

Table of Contents

	Sup	ervisory	Board	3
	Exe	cutive Bo	pard	4
	Prof	file and C	Core Activities of Wageningen University & Research	5
	Lett	er from	the Executive Board	7
1	Intr	oduction	1	9
2	Wag	geningen	University & Research Executive Report	10
	2.1	Superv	risory Board	10
		2.1.1	Report of the Supervisory Board	10
		2.1.2	Report of the Audit Committee	12
		2.1.3		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	14
	2.2	Key Fig	gures	15
		2.2.1	Wageningen University & Research	15
		2.2.2	Wageningen University	16
		2.2.3	Wageningen Research Foundation	16
	2.3	Mission	n, Vision and Strategy	17
		2.3.1	Mission and ambition	17
		2.3.2	Strategic Plan	17
		2.3.3	Attention for Corporate Social Responsibility	19
	2.4	Educat	ion	22
		2.4.1	Profile and policy	22
		2.4.2	Highlights	23
		2.4.3	Results and success rate	26
		2.4.4	Quality assurance	26
		2.4.5	Funding	27
		2.4.6	Quality agreements	27
		2.4.7	Students	32
		2.4.8	Alumni	37
		2.4.9	Outlook	37
	2.5	Resear	ch	37
		2.5.1	Policy and organisation	37
		2.5.2	Internationalisation	39
		2.5.3	Results	40
		2.5.4	Quality assurance	41
		2.5.5	Open Science	41
		2.5.6	Funding	42
		2.5.7	Outlook	42
	2.6	Value o	creation	43
		2.6.1	Collaboration, tech transfer, and co-creation with partners	44
		2.6.2	The entrepreneurial use of knowledge	46
		2.6.3	Sharing knowledge	48
		2.6.4	Wageningen Campus, Ecosystem & Facilities	51
		2.6.5	New professionals	54
		2.6.6	Outlook	54

2./	Employe	ees	55
	2.7.1	One Wageningen	55
	2.7.2	Recruitment, Introduction Period & Inclusion themes	55
	2.7.3	Leadership & Talent Development theme	55
	2.7.4	Organisational Development theme	56
	2.7.5	Self-career Development & Happy Work Life theme	56
	2.7.6	HR & Operational Excellence theme	57
	2.7.7	Corporate Social Responsibility	58
2.8	Operation	onal management	59
	2.8.1	General Data Protection Regulation	59
	2.8.2	Application roll-out and process optimisation	60
	2.8.3	Safety and environment	61
	2.8.4	Procurement policy and supply chain responsibility	65
2.9	Complia	ance	66
	2.9.1	Governance	66
	2.9.2	Risk management and internal control	67
	2.9.3	Remuneration of executives	70
	2.9.4	Side activities of board members	74
	2.9.5	Clarifications	77
	2.9.6	Treasury Policy	77
2.10	Econom	nic performance indicators	77
	2.10.1	Direct economic value	77
2.11	_	ngen University Continuity Section	79
	2.11.1	Principles of the financial policy	79
	2.11.2	Internal risk management	82
	2.11.3	Risks and uncertainties	82
2.12		criteria and scope	83
	2.12.1	Consolidated report	83
	2.12.2	Report criteria	84
	2.12.3	Scope	84
Abric	lged Wa	geningen University & Research annual financial report	85
3.1	Wagenii	ngen University	85
	3.1.1	Results developments	85
	3.1.2	Revenue and costs developments	86
	3.1.3	Balance sheetdevelopments	87
	3.1.4	Outlook	87
	3.1.5	Abridged Wageningen University annual financial report	89
	3.1.6	Accounting Principles	93
	3.1.7	Auditor's report by the independent auditor	99
3.2	Wageni	ngen Research Foundation	100
	3.2.1	Results developments	100
	3.2.2	Revenue and costs developments	100
	3.2.3	Balance developments	101
	3.2.4	Outlook	101
	3.2.5	Abridged Wageningen Research annual financial report	102
	3.2.6	Accounting Principles	105
	3.2.7	Other information	111
	3.2.8	Auditor's report by the independent auditor	113
Appe	ndix 1 E	Education at Wageningen University	114
Appe	ndix 2 K	(nowledge valorisation indicators	119
Appe	ndix 3 C	Corporate Social Responsibility Report	125
Appe	ndix 4 G	Glossary	132

Supervisory Board

At the end of 2019, the members of Wageningen University & Research's Supervisory Board were as follows1.

Ir. J.R.V.A. Dijsselbloem² (Chair) Prof. S. Korver (Vice Chair) Drs. T Klimp Dr. R.P. Smith RA Ir. M.A. Verhoef

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

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

 $^{^{\}rm 1}~$ Until 1 July 2019, mr. B.J. Marttin was a member of the Supervisory Board.

² Until 1 April 2019, prof. M.J. Cohen was Chair of the Supervisory Board.

Executive Board

At the end of 2019, the members of Wageningen University & Research's Executive Board were as follows:

Prof. L.O. Fresco (President)

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

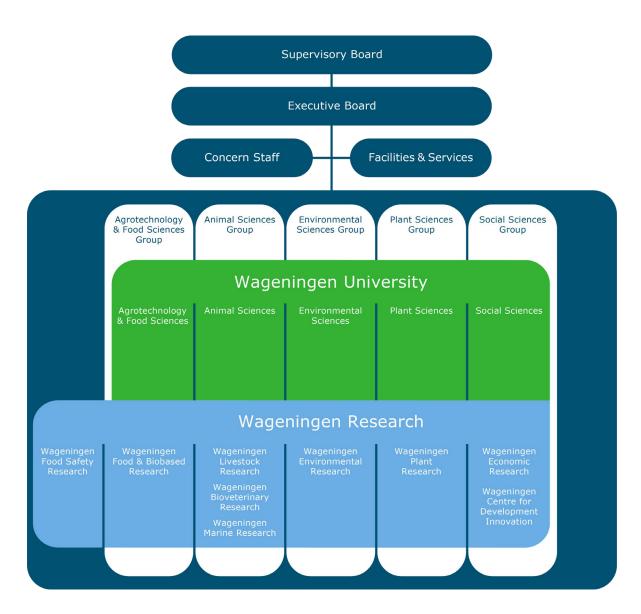
L.A.C. Buchwaldt, MBA

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

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

Profile and Core Activities of Wageningen University & Research

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



One research institute, Wageningen Food Safety Research (WFSR), is not organisationally integrated into a science group. Effective 1 June 2019, the WSFR merged its laboratory with the Laboratory for Food and Food Safety of the Netherlands Food and Consumer Product Safety Authority (NVWA). WFSR carries out Legal Research Tasks in the area of food safety.

Wageningen University and Wageningen Research are independent legal entities. 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 dependant on policy. Individual organisational resources may not be used for any other purpose than to realise the objectives and perform the primary tasks of the individual organisation. For this reason, the separate legal entities publish a consolidated financial report for their group. Wageningen University & Research as a whole does not publish a consolidated annual report.

Letter from the Executive Board

After completing 2018, the year in which we celebrated our 100th anniversary with a great success, we initiated the first year of our new strategic plan in 2019. The influx of the number of students stabilised in 2019, while the growth in the total number of students continued. This confirms the decision and necessity of constructing a third education building to not only safeguard, but also further improve the quality of our education, which continues to be highly regarded nationally and internationally. The strategic decision to establish a Dialogue Centre on campus was further detailed. Naturally, this not only concerns the brick and mortar buildings, but especially about creating a central area for Wageningen Campus in the critical debates of our time: climate, sustainability, healthy nutrition and a robust natural environment.

The pressure on our education system was intense, but thanks to the tremendous efforts of our employees and the motivation of our students, we managed to retain our top spot in the Dutch rankings of 2019 for the 15th time in a row. Internationally, WUR continued to score well in the rankings in the areas of agriculture, forestry and environment. We once again enjoyed good coverage in the international media in 2019. Several research groups and research associates garnered prestigious awards and grants in 2019.

Nationally, food production came under pressure, due to the Council of State nullification of all nitrogen emission agreements. This not only affected the agricultural sector, but numerous other key economic sectors as well. A special taskforce gathered expertise from all segments of our organisation to contribute to solutions with the best possible available knowledge.

An important step was made in our collaboration with the universities of Utrecht and Eindhoven and the University Medical Centre Utrecht. The expertise of these institutions complements that of WUR. The synergy created in this alliance brings new research directions into focus with the potential of making a contribution to solving key issues, for example, in the area of health and quality of life.

In February, the Province of Gelderland made another important step: thanks to the award of a grant, Imec, a leading international research institute in nanoelectronics and digital technologies, will be establishing a presence in the region. Together with Radboud University, we are joining forces as three founding partners for the purpose of developing long-term solutions that promote health and support the production of food in balanced, sustainable ways. The new OnePlanet Research Centre will establish its head office on Wageningen Campus.

At the end of the year, the doors of the new Unilever Research Centre opened on Wageningen Campus in the presence of King Willem-Alexander.

As such, the campus strengthened its unique position in the area of research into healthy nutrition and sustainable food production. This means that the available areas for construction have been virtually all accounted for. It is a conscious decision to maintain the campus' green appearance befitting the major focus on sustainability and nature development in our research and education. The development of the Born Oost grounds was initiated to be able to respond to the interest of knowledge-intensive parties to affiliate themselves with us on Wageningen Campus. In 2019, tens of organisations and companies in the WUR domain opted to affiliate themselves with developments at Wageningen Campus. The campus' accessibility continued to be an area of concern in 2019. Even with the province's major efforts, there was no visible improvement in the situation in 2019.

