other publications

Type of publication	WU			WR		
	2021	2022	2023	2021	2022	2023
PROFESSIONAL PUBLICATIONS						
a. Articles in journal ¹	102	129	80	244	235	198
b. Books	6	3	6	11	5	9
c. Book chapters	36	39	25	20	25	14
d. Annotations	0	0	0	0	0	0
e. Conference papers	0	0	7	1	5	3
f. Protocols	0	0	0	0	0	0
g. Reports	201	165	185	799	810	755
PUBLICATIONS AIMED AT THE GENERAL PUBLIC						
a. Books	0	2	0	0	0	0
b. Book chapters	4	4	2	0	0	1
c. Article in newspaper/magazine/journal	8	22	14	3	8	5
OTHER OUTPUT						
a. Book Reviews	23	13	13	2	2	1
b. Book Editorships	20	25	18	7	6	6
c. Journal Editorships	38	32	17	5	4	5
d. Inaugural Speeches	2	2	4	1	1	0
e. Abstracts	232	361	405	84	188	202
f. Designs	0	1	1	0	1	0
g. TV or Radio appearances ²	49	46	138	54	49	93

* Source: Pure via Staff Publications dated 22/02/2024 and Pure for TV and radio appearance d.d. 22/02/2024.

¹ In this category only articles in professional media written by WUR staff are counted. Mentions or interviews in these media are registered as media mentions in Pure and not included in this table.

² TV and radio appearances are taken directly from Pure. Note that not all tv and radio appearances are registered in Pure.

Appendix 3

Social Annual Report

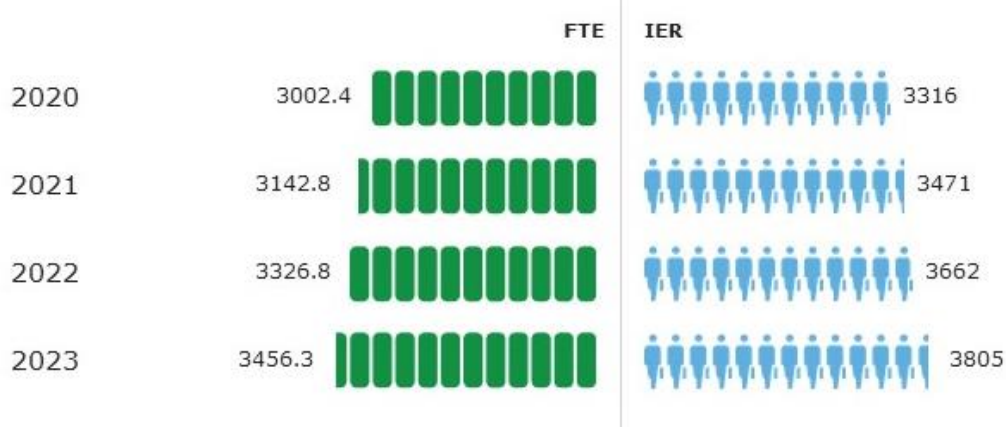


Figure B3.1 WR staff on 31-12-2023 in FTE and Individual Employment Relationship (IER)

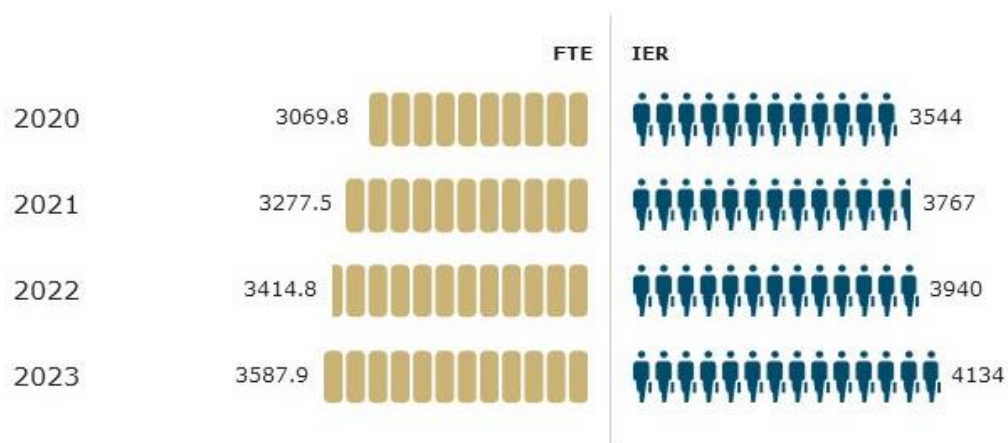


Figure B3.2 WU staff on 31-12-2023 in FTE and Individual Employment Relationship (IER)