Finally, 2019 was a prosperous year financially. The funding shortfall incurred by Wageningen University over the past few decades was largely eliminated after its transfer to the Ministry of Education, Culture and Science (OCW). This means that personnel bottlenecks can now be resolved. Quickly attracting sufficient qualified personnel has proven to be a challenge, however. This continues to be energetically pursued with the support of a recruitment team. Wageningen Research acquired additional research assignments, particularly from government, yielding positive results in this area as well.

In March 2020, like everyone else in the world, WUR was hit by the corona crisis. This pandemic and the necessary measures to be implemented will have important consequences for 2020 and the years thereafter.

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

Introduction 1

This annual report covers the 2019 financial year of Wageningen University & Research, the partnership between Wageningen University and Wageningen Research. This encompasses both the joint executive report and the individual annual financial report of the separate legal entities.

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

Both Wageningen University and Wageningen Research have a social function. The annual report offers insight into how both organisations have fulfilled their public responsibilities.

The following chapters offer the reader an overview of the key developments that occurred in 2019.

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 the ambitions of Wageningen University & Research. Following that are the achievements in education (2.4), research, (2.5) and value creation (2.6). In addition to the Corporate Social Responsibility Report (Appendix 3), the developments in terms of human resources (2.7) and business operations (2.8) are also covered. Section 2.9 offers insight into the administration of the organisation, Section 2.10 deals with the Economic Performance Indicators and Section 2.11 covers Wageningen University & Research continuity. Section 2.12 offers insight into the reporting criteria for this annual report.

Chapter 3 covers the annual financial reports of Wageningen University (3.1) and Wageningen Research (3.2) and the auditor's report of the financial statements. The abridged annual financial reports are directly derived from the full annual financial report, which is published separately on the Wageningen University & Research website. Finally, Section 2.9.3 deals with the remuneration for the executives of Wageningen University & Research.

The Wageningen University & Research Annual Report 2019 was prepared and validated by the Executive Board on 20 April 2020 and approved by the Supervisory Board on 27 May 2020.

This document contains the English translation of the Dutch Wageningen University & Research Annual Report 2019. In case of discrepancies between the English translation and the Dutch text, the Dutch text prevails.

Wageningen University & Research 2 **Executive Report**

2.1 Supervisory Board

2.1.1 Report of the Supervisory Board

In 2019, the Supervisory Board attended six regular meetings and one separately scheduled meeting. In addition to the regular meetings with the Executive Board, the Supervisory Board also met seven times in closed sessions. The Chair of the Supervisory Board regularly held informal consultations with the members of the Executive Board.

Supervisor

The Supervisory Board approved the Wageningen University & Research 2018 Annual Report, the Wageningen University and Wageningen Research Foundation 2018 annual financial reports and the 2020 Wageningen University & Research budget.

The Supervisory Board was informed of various topics and discussed these topics with the Executive Board, such as the (long-term) development of the campus, the sickness absence benchmark, the long-term financial projections and relevant matters concerning scientific integrity and compliance. In light of the 2020 budget, extensive discussions were held concerning the spending of additional funds (including the funds stemming from the Van Rijn Committee, the Quality Agreements, the Science & Technology Sector Plan, and as a result of the transfer to the Ministry of Ministry of Education, Culture and Science (OCW)), and the associated challenge of recruiting additional research associates.

In addition, we contributed to the work carried out at a national level on a new Code for Good Governance for Universities, which is expected to go into effect in 2020. In November 2019, the Supervisory Board attended an open meeting to discuss the Code. In 2020, WUR will amend the Corporate Governance Code WUR following the adoption of the new Code for Good Governance for Universities.

The Supervisory Board discussed various real estate-related topics with the Executive Board, such as the investment in the construction of the Dialogue Centre, the investment in infrastructure for a thermal energy storage (TES) facility and the valorisation of the Kortenoord subplans. A meeting took place to discuss the required adjustment of the investment in the construction of the third education building. The Supervisory Board approved the above-referenced investments and valorisation.

The Supervisory Board was informed about the progress of the 2019-2022 Quality Agreements and discussed this with the Executive Board. The Board approved an addition to these agreements in 2019. Furthermore, the Supervisory Board met with the Quality Agreements Audit Panel of the Accreditation Organisation of the Netherlands and Flanders (NVAO). The outcome of this meeting was positive.

The Supervisory Board approved the 2020 budgets for Wageningen University and the Wageningen Research Foundation.

Adviser

A key area of discussion was the realisation of the strategic plan. The Supervisory Board is kept informed of the progress of this plan through various topics. The Board discussed the allocation of funds for WU, as well as WR, for various investments and other themes. The Board also discussed the altered management of knowledge base (KB) funds for the WR themes, an important step towards the One Wageningen strategy. The Board recommends that the altered management approach will be evaluated on a continuous basis, with a view to the realisation of the strategic plan.

In addition, the Board was informed about the performance of the SRT units (the units responsible for performing Statutory Research Tasks). The Board endorses the importance of safeguarding the quality and independence of these units and is kept informed about the SRT units on an annual basis. The high work pressure theme was discussed, including the pressure on available workspaces and laboratory space and the related Strategic Accommodation Plan. The Board was informed about the sale of the Main Auditorium.

In addition, the Board discussed succession planning within the organisation and external collaboration, such as the knowledge alliance with Utrecht University, Eindhoven University of Technology and the University Medical Centre (UMC) Utrecht.

The Supervisory Board and the Audit Committee consulted with the external auditor regarding the annual financial report for 2018 and the 2019 half-year interim report. The Supervisory Board requested that the Executive Board adopt the auditor's recommendations. In addition, the Board was regularly informed about the financial reporting and investments.

Employer

On the recommendation of the Appointments Committee, and upon receiving a recommendation from the Academic Board, the Student Council and the Central Participational Body, the Supervisory Board reappointed Prof. A.P.J. Mol as Vice-president of the Executive Board and Rector Magnificus. The Supervisory Board approved the (half-year) overviews of personal expenses by Executive Board members. The board also granted its approval for the (new) ancillary employment activities and external activities of members of the Executive Board. The board completed performance reviews with the members of the Executive Board in 2019.

Relationship with stakeholders

In March 2019, the Supervisory Board attended the internal meeting with the WUR Council. The Board also discussed the reappointment of Prof. Mol with a delegation of the Student Council and the Central Works Council. Halfway through the year, discussions were held between the Board and the Participational Body during the consultative meeting. Additionally, an informal consultation was conducted between the Supervisory Board and the participational structure in December 2019. As a follow-up to the institutional assessment and the Quality Agreements, these are the Board's recurring points for discussion with students, as well as employees.

The Supervisory Board visited parts of WUR after every meeting. This enabled them to get further acquainted with the research that is conducted, the education that is provided, and with staff members in key positions within the organisation, such as members of management councils, lecturers, and researchers who provide important contributions to societal issues and who conduct pioneering research. In 2019, ESG organised a presentation about their research, the Board visited the village of Randwijk (PSG) where fruit-related research is being conducted, and WEcR further explained the research and presented the new accommodation concept. Furthermore, AFSG presented their research and a laboratory research facility was visited. WFSR made a presentation and organised a tour during which the collaboration with the merged NVWA laboratory was explained. The Board also visited the Amsterdam Institute for Advanced Metropolitan Solutions (AMS), an alliance involving TU Delft, MIT and WUR.

In addition to the above-referenced visits, the Board regularly held more extensive discussions with the Executive Board about substantive themes, such as circular agriculture and the Cabinet's policy with respect to China and the associated implications for WUR.

The Supervisory Board was present at a range of meetings, such as the Dies Natalis and the official opening of the academic year.

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

The Board also maintained contact with external stakeholders. Various meetings were organised in a VSNU - Association of Universities in the Netherlands - context that were attended by the Board, for example for the new Code of Good Governance for Universities.

Development

The Board is actively involved in its own development. Each year the Board conducts a self-evaluation. Moreover, a discussion is held each year to determine which courses members will attend. Furthermore, when the profile for a new Board member is adopted, the Board specifically reviews the Board's composition and the desired development of the Board.

2.1.2 Report of the Audit Committee

The Audit Committee convened for three regular meetings and two additional meetings in 2019.

The Audit Committee extensively discussed the 2018 Annual Report of Wageningen University & Research and the 2018 annual financial reports of Wageningen University and Wageningen Research Foundation. The auditor's report was reviewed in the presence of the auditor. Specific areas for attention included the valuation of real estate, European calls for tenders, the Standard Remuneration Act for Public and Semi-public Sector Senior Officials (WNT) and an investigation of two incidents of fraud. The Audit Committee agreed with the auditor's specific recommendations and advised the Supervisory Board to approve the annual financial reports for 2018 of Wageningen University and Wageningen Research Foundation, and to implement the auditor's recommendations. In addition to the Annual Report and the annual financial reports, attention was focused on the 2019 interim audit. This audit was discussed with the auditor. Specific areas for attention were the research projects (work in progress) and IT. The status of the internal audit plan and the migration to continuous monitoring in 2020, to which a great deal of effort was devoted this year, were discussed in the presence of the internal auditor.

In the autumn, the Supervisory Board discussed the 2020 budgets for Wageningen University and Wageningen Research Foundation. Key areas for attention were the funds available for investments, the attendant recruitment of additional employees and the creation of additional workspaces. The Audit Committee gave a positive recommendation to the Supervisory Board regarding the 2019 budgets for Wageningen University and Wageningen Research.

The Audit Committee on several occasions spoke about the disappointing level of construction costs in relation to initial estimates. In addition to the changed budget, the Committee also discussed the methodology used to prepare project budgets and how to avoid variations in relation to these budgets. After considering the necessity of the projects, the scope and cause of budget variations, the financial room and project controls, the Audit Committee issued a positive recommendation to the Board concerning various real estate and other investments, such as the investment in the construction of the Dialogue Centre, the required additional investment in the third education building and the investment in infrastructure for a thermal energy storage (TES) loop for the campus.

Furthermore, during the year, the Audit Committee received reports about other topics and provided the Executive Board with recommendations, such as the funds policy, an update on the annual privacy plan, the internal audit report, the long-term projections and the long and short term developments of Wageningen Campus.

2.1.3 Report of the Appointments Committee

In 2019, the Appointments Committee attended three regular meetings. Several additional meetings were also organised for the reappointment of the Rector and the recruitment of a new Supervisory Board member.

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

In 2019, the Board reappointed Prof. A.P.J. Mol as Vice-president and Rector Magnificus. Prior to this reappointment, the Committee sought input from various forums, including the Central Participational Body and the Academic Board, and issued a reappointment recommendation to the Board.

At the recommendation of the Committee, the preparations were started in late 2018 for the recruitment of a new Chair of the Supervisory Board as Prof. M.J. Cohen indicated he wants to step down from his position at the start of 2019. The appointment procedure was carried out by the full Board in view of the importance of this position.

Per 1 April 2019, Mr J.R.V.A. Dijsselbloem was appointed as Chair of the Supervisory Board by the Minister of Education, Culture and Science (OCW) and the Minister of Agriculture, Nature and Food Quality (LNV). Mr. Dijsselbloem succeeds Prof. M.J. Cohen, LLM, who held this position for six years.

The term for Mr B.J. Marttin ended on 1 July 2019. At the recommendation of the Appointment Committee, recruitment for a new member of the Supervisory Board began in 2019. In December 2019, recruitment was commenced with the support of an external agency and the Appointment Committee submitted its recommendations to the Supervisory Board. The Supervisory Board presented the selected candidate to the minister for appointment. The Minister appointed Prof. P.M. Herder as a member of the Supervisory Board, effective 1 February 2020.

In 2019, the composition of the Supervisory Board changed from 2 women (33%) and 4 men (67%) to 2 women (40%) and 3 men (60%). This was the result of the vacancy created due to the expiry of Mr. B.J. Marttin's term of office effective 1 July 2019, which was not filled in 2019. With the appointment of Ms. Herder in 2020, the Board is now composed of 3 women and 3 men.

At the initiative of the Appointments Committee, the Supervisory Board conducted a self-evaluation in 2019. A number of measures were formulated as a result. These were shared with the Executive Board.

Details of the remuneration for the members of the Executive Board and Supervisory Board for 2019 are provided in Section 2.9.3 of this report.

2.1.4 Report of the Education and Research Committee

The Education and Research Committee met once in 2019. The second meeting was deferred to January 2020 due to special circumstances. In the meeting of March 2019, the Committee discussed the state of affairs relating to programme accreditations. In addition, the Committee was informed about the changed management approach to the WR themes (research themes for which knowledge base (KB) funds are used). Effective from 2019, these themes have been integrally managed organisation-wide by 5 talented individuals. Other topics that were discussed with the Executive Board were the performance of the SRT units and the new investment theme 'Connected Circularity'. In the meeting of January 2020, the analysis of the preliminary registration of Bachelor students, the Educational Reform Acceleration Plan, the appointments advisory committees' mode of operation in relation to accelerating the recruitment of employees and the investment theme 'digital twins' were discussed.

The Committee informed the Board about the topics it discussed.

2.1.5 Independence and Compliance

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

2.1.6 Background of the Supervisory Board members

Prof. M.J. Cohen (1947) has been a member of the board since 1 September 2013 and is Chair of the Appointments Committee and a member of the Education and Research Committee. At his request, he honourably stepped down during his second term of office on 1 April 2019. Mr Cohen has held numerous public offices among them, Rector Magnificus of Maastricht University, Mayor of Amsterdam and leader of the Labour Party in the House of Representatives.

Mr J.R.V.A. Dijsselbloem (1966) became Chairman of the Supervisory Board on 1 April 2019, and is Chairman of the Appointments Committee and member of the Audit Committee. Mr Dijsselbloem is Chairman of the Dutch Safety Board.

Prof. S. Korver (1953) has been a member of the board since 1 January 2013 and is Chair of the Education and Research Committee and a member of the Appointments Committee. His second term of office will end on 1 January 2021, at which point Mr Korver will be not eligible for reappointment under the board's rotation schedule. Mr Korver was Director of VION and is a professor holding an endowed chair at Tilburg University.

Mr B.J. Marttin MBA (1965) was member of the supervisory board from 1 July 2011 to 1 July 2019, which is when his second term of office expired. He also was a member of the Audit Committee. Mr Marttin is a member of the Managing Board of Rabobank Group.

Mr R.P. Smith RA (1960) has been a member of the board since 1 January 2013 and is also chair of the Audit Committee. His second term of office ends on 1 January 2021. Mr Smith will not be eligible for reappointment at that point. Mr Smith was Chair of the Executive Board of Royal Cosun until 1 June 2017.

Ms M.A. Verhoef (1959) has been a member of the board since 1 January 2017 and is a member of the Appointments Committee and of the Education and Research Committee. Her first term of office ends on 1 January 2021. At this point she will be eligible for reappointment due to the provisions of the Board's rotation schedule. Ms Verhoef is Chairman of the Executive Board of Spirit en Bascule Jeugdhulp, a youth-care organisation in Amsterdam.

Ms T. Klimp (1972) has been a member of the board since 1 September 2018 and is a member of the Audit Committee. Her first term of office will expire on 1 September 2022. At this point she will be eligible for reappointment due to the provisions of the Board's rotation schedule. Ms Klimp was Director of Finance of Paints and Coatings for Commercial and R&D at Akzo Nobel. Effective 1 January 2020, she became Senior Vice-president Strategy at Corbion B.V.

2.2 Key Figures

2.2.1 Wageningen University & Research

Table 2.1 Education

	2016-2017	2017-2018	2018-2019	2019-2020
Bachelor's programmes	19	19	19	19
Master's programmes	28	29	30	30

Table 2.2 Research

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

At the request of the library, epubs ahead of print were included. Excluding the epubs, the number of publications is 5,061. Epub ahead of print are the publications that have already been released online, but which have yet to be assigned definitive publications details in the registration system.

Table 2.3 Students

	2016-2017	2017-2018	2018-2019	2019-2020
Number of enrolled students	11,278	12,000	12,439	12,847
Bachelor's students	5,298	5,655	5,902	5,928
Master's students	5,480	5,822	6,105	6,409
Other enrolments	500	523	432	510
Influx of first-year students	2,962	2,977	3,003	2,923
Bachelor's	1,655	1,711	1,744	1,629
Master's	1,307	1,266	1,259	1,294
Number of graduates ⁴	2,946	3,190	3,323	
Bachelor's	1,095	1,162	1,268	
Master's	1,851	2,028	2,055	
Number of student nationalities	103	106	106	102
Percentage of international students				
Bachelor's students	3	3	3	5
Master's students	40	40	38	36

Table 2.4 Employees

	2015	2016	2017	2018	2019
Average number of employees (in FTE)	4,995	4,912	4,852	5,040	5,400
Distribution on the basis of appointment:					
Wageningen University	2,546	2,523	2,492	2,590	2,743
Wageningen Research Foundation	2,449	2,389	2,360	2,450	2,657

Relates to staff with a regular employment contract.

³ Reference date 03-02-2020 – The numbers of publications may differ slightly from the number specified last year, as there was a lag in entering the publications into the registration system.

 $^{^{4}\,}$ A number of publications were produced through a combined effort of WU and WR. These publications were counted once in the total.

Table 2.5Sustainability

	2014	2015	2016	2017	2018	2019
Reduction of CO ₂ emissions by %	47	46	47	51	48	50
compared to 2010 ¹⁾						
Annual energy reduction (%)	4.2	3.4	2.3	6.0	2.2	1.1

 $^{^{1)}}$ The annual CO₂ emissions as a percentage of the total CO₂ emissions for the reference year 2010 (100%). For further explanation see Section 2.8.3.2.