Figure B3.3 Temporary/permanent ratio

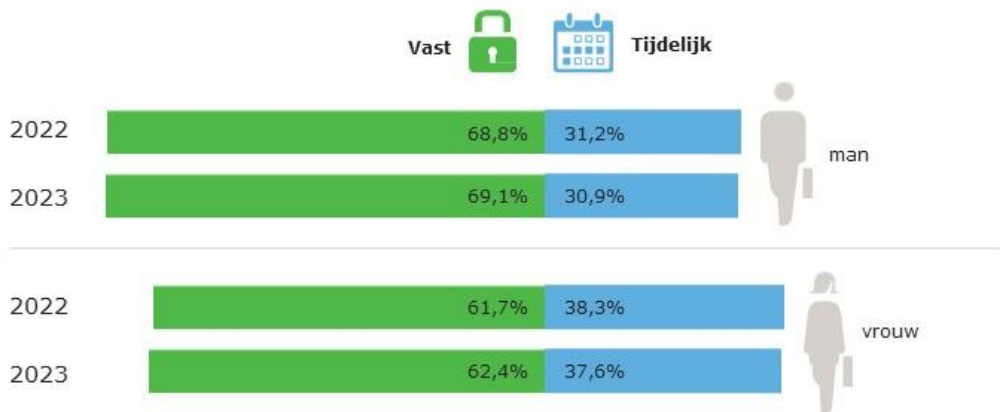


Figure B3.4 WUR permanent/temporary ratio; male/female



Figure B3.5 WUR full-time/part-time; male/female

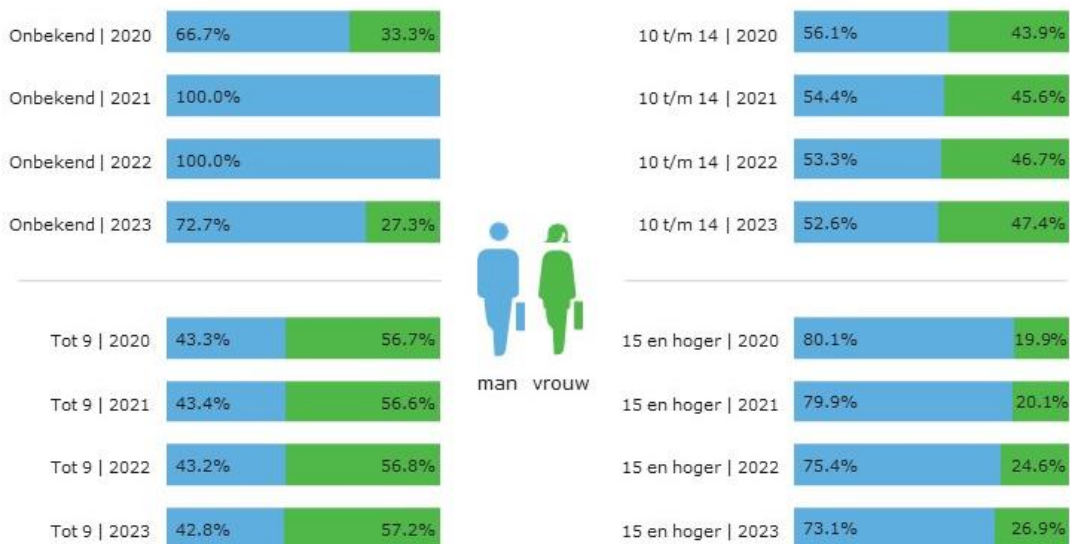


Figure B3.6 WU grading; male/female

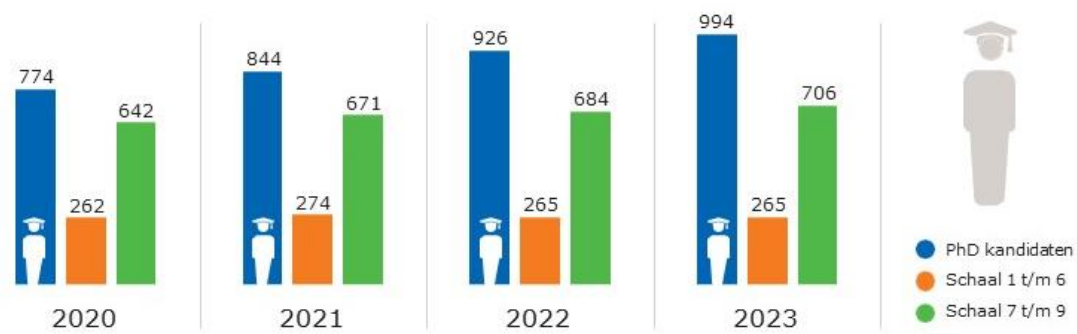


Figure B3.7 Grading for PhD candidates

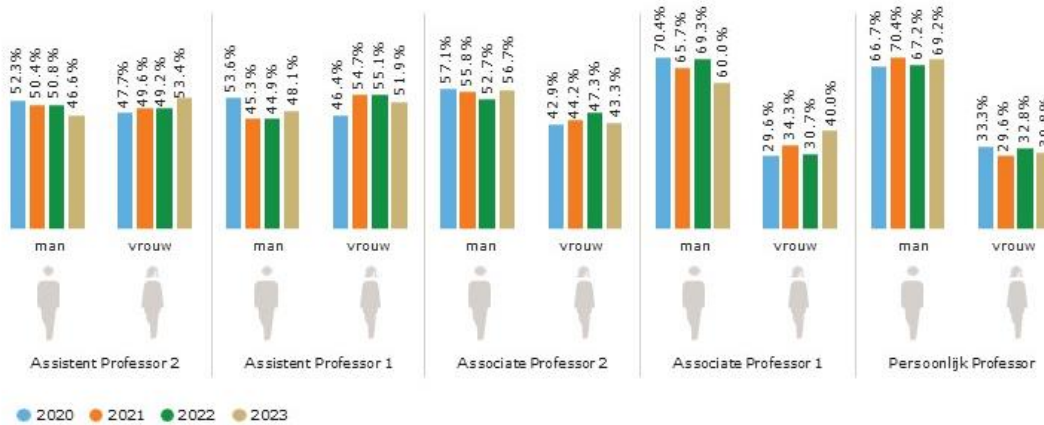


Figure B3.8 WU male/female ratio per job category in tenure track



Figure B3.9 WR and WU age distribution

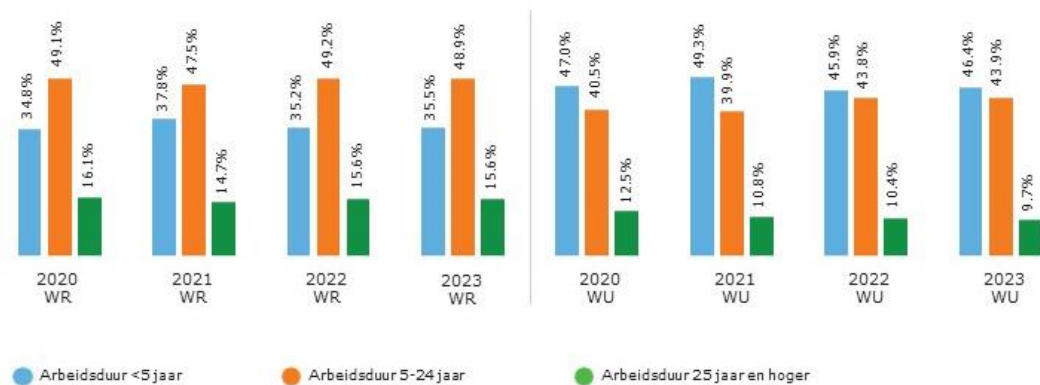


Figure B3.10 Years of employment at WR and WU



Figure B3.11 Dutch/non-Dutch nationality

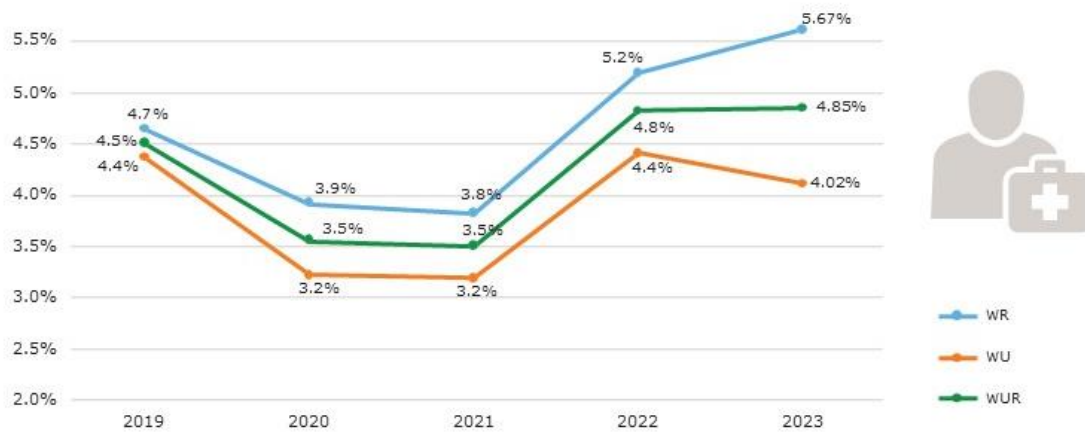


Figure B3.12 Sickness-related absenteeism at WUR

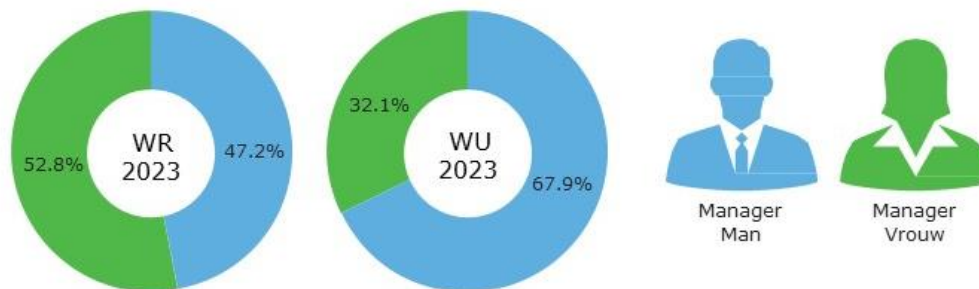


Figure B3.13 Male/female ratio for supervisors

Appendix 4

Glossary

Limitations	The scope of reporting, namely where the organisation has set the boundaries of the activities reported on. The limitations determine what 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 stakeholders	The entirety of interactions between an organisation and its stakeholders. This is not limited to 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 authorities and responsibilities.