2.2.2 Wageningen University

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

	2016	2017	2018	2019
Government funding excluding targeted subsidies	182.4	189.9	202.5	226.4
Tuition and tuition fees ¹⁾	32.3	36.9	37.8	38.1
Research funding and targeted subsidies	28.3	28.6	32.2	34.3
Matching market and contract research	60.1	59.1	60.0	64.1
Investments in buildings and land	4.0	3.7	6.4	17.7
Investments in other tangible assets	12.3	9.5	11.3	15.4
Net result	-2.5	13.2	27.6	20.0
Wageningen University capital				
Capital invested in fixed assets	258.7	247.4	238.0	248.1
Equity capital	151.2	164.4	192.0	212.1
Total capital	353.1	348.0	369.6	405.3
Solvency ratio (%)	42.8	47.3	51.9	52.3
Liquid assets Wageningen University				
Liquid assets	44.9	53.9	88.9	114.2
Current ratio	0.5	0.6	0.8	0.9

¹⁾ Excluding course fees.

2.2.3 Wageningen Research Foundation

Table 2.7 Key financial figures for Wageningen Research foundation ($x \in 1$ million)

	2016	2017	2018	2019
Turnover	299.2	299.4	321.9	344.0
Proportion of revenue from LNV (%)	40	38	42	43
Investments in buildings and land	14.3	16.6	17.7	9.8
Investments in other tangible fixed assets	3.8	5.5	7.2	13.7
Net result	2.7	4.2	10.4	14.9
Wageningen Research Capital				
Capital invested in fixed assets	335.4	336.1	339.5	339.0
Equity capital	304.5	308.7	319.1	334.0
Total capital	542.9	525.1	547.9	555.8
Solvency ratio (%)	56.1	58.8	58.2	60.1
Liquid assets Wageningen Research				
Liquid assets	115.8	93.8	117.7	129.2
Current ratio	1.5	1.4	1.3	1.4

2.3 Mission, Vision and Strategy

2.3.1 Mission and ambition

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

The 21st century is characterised by major global challenges that transcend countries and sectors. Humans are depleting nature and the natural resources of our planet, malnutrition continues to be a global problem, cities are becoming overcrowded and the climate is rapidly changing.

With knowledge, education and research of the highest possible standard, WUR aims to tackle global challenges and shape and accelerate the required transitions. In this way, we contribute to the development of innovative technological, social and nature-based solutions designed to build biocircular agricultural food systems. These solutions also contribute to protecting nature, improving biodiverse ecosystems and supporting liveable urban and rural communities. At the same time we focus on continuous internal innovation, change and further development in order to retain and strengthen our quality, social impact and global position.

The domain of WUR, 'healthy nutrition 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

In January, the new 2019-2022 Strategic Plan was launched, distributed, and made publicly available. The plan is titled 'Finding Answers Together'. The strategic plan calls on new and existing partners, students, alumni and citizens to explore the potential of nature together, to acquire greater insight into the challenges that confront us and to discuss and navigate conflicting interests. We aim to collaborate on scientific, substantiated and socially inclusive answers that can jointly help shape the transitions.

We enthusiastically got down to work in the first year of the strategy's realisation. Various new initiatives and changes were started up. A number of assumptions and leading principles are adhered to during the implementation. Twelve Change Performance Indicators (CPIs) were established in the strategic plan. These CPIs serve as an implementation quideline. In addition, we are implementing the strategic plan by assigning responsibility to the line for achieving the targeted ambitions and goals as much as possible. We are utilising existing processes and instruments, such as the Planning & Control cycle, the budgeting process, existing forums and meetings. We create ownership at all levels of the organisation, whereby we help teams take ownership of the ambitions and goals in the strategic plan. We can only achieve the strategic plan together. This is why it is necessary that the plans and actions of the Executive Board, science groups and staff services are addressed in joint coordination.

There are in regular communication about the plans and the results achieved, for example, through means of various videos. Open meetings were organised every two weeks with the objective of finding answers to various goals in the strategic plan together. Over the past year, the strategic plan was further elaborated by the science groups in their own strategic plans, and by staff services in policy memorandums. Each CPI was also further detailed by change agents; colleagues who in the line, or as figureheads, play an important role in the development and realisation of the targeted objectives. Together with them, the CPIs were detailed to create specific actions and objectives that can be monitored.

Research

Our research is driven by the desire to acquire greater insight into and contribute to the challenges and transitions our world is confronted with. In Wageningen, we devote our efforts to the entire knowledge chain, ranging from curiosity driven by fundamental research to scientific and scalable practical knowledge needed to create solutions.

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

Investment Themes (Wageningen University & Research):

- · Connected Circularity
- **Protein Transition**
- Digital Twins

Research Themes (Wageningen Research):

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

Our education and our students

We offer students and professionals the knowledge and skills required to understand and facilitate key global transitions. Students and professionals come to WUR to participate in our growing portfolio of online and on-campus programmes, training programmes and courses bundled in our Education Ecosystem. Our education ecosystem is constantly developing through innovation and the expansion of content and different forms of education. We continue to supply high-quality education, create flexible learning paths and strengthen the diversity of our student population.

Our people, organisation and resources

WUR's impact is the result of our people's efforts. They develop and disseminate new knowledge and innovations, train students and professionals and find answers to social issues. The support staff ensures that education and research proceed efficiently. Our policy, our organisation and our resources facilitate the excellent work of our staff and their collaboration with colleagues, students, partners and society at large. Together we are One Wageningen and maximise the synergy between Wageningen University and Wageningen Research by enlarging the flexibility and mobility between and within the two institutes to form effective, diverse teams that boost our collective impact and quality.

Impact: our social value

Since our foundation just over a century ago, our motivation has been to find answers and improve our world. We aim to make a difference. We make this difference by providing high-quality education, conducting innovative research together with our partners and creating spinoffs and start-ups. We continue to make a contribution to social agendas and to organise social dialogues. We continue to be closely connected with our alumni in the Netherlands and abroad and will continue to develop our campus.

Change Performance Indicators

We established twelve Change Performance Indicators (CPIs) to monitor the progress made in achieving our goals. The CPIs will be further operationalised and quantified as part of our realisation process.

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

2.3.3 Attention for Corporate Social Responsibility

In everything we do, we set high standards regarding social responsibility and sustainability. We are aware of the social impacts of our work and act accordingly. Social impact forms part of our decisionmaking. For us, this is the core tenant of Corporate Social Responsibility (CSR). This blends seamlessly in with the domain in which we work: making a contribution to a better world through knowledge of our living environment and healthy nutrition.

We aim to continue to fulfil a pioneering role in the sphere of sustainability and corporate social responsibility. One Wageningen is the central theme of our CSR strategy. In this manner, we can make optimal use of all available knowledge and strive for sustainability on all fronts - education, research, and business operations. WUR's Integrity Code states that all employees, at all levels, are expected to act with respect for humans and animals and with an awareness of nature and the living environment.

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

The themes in the strategic plan form part of our CSR agenda: a list of seventeen social themes that are key to our organisation and stakeholders. The CSR agenda was updated in 2019, including the goals and associated performance indicators. The themes of research and education are at the top, with social responsibility at the heart of all our activities. Through research and education, we contribute to the global social challenges relating to food security, safety, health, liveable cities and sustainable land use. See Table 2.8 for the themes of the CSR agenda. Our website and the 2019 Sustainability Report contain more information about the WUR CSR Agenda.

Science for Impact continues to be the basic principle underlying our research and education. Impact furthermore is the motivation for our business operations. The energy transition strategy was further detailed in 2019. A project was initiated to further expand the thermal energy storage (TES) facility at Wageningen Campus with greenhouses and a newly conceived and still to be constructed loop. In addition, solar panels were installed on various roofs. Work proceeded on developing a new vision for raw materials and waste with which WUR aims to make a transition from a waste management policy to a circular economy policy. In 2019, the first actions were implemented in the context of the 2030 Mobility Vision; bicycle parking stations were improved, and employees were given the opportunity of trying out an e-bike or a Speed Pedelec.

We continue to be a frontrunner in the sustainability rankings. In December 2019, Wageningen University and its campus were once again declared the most sustainable university in the world in the UI GreenMetric ranking. Wageningen University & Research ranked 46th in the Transparency Benchmark of the Ministry of Economic Affairs and Climate Policy (EZK) in 2019, making it the most transparent in CSR reporting among universities in the Netherlands. In 2019, Eindhoven University of Technology (TU/e) won the best practice award in the SustainaBul – an annual ranking of Dutch educational institutions organised by students. The best practice TU/e qualified as the most sustainable and innovative. Wageningen scored the most points in the overall rankings and as such leads in the SustainaBul rankings.

The ambitions for sustainability and CSR in the strategic plan and the development of the themes in the CSR agenda are coordinated by the CSR group. The CSR group consists of WUR staff in key positions throughout the organisation and it is their job to assess the progress. The group reports to the Executive Board. As chair, the Director of Facilities & Services manages this group and together with the Director of Corporate Human Resources is responsible for the content and implementation of the CSR policy.

The actions, efforts and results arising from WUR's sustainability and CSR goals are set out in the 2019 Sustainability Report. This report also describes the results of the CSR Agenda and adheres to the reporting criteria of the Global Reporting Initiative (GRI).

Table 2.8The themes in the CSR Agenda

In this Annual Report
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2.4 Education

2.4.1 Profile and policy

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

Companies, government bodies, and research institutions can visit Education Project Services to connect their questions to courses for students who are learning to use their academic skills to resolve concrete issues (see also 2.6.3.3.). The Science Shop is available for non-profit organisations (see 2.6.3.4). Through Wageningen Academy and the Centre for Development Innovation (CDI), WUR offers courses, training programmes, and degree programmes for professionals in the business community, in government, or in the semi-public sector (see 2.6.3.6).

Our education and research is aimed at the domain of "healthy food and living environment" (see 2.3.1). In the 2019/2020 academic year, the range of programmes for the more than 12,000 campus students consisted of 13 Dutch Bachelor's programmes, six English Bachelor's programme (Tourism) and 30 English Master's programmes in the fields of Agro Technology and Food Sciences, Animal Sciences, Environmental Sciences, Plant Sciences and Social Sciences (Appendix 1, Table B1.1). Three of these study programmes are jointly provided with other institutions of higher education.

The Tourism Bachelor's programme is provided with NHTV in Breda and the Water Technology Master's programme is provided with the University of Groningen, Twente University, and Wetsus in Leeuwarden. The Metropolitan Analysis, Design, and Engineering (MADE) Master's programme is offered with the Delft University of Technology, under the umbrella of the Amsterdam Institute for Advanced Metropolitan Solutions. Three Master's programmes offer online a part-time specialisation, which provides students across the world with the opportunity to obtain a full Master's and to combine study and work. In addition to these degree programmes which are accredited by the Accreditation Organisation of the Netherlands and Flanders (NVAO) and are publicly-financed, Wageningen University offers open and online education, such as Massive Open Online Courses (MOOCs) and professional online courses.

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

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

The implementation was continued in 2019. In it, three important pillars for the development of education are defined:

- 1. High-quality scientific knowledge
- 2. A rich learning environment is offered, in which the development of knowledge, skills, and approaches are combined
- 3. Flexible and personal learning paths

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

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

2.4.2 Highlights

Educational reform

In 2019, the innovation of education was reorganised in an innovative way, based on, among other things, the Vision for Education, and research conducted by the Education and Learning Sciences chair group into the effectiveness of education innovation projects. An example of a key change is the possibility of continuous innovation and calling on innovation resources, instead of organising an innovation session once a year. The implemented innovations are more structurally researched in terms of their effectiveness and are more broadly communicated.

In 2019, the implementation of the digital learning environment 'Brightspace' was initiated to improve education where possible. A method - the Redesignlab - was developed to thoroughly redesign a course, method of working, specialisation or teaching guideline. The Redesignlab was applied ten times in 2019. In the context of the 'Educational Reform with ICT Acceleration Plan', a process was developed to integrate new ICT applications into the education process in as streamlined and broad a way as possible. Finally, in 2019, Communities of Practice were created around various innovation themes. In these communities, enthusiastic lecturers share their ideas and experiences through, for example, skills, feedback, collaboration, team management and wet labs. The experiences gleaned from innovative education are shared via the 4TU website.

Open and online education

In 2019, we worked on six new Massive Open Online Courses (MOOCs) in the field of nutrition and sport, drones in agriculture, drainage, the gap between the financial world and landscape development (in collaboration with WCDI), the evaluation of animal rearing programmes and a new AMS MOOC. In addition, we redesigned and adjusted another six MOOCs as a result of which, together with other MOOCs, they now form three micro Masters about the biobased transition. As a result, the total Wageningen portfolio now contains 44 online courses. The number of students, coming from a large number of countries, participating in one or more MOOCs grew by 165,000 to a total of over 750,000 participants in 2019. Over 100 WUR lecturers are involved in the online courses. In addition,

in 2019, 239 regular degree students participated in the 'virtual exchange' education of Wageningen University or of one of our partner universities. In 2019, over 100 students participated in one of the three online MSc programmes (Food Technology, Nutrition & Health, and Plant Sciences) and eighteen of these students graduated that year.

Data Science

Lecturers of various science groups and the Wageningen Data Competence Centre developed a large number of courses in the field of data science. These courses were integrated into thirteen different study programmes in 2019.

Programme accreditations

The third programme audit cycle was completed in 2019. All programmes were audited and received a positive evaluation from the panels. The accreditation identified a number of general areas of strength, such as the unique multidisciplinary character of Wageningen University's study programmes, the high level of commitment of lecturers and study advisors, and the high quality of the graduating projects. In 2019, various initiatives were started up on the basis of the accreditations to further improve the quality of education, at the study programme level, as well as university-wide.

Implementation of education vision

In 2019, we continued to work on the broad implementation of the education vision, based on ongoing activities and building on the successes realised by study programmes and chair groups in recent years. Work was started on the collective development of skills teaching guidelines in the Bachelor study programmes.

Quality agreements

In January 2019, the Executive Board and the Student Staff Council reached agreement on the 2019-2024 Quality Agreements for Wageningen University. As such, a decision has been taken on how to deploy the funds released due to the discontinuation of the basic study grant, for the purpose of improving the quality of education at Wageningen University (see Section 2.4.6 for additional details).

Comenius Leadership programme: Boundary Crossing

As part of the Comenius Leadership programme, Wageningen University is investigating how students can acquire boundary-crossing skills even more in the area of intercultural, interdisciplinary and transdisciplinary collaboration. In 2019, the first year of this project, the conceptual basis was developed and work was started on various elements, including the development of teaching guidelines and a lecturer's course on boundary crossing. In addition, workshops and presentations were organised at various national and international conferences.

Student Challenges

In 2019, the first edition of the ReThink Protein Challenge took place. This is an international student competition organised by WUR. The challenge was to develop a business plan or concept that contributes to solving the global issue of feeding 9 billion people with sufficient, healthy and affordable proteins that can be produced in sustainable ways. 58 teams from fourteen countries throughout the world participated and were supported online by coaches from the partner network. Twenty teams ultimately made the final cut. They pitched their innovation to the jury and presented themselves to the public on the innovation market. The winners were SWAP - Silkworms as Protein - and GrainGain. At the end of 2019, the best student teams from the four Dutch universities of technology competed in the 4TU Impact Challenge finals in The Hague for the first time. In addition, at the end of 2019, the kick-off of the second edition of the Urban Greenhouse Challenge took place. The finals for this challenge will take place in 2020.



IT in education

Brightspace was successfully implemented in 2019 and the largest share of the education was transferred to this new learning environment. In addition, work was started on the design of the new student information system, Osiris, and the conversion of data to Osiris has largely been completed. Furthermore, in 2019, tenders for a new digital testing system and a student portal platform were initiated. This provides a single point of entry for students to all required information and functions.

The first trials took place by making course applications available for use by students on their own laptops to enable students to study anytime, anywhere using their own device (Bring Your Own Device (BYOD)). In addition, the IT ServicePoint for students was implemented and, organised by WUR, the first 600 laptops on hand were sold to students.

Educational Reform with ICT Acceleration Plan

Wageningen University is actively participating in the Educational Reform through ICT Acceleration Plan introduced by the VSNU, the Netherlands Association of Universities of Applied Sciences and SURF - the collaborative organisation for ICT in Dutch education and research. The objectives of this Acceleration Plan are to make flexible studying possible, use technology to enable students to study smarter and better, and improve graduates' alignment with the labour market. Wageningen University is committed to the following themes: improving the flexibility of education, collaboration with EdTech, and digital learning resources. This has resulted in the start-up of a number of developments in 2019. For example, a pilot was initiated with the alliance partners TU Eindhoven and Utrecht University to promote student mobility, and investments were made in the offer of 'lifelong development' In addition, we worked together on various pilots designed to implement new tools in education, and on a national infrastructure for learning resources.

Dies Natalis, Teacher of the Year and Opening of the Academic Year

The 101st Dies Natalis took place on 11 March 2019. The theme of the Dies Natalis was: 'Innovation for conservation: Pushing technological frontiers'. The most important speaker was David Coomes, professor in remote sensing at the University of Cambridge. Three young WUR scientists reflected on their innovative work, namely Dr Brenda Walles (Marine Ecologist South-western Delta), Dr Lammert Kooistra (Associate Professor) and Jasper Eikelboom MSc MA (PhD Candidate).

On 17 June 2019, the 2019 Teacher of the Year Award of the University Fund Wageningen (UFW) was presented to Dr Fred de Boer, Associate Professor Resource Ecology in the Department of Environmental Sciences.

Prof. Louise O. Fresco opened the 2019-2020 academic year on 2 September 2019. The theme of the opening was 'Dialogue: an academic responsibility'. Former Rector Magnificus of KU Leuven, Rik Torfs, addressed the attendees.

2.4.3 Results and success rate

The success rate (study success) of the Master's programme after two years is 42% (for cohort 2017) and 82% after three years (for cohort 2016). This is more or less the same as in previous years. In the Bachelor's programmes, the success rate after three years has slightly risen from 37% to 39%, while the success rate after four years has dropped from 76% to 74%.

In 2019, WUR was rated the best university in the Netherlands for the fifteenth time in a row (Keuzegids [university selection guide] 2020). With an overall score of 74 points, the Wageningen students' evaluation of their bachelor's study programmes was relatively higher than that of other Dutch universities. Fifteen of the nineteen study programmes, two more than last year, received the designation 'Top Study Programme'.

In prominent international rankings such as the Times Higher Education, ARWU, and QS, Wageningen University once again placed relatively high in 2019, despite some of these rankings not adjusting for the formative scope of an institution. Our quality comes best to the fore in the subject rankings that differentiate between different fields. Wageningen University ranked first for Agriculture (ARWU, OS ranking and US Best Global University Rankings), Plant and Animal Sciences (Best Global Universities Rankings) and Environment/Ecology (Best Global University Rankings), while it scored second in the field of Food Science and Technology (ARWU).