Social aspects of entrepreneurship	Aspects of entrepreneurship which are identified when looking at organisations from a broader perspective than the traditional financial perspective. Social aspects of entrepreneurship embrace not only social issues but also economic and environmental matters. It is used here as a synonym for Corporate Social Responsibility or sustainable business.
Social information	All information related to the social aspects of business.
Social results	The performance of an organisation with regard to the social aspects of business.
Social reporting	External information on the organisation's policies and results with regard to the social aspects of business. Social reporting is a generic term for typically non-financial information published in sustainability reports or 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 social 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	Value creation means using the knowledge and infrastructure of WUR for the benefit of society. Our knowledge achieves economic and social added value (impact) through application.
Value chains	An organisation is active in a chain of activities leading to the production and delivery of products and/or services which are bought, 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 detracting of value at various places and moments due to the activities of the various players in the chain.

Colophon

Wageningen University & Research, June 2024
Droevendaalsesteeg 4, 6708 PB Wageningen
Postbox 9101, 6700 HB Wageningen
wur.eu

Contact

Jan Willem Bol
Wageningen University & Research
T (0317) 48 77 20
E janwillem.bol@wur.nl

Editing

Tekstredactie Groenewoud

Layout content

MediaCenter Rotterdam

Design & image research

Wageningen University & Research, Communication Services

Photography

NASA / Earth Observator (cover front)
CIAT / Georgina Smith (back cover left)
Jeroen Bouman (back cover right)

Printing

MediaCenter Rotterdam

To explore
the potential
of nature to
improve the
quality of life



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, 7,700 employees (7,000 fte), 2,500 PhD and EngD candidates, 13,100 students and over 150,000 participants to WUR's Life Long Learning, 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.