In accordance with the UI GreenMetric University Ranking, which focuses on policies and facilities relating to a green campus and sustainability, WUR for the third consecutive year is entitled to refer to itself as the greenest university in the world in 2019. Finally, WUR came in first among Dutch universities in an Elsevier national poll regarding the most socially responsible university. This poll considers the mention of universities in documents of the House of Representatives, municipalities, the European Parliament and the participation of research associates in the government's advisory councils. The major involvement in the development of the Sustainable Development Goals of the United Nations in particular is striking; Wageningen University invests five times as much in this research as the average.

2.4.4 Quality assurance

Internal

The course and programme evaluations provide crucial feedback to lecturers, programme directors, chair holders and the Examining Board regarding the quality of education. The evaluations are transmitted, the information is collected, and the reports are prepared using the Programme and Course Evaluations (PaCE) system. The most often used questionnaire, namely the questionnaire for regular courses, was revised and tested in a pilot in 2019. A new questionnaire was introduced in 2019 on the basis of the results. This questionnaire will be evaluated in 2020. The average overall satisfaction score across all courses is 3.8 on a scale of 1 to 5; the same as the previous year. The response rate to the course evaluations is generally sufficient: 35% on average. The feedback on the evaluation provided by course coordinators to students, the professor and programme director is very much appreciated by the students. In spite of this, a relatively small number of course coordinators as yet provides the requested feedback (2018-2019: for 15% of the courses).

The programme evaluations are conducted at the end of the first year of the BSc (average response rate of 23%) and on completing the BSc or MSc programme (response rate of 31% and 36%, respectively). The reports are sent to programme directors and committees so they can use the feedback to continue improving their study programmes.

External

The year 2019 was characterised by the completion of the third programme audit cycle by the NVAO. The last four programmes of the Wageningen accreditation cluster Life Sciences and Natural Resources were reviewed, as well as two programmes of the Communication Sciences cluster and two programmes of the Earth Sciences cluster. A self-evaluation was completed for every programme, and included a SWOT analysis submitted by students. All programmes received a positive or very positive evaluation. The recommendations of all panels were collectively analysed and resulted in an overview of potential improvements for all Wageningen programmes. It was decided to work on a selection of ten themes. A few examples of this include the thesis procedure and evaluation, the internship evaluation and the operation of the examining boards.

The joint Master Metropolitan Analysis, Design and Engineering degree offered by WU together with TU Delft received its final accreditation in 2019, on the basis of a New Programme Assessment. In 2019, the Master Biobased Sciences degree was also required to demonstrate that it meets the conditions of a New Programme Assessment. A panel issued a positive ruling on this in 2020.

2.4.5 Funding

Education at Wageningen University is funded by direct government funding for education and research that consists of government funding of €226.2 million and the proceeds from tuition and course fees of €38.1 million, totalling over €264 million. Effective as of 1 January 2018, the funding of green education was transferred to the Ministry of Education, Culture and Science (OCW). 2018 was the last year in which the government funding for Wageningen University was capped. This capping method was included in the old funding agreements with the Ministry of Economic Affairs and Climate Policy (EZK) and the Ministry of Agriculture, Nature and Food Quality (LNV). The capping was abolished effective 1 January 2019 and Wageningen University is now fully incorporated into the university funding model of the Ministry of Education, Culture and Science (OCW).

2.4.6 Quality agreements

2.4.6.1 **Process**

In January 2019, the Executive Board and the Student Staff Council reached agreement on the 2019-2024 Quality Agreements for Wageningen University. As such a decision has been taken on how to use the funds released as a result of the discontinuation of the basic study grant, for the purpose of improving the quality of education at Wageningen University. In the first half of 2019, WUR further elaborated the Quality Agreements into specific objectives by year 2021, and, at a macro level, up to 2024. A dashboard is used to report progress at least three times per year. The information in the dashboard is also shared via Wageningen University's website. On 7 November, a NVAO panel carried out a review to evaluate whether the WUR Quality Agreements satisfy the protocol. On the basis of discussions with various parties and the documents that were supplied, the panel issued a positive recommendation to the NVAO. The NVAO accepted the positive recommendation in its advice to the Minister. The Minister has since issued a positive decision.

2.4.6.2 **Progress**

Wageningen University invests in five of the six quality themes. Different projects have been defined for each theme with specific objectives and budgets for each year, up to and including 2021. Almost all projects achieved their targeted objectives for the first year. The overview below provides a summary of the objectives realised including an explanation/rationalisation.

a. Small-scale Education

Project	Objective	Achieved
Thesis supervision	All chair groups maintain intensive thesis	Random interviews demonstrate that the large
	supervision despite the growth in student	majority of chair groups maintained or
	numbers.	provided intensive supervision.
Measures for science	In total, the science groups will hire an	In total, the science groups have appointed
groups	additional 7.6 FTE in support of intensive	7.3 additional FTE in support of intensive
	small-scale education.	small-scale education.
Additional teaching	8 FTE additional staff will be appointed by	4.2 FTE additional staff was appointed by
personnel for chair	30 chair groups.	28 chair groups.
groups		

The tight labour market in particular was an inhibiting factor for the 'Small-scale Education' theme. It is expected that this backlog will be eliminated in 2020. Chair groups and science groups are seeing a clear reduction in the tasks of lecturers, who now have more time for teaching and their students.

The estimated budget was sufficient for additional staff for 28 chair groups. The original idea was to aim higher, namely for 30 chair groups with a view to potential underspending. Ultimately, it was decided to grant the proposals of a total of 28 chair groups in accordance with the budget and to avoid underspending in some other ways.

Pursuant to the NVAO's panel visit, it was decided to allocate the freely investable budget in the 'Small-scale Education' theme, which means the budget for this theme will be increased by €300K in 2021.

b. More and better study guidance

Project	Objective	Achieved
Dealing with stress	Organise a mental health week plus at least	All activities were organised, including the
campaign	four other activities. Continue with additional	'Surf-your-Stress' week. An additional student
	student psychologist (0.4 FTE)	psychologist (0.4 FTE) has been in place since
		2018.
More study advisers	0.40 FTE for additional student advisors.	0.40 FTE additional student advisors
		appointed.
More student	0.40 FTE for additional student psychologist.	0.40 FTE additional student psychologist
psychologists		appointed.
Student initiatives	1 student initiative financed.	1 student initiative financed and
for students		implemented.
Virtual Training	Appoint coordinator, survey current availability	Coordinator has been appointed and survey has
Centre	of training courses and create a plan for the	been completed. Integral plan will be submitted
	Virtual Training Centre.	in early 2020.
Lecturer training	At least 2 training courses per year for	1 training course has been completed. The
	lecturers focused on recognising student issues	other training course will be held in February
	and counselling students to deal with these	2020. This topic is now covered in several
	and counseling stadents to dear with these	2020. This topic is now covered in several

The stress prevention campaign Surf-your-Stress was launched. The Surf-your-Stress week attracted many students and was perceived by students to be highly beneficial. In addition, the number of student psychologists continued increasing. The positive impact of the Surf-your-Stress week resulted in an increased demand for help from student psychologists, which has caused an increase in waiting times. In 2020, the WU will hire two additional psychologists as indicated in the Quality Agreements, which should help reduce waiting times. Furthermore, an additional student advisor who was hired for several study programmes will fulfil a coaching function and act as a flexible resource.

Students also help each other. The first Students for Students project was launched with financial support from the Quality Agreements. In addition, students submitted ideas for projects in 2020.

In addition to training courses concerning student wellbeing, a broader supply of training courses will be better communicated through a Virtual Training Centre. A survey of requirements to benefit the training centre has been completed, and in 2020 a Virtual Training Centre will be launched on the basis of the identified needs. The project to realise staff training courses to recognise student issues was not fully completed. This will be compensated for at the beginning of 2020 by organising an additional training course. However, aside from this, part of the training concerning this theme has been integrated into existing training courses for lecturers.

c. Education differentiation

Project	Objective	Achieved	
Student challenge	WU will organise at least one student challenge	One student challenge was launched and an	
	per year.	additional student challenge for 2020 was	
		prepared.	
Skills training	Implementation of three skills pilots and create	Three pilots were completed in multiple study	
	a framework for multiple academic skills.	programmes.	
	Six training courses for student assistants.	Eight training courses for student assistants	
	Further shape the digital learning environment	were provided.	
	in order to share knowledge about training	Designed framework for 14 skills.	
	skills.	Digital learning environment took further	
		shape.	
Extracurricular	Increase in the activities of the Career Service	An additional Career Lunch has been held every	
activities	Centre.	month since May 2019. Organised an additional	
	Launch of a Coaching for Students experiment.	Career Day and pop-up CV checks were held	
	Implement a custom 'Bildung' pilot programme	2-4x per month. Completed an analysis of	
	for a study programme. Develop a plan for the	student needs for career coaching.	
	continuation of this programme in 2020-2021.		
		Bildung pilot completed. Multiple study	
		programmes are interested. Developed plan for	
		2020.	

With the aid of the funds made available for the Quality Agreements, WUR has been organising an annual Student Challenge since 2018. The challenge was given a positive evaluation by participating students and other involved parties. The first skills teaching guideline pilots within various study programmes were successfully implemented. Partially on the basis of these pilots, a framework was developed in which all the skills we aim to integrate into the study programmes were elaborated. Starting in 2020, all study programmes will start working on implementing the 'skills teaching guidelines' and the support provided by educational experts will be funded from the Quality Agreements. The developed knowledge and tools will be shared through the digital learning environment and this environment will support the implementation of the skills teaching guidelines.

In total, seven training courses in didactic skills for student assistants were requested and thus the targeted objective was achieved. The students and the course coordinators perceived the training courses as very positive. In 2020, further attention will be drawn to the possibility of requesting training courses for student assistants. The 'Bildung' pilot was introduced in one study programme. Other programmes are interested as well. The Career Service Centre has organised various other activities, such as doubling the number of Career Lunches and an additional Career Day for students. An analysis to identify student needs for coaching was completed.

d. Lecturer professionalisation

Project	Objective	Achieved		
Training for PhD	At least 140 PhD candidates with teaching	At least 162 PhD candidates with teaching		
candidates	tasks will take a didactic training course.	tasks completed a didactic training course.		
Professionalisation	Prominent educational experts share their	The funds will be spent on additional training		
fund	knowledge on WU's Teachers Day.	courses in 2020.		
Unburden and	0.6 FTE for additional staff to unburden	0.6 FTE of additional staff was appointed.		
support lecturers	lecturers.			

The interest in didactic training courses for PhD candidates is higher than the projected total of 140. Participants perceived the training courses as useful and effective. In spite of this, the budget was underspent because costs were lower than expected due to the increased efficiency in organising the training courses. In view of the success of the training courses, the same budget will be allocated in 2020 and the objective therefore will be to train more PhD candidates.

The Teachers Day will be designed and organised together with lecturers. Lecturers expressed a greater need for exchange than prominent speakers. No additional budget was therefore required. In 2020, the funds will be spent on additional training courses for lecturers, in accordance with the project's objective. To reduce staff burden, the full 0.6 FTE was staffed by the science groups.

e. Education facilities

Project	Objective	Achieved
Bring Your Own Launch the WUR app store. The WUR app store was launched. The		The WUR app store was launched. The app
Device		store is gradually being opened up to students.

The development of a WUR app store was initiated. This will give students access to the required programmes at all time and from anywhere. The WUR app store was gradually launched and in 2019, approximately 380 students were assigned rights to specific applications in the WUR app store.

2.4.6.3 **Budget**

In 2019 and 2020, Wageningen University will invest additional funds from its own resources in the Quality Agreements. In 2019, WUR received a total of €3,009,823 for the Quality Agreements from the Ministry of Education, Culture and Science (OCW). In addition, WUR has budgeted an additional €1,091,000 for temporary overspending. The OCW funds were fully allocated to the Quality Agreements. As such, WUR respected the financial agreements.

The budget for the 'Extra Staff for Solving Bottlenecks' project was set at € 810,000 for 2019-2021. €725,000 was budgeted for 2019, €85,000 was added to this and this investment will be compensated by reducing spending in 2020 and 2021 to €810,000. The equalisation over these years is necessary because these funds are earmarked for additional personnel.

A total of €842,100 of our own resources was left unspent. Several projects incurred delays and the funds for these projects will still be spent for the implementation of the targeted measures. In total €83,700 was not spent due to overbudgeting for the 'Skills Development' (3.2) and 'PhD Skills Training' (4.1) projects. The measures and objectives for these two projects were achieved, however. The basic principle that applies is that funds left unspent, while the objectives are achieved, will be used to address any shortages in other projects. If there are no shortages, a review is carried out to determine if additional measures can be implemented in the relevant project in the following year.

In 2019, the 'Thesis Supervision' project had a shortage of €99,000. These additional funds have been spent and will be offset by the €83,700 that was not spent due to overbudgeting. By compensating this amount, the total underspending amounts to €742,100.

The 'Free Space per Year' investment theme has been removed from the Quality Agreements and the budget has been allocated to the 'Small-scale Intensive Education' theme.

The following table summarises the financial reporting concerning the use of the Quality Agreements in 2019. The notes below the table explain the over and underspending. Underspending is being avoided for 2020-2024 by refining the detailed budgets.

		Budget	Realisation
		(k€)	(k€)
Small	-scale Intensive Education		
1.1	Thesis supervision	1,700	1,799
1.2	Science Groups	500	500
1.3	Extra staff for solving bottlenecks	810*	127
	Total	3,010	2,426
More	and better study guidance		
2.1	Stress prevention campaign	50	50
2.2	More study advice for student by hiring more study advisors	30	30
2.3	More mental support for students by hiring more student psychologists	50	50
2.4	Fund to subsidise student initiatives to support students	5	5
2.5	Launch and run training centre	10	10
2.6	Training for staff to recognize and deal with student issues.	55	23.8
	Total	200	168.8
Educa	tion differentiation		
3.1	Student challenges**	300	300
3.2	Skills development	225	143,1
3.3	Expand extracurricular activities, including more coaching on personal development and career preparation	75	56,8
	Total	600	499,9
Profes	ssionalisation		
4.1	PhD Skills training	75	73,2
4.2	Fund to compensate chair groups for professionalisation and peer review expenses	25	0
4.3	Unburden and support lecturers by hiring supporting staff and instructional designers	75	75
	Total	175	148.2
Adequ	uate facilities		
5	Bring your own device**	200	200
	Total	200	200
TOTAL	L	4185	3442,9

^{*} The annual budgets were equalised at €810,000 per year by adding €85,000 in 2019 and by compensating for this amount in 2020 and 2021. This is the average of the budgeted amounts for 2019-2021. The equalisation is required for the appointment of additional personnel.

2.4.6.4 **Participational Structure and Supervisory Board**

The Focus Group of the Student Staff Council, the Supervisory Board, project managers, the Coordinating Group and the Executive Board maintained intensive contact in 2019 regarding the implementation and progress of the Quality Agreements. A delegation of the Coordinating Group regularly met with the Focus Group of the Student Staff Council. A procedure was agreed upon with the Participational Body concerning the coordination of progress and changes, to safeguard the involvement of the Participational Body in accordance with the NVAO protocol. At the end of 2019 and the beginning of 2020, changes to the Quality Agreements were discussed with the Student Staff Council and the Supervisory Board and their approval was requested. This process was completed at the beginning of 2020. Progress is monitored and reported three times per year in a dashboard. The Executive Board discusses the dashboards with the Supervisory Board and the Student Staff Council. Furthermore, the dashboard is publicly available on WUR's website.

^{**} The measures and resources in the Quality Agreements contribute to the realisation of a larger project.

2.4.7 Students

2.4.7.1 Student numbers

For the first time in years, interest in Wageningen University's Bachelor's programmes decreased slightly. The decrease in comparison to last year was 7%. The influx of Dutch students into the Bachelor's programmes dropped from 1,580 students in 2018 to 1,427 students in 2019 (-10%) based on the 1 October 2019 reference date. The influx of international students however increased from 86 to 129 students (+50%). The latter is related to the offer of six English Bachelor's programmes. Five of these six programmes only became available in English in September 2018. The inflow in the MSc programmes has grown by 5%, which is largely due to a growth in the number of transfer students from BSc study programmes and entrants with a university of applied sciences (HBO) degree.

On the reference date of 1 October 2019, 5% of all Bachelor's students were not Dutch: 272 of a total of 5,928 students. Of the international students, most are of German nationality (25%), followed by Italian and Belgian nationality (both 8%). Of the Master's students, 36% has a foreign passport: 2,332 of 6,409 students, spread across 93 nationalities. The main nationalities are Chinese (499), German (255), Italian (248), Greek (180), Indonesian (144), Spanish (122) and Indian (107).

All the Master's programmes are taught in English and are provided to Dutch and non-Dutch students together.

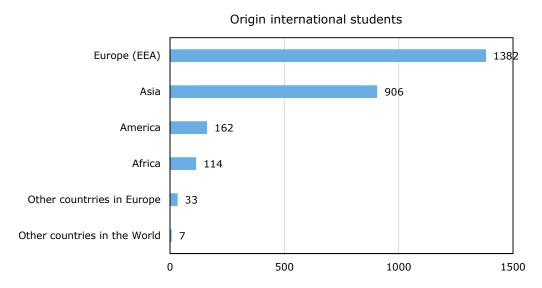


Figure 2.1 Distribution of the 2,604 international students (BSc and MSc) at Wageningen University according to continent on reference date 1 October 2019 (excluding exchange students)

2.4.7.2 Study and student counselling

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

In 2019, the stress prevention campaign Surf-your-Stress was launched using funds from the Quality Agreements. The personnel capacity of study advisers and student psychologists was expanded, and work has begun on creating a Virtual Training Centre.

Student Deans

In 2019, the deans spoke with students on a total of 1,846 occasions. This represents a continued increase. This increase is due to the growing number of students and the fact that the number of sessions per student increased from 1.5 to 1.6. In 2019, the Dean's Office met with 1,177 individual students, or 10% of students, for one or more sessions. The number of deans in terms of FTE stayed the same. In contrast with previous years, there was a two-week waiting

- period in the peak months (September and October) in 2019. The deans worked additional hours during these months.
- In part due to the increasing influx, the Dean's Office as much as possible dealt with simple questions via e-mail or phone. The number of e-mails dealt with that came in through the general e-mail inbox (deanforstudents@wur.nl) increased significantly to 1,853 e-mails. The student dean's function has changed over the years. More time is devoted to dealing with e-mails and the individual discussions with students have become more complex.
- The percentage of discussions about psychological issues increased to 19% in 2019. This increased percentage is in part due to the fact that, in December, the student psychologists no longer accepted any new student requests and various students therefore approached the Dean's Office
- In 2019, the Dean's Office devoted additional attention to reaching out to international students. However, information alone is not sufficient. There is a clear cultural difference. While in the Netherlands it is reasonably normal to seek help on your own, this is different in other cultures. Some groups of students are accustomed to a system of care whereby other students, student advisors or co-tenants reach out for help when things are not going well with the relevant student.
- Just as in 2018, the number of students with RSI complaints declined (to 73). However, the student deans concluded that many students with RSI complaints report this far too late as a result of which the only recommendation is for the student to temporarily deregister; a major step for many students. In addition, the deans observed that many students with RSI complaints often occupied an administrative function. In 2019, the Student Service Centre opened a special walk-in for students with questions about RSI. Furthermore, there is close cooperation with the Study Anytime Anyplace project.

Student Psychologists

- In 2019, 1,062 students contacted student psychologists; up to the end of November there were 1,031. In comparison to the same period in 2018 (964 students), this represents an increase of over 7% for 2019. Related to the total number of registered students, the percentage of contacts stayed reasonably constant. At the end of November 2019 it was decided to stop accepting other students. At that point, the waiting period had increased to eight weeks and it was not considered responsible to let this increase any further.
- The most important reasons why students contact the psychologists has been reasonably stable over the years, with the number one reason being fear of failure. The study-related problems include study stress, discipline and graduation problems. In the personal problem category, depression is by far the most common complaint. In recent years, there has been an increase in the number of students struggling with tension, stress and overload.
- In 2016, a walk-in hour was launched in the Forum Building during the lunch break, known as the Walk-in Counselling hour. In 2019, the Walk-in was open five days per week (closed during the summer months and during the Christmas holidays). In total, 285 students visited the Walk-in, a striking increase (47%) compared to the previous year. The months of September and October in particular were exceptionally busy. The Walk-in was probably also used as a 'short cut' as the waiting time for scheduled appointments increased. It was once again striking to see that the percentage of international students visiting the Walk-in (37%) was much higher than the percentage of international students contacting the student psychologists by e-mail (27%).
- In view of the growth in the number of students and to avoid having to stop accepting new student requests in 2020, additional psychologists were hired. Unfortunately, there is not enough space for the psychologists in the Nexus and not even on Campus. This means that the psychologists need to move to an off-campus location.

2.4.7.3 **Student services**

We are highly committed to providing excellent service to our students. This is provided for the most part by the Student Service Centre (SSC). This is housed in the Forum building and welcomes students with questions about enrolment, admission, tuition fees, grade lists, graduation and more. Students can also go to the SSC for legal advice on study-related matters, for advice on study delays or for help from a psychologist.

Service provision to students is conducted by phone, online (website), the student contact system, and the information desk. In particular the number of questions that the Student Staff Council responds to through the Student Contact System is high. Over 85,000 questions were answered in 2019. The aim is to answer a question within three working days. This target was met in 98% of the cases. Over 28% of the questions was received and dealt with during the months of July and August.

In 2019, in terms of service provision, the 'self-service where possible, additional personal service where desired and necessary' theme was promoted. This way the Student Staff Council hopes to free up more time for more complex student questions. Furthermore, additional attention was devoted to diversity in relation to service provision. Not all students want and expect uniform service provision, and the SSC among other things looked into differences in nationalities and lifestyles. The service provided to students is based on the concept that the students themselves proactively ask a question or request help. This is not self-evident in some cultures, however.

2.4.7.4 Student facilities

We feel it is important for students to have a rich life in and outside of the university, in addition to being active in their study programme. The university supports a range of extracurricular activities for student and other organisations: student associations, study associations, sports and cultural associations, and organisations involved in social responsibility, sustainability, entrepreneurship, skills, etc. A wide variety of facilities are realised this way, while students gain experience in organising these. Students also play a crucial role in the preparation of the introduction weeks for new students (in August and February) and in the organisation and support of sports activities for students.

SWU Thymos, Wageningen University's Sports Foundation, promotes the interests of Wageningen student athletes - individual athletes, as well as members of the student sports associations (SSAs). In 2019, Thymos organised various events and internal competitions and by subsidising students has facilitated participation in external sports events. The Foundation operates on the 'for students, by students' principle and is in close contact with the Sports Centre de Bongerd (SCB), the Municipality of Wageningen and Student Sports Netherlands. In 2019, two new SSAs joined SWU Thymos: Student Dance Factory (hip-hop and modern dance) and WOEST (survival), making for a total of 31 SSAs.

Sports Centre De Bongerd (SCB) is the sports centre for students and employees of WUR. All students and staff of WUR are able to use the SCB facilities at reduced rates. SCB offers a high-quality sports programme with a broad range of sports and activities in excellent indoor and outdoor facilities. In 2019, the fitness room was expanded by 100 m², resulting in the creation of an entirely new strength and conditioning zone that meets the criteria of the Wageningen Beasts student personal training association, the other student sports associations and our professional sportspeople. The indoor climbing wall will be completed in February-March 2020.

Exercise and sports are promoted in various ways. Eight new professional videos were developed for the 'Bottoms Up' project that can be shown during lectures or meetings to ensure students spend less time sitting. Exercise sessions are being held by SCB instructors four days per week for employees in eleven buildings in the context of the 'PauseXpress' project. The percentage students that during the 2018-2019 academic year made use of the SCB rose to 55.79% and includes a total of 6,664 students.

2.4.7.5 **Profiling Fund**

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

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

 Table 2.9
 Overview of Wageningen Financial Support

Category	Number of	Number of	Total	Average	Total	Average
	applications	payments	payments	payment	duration	duration
			(€)	(€)	(months)	(months)
 FOS regulation¹) 						
1.1 Force Majeure	124	124	139,071	1,122	330	2.7
1.2 Administrative/participation	onal 461	461	663,262	1,439	1,874	4.1
1.3 Professional sport	5	5	5,395	1,079	17	3.4
Total FOS regulation	590	590	807,728	n/a	2,221	n/a
2. Social Sciences masters,						
2-year²)	38	36	143,221	3,978	432	12
3. Fellowships ³)						
3.1 WUFP grants ⁴)	n/a	63	976,000	15,492	744	12
3.2 WUFP tuition fee waivers ⁴) n/a	370	791,800	2,140	3,320	9
4. Emergency Student Fundi	ng¹) 2	2	1,846	923	n/a	n/a
Total incl. WUFP	630	1,061	2,903,349	n/a	n/a	n/a
Total excl. WUFP		628				

¹⁾ EEA + non-EEA

Explanation:

- 1. A total of 590 students utilised the FOS regulation (Student Financial Support), including 29 non-EEA students: 19 due to circumstances beyond their control and ten due to administrative activity. The application process is organised in such a way that only students who are actually eligible for the regulation can apply (student dean, head of the university sports centre).
- 2. A total of 38 students applied for the Social Sciences Master's regulation.
- 3. Only non-EEA students are eligible for the WUFP. In 2019, 23 new grants for a maximum of the institutional tuition fees were awarded to talented students, totalling €430,100, and five full grants were awarded to talented African students, totalling €192,000. The figures mentioned apply to the first year. Additional payments were for ongoing grants (a total of 33) that started in 2018. In 2019, the total disbursements by the Wageningen University Fellowship Programme (WUFP) amounted to €1,768K, including discounts and top-ups for scholarship programmes and bilateral agreements.
- 4. The grants from the Social Emergency Fund were disbursed due to unforeseen costs relating to serious family circumstances.

2.4.7.6 International exchange

This exchange programme offers Wageningen University students the option of studying at renowned international institutions abroad. In return, the university receives international students who perhaps otherwise would not have come to Wageningen University to study. Incoming students are a welcome addition to the diversity of nationalities in Wageningen and contributed to the international character of our education.

For the 2019-2020 academic year, Wageningen University has received a record amount of Erasmus+ funding. This is why additional focus has been placed on the promotion of the grants programme through Facebook, Instagram, and additional promotion events.

In 2019-2020, 455 Wageningen University students participated in a study exchange (464 in 2018-2019). Of those, 331 received an Erasmus+ grant, eight went to Switzerland and received a Swiss grant, and 116 went to non-EU destinations. Compared to the number of students that had registered for selection, we were able to actually send 83% out on exchange. The other 17% dropped out during the selection. Either the student withdrew or did not meet the requirements (such as passing the first year before leaving). A total of 128 grant applications were received for internships by outgoing students (per 28 February 2020).

The number of incoming students has increased to 383 (last year 356). The incoming exchange students took part in the regular activities organised for them, such as the Annual Introduction Days

²) EEA

³⁾ Non-EEA

⁴⁾ WUFP: selection of accepted MSc students

(AID) and activities by student organisations such as IxESN and ISOW. The arrival of the students went smoothly. They were very enthusiastic about the personal guidance they received from the Exchange Coordinators and about the form and content of the education. Some students have transferred into the regular study programmes at Wageningen University & Research following their exchange.

Several new agreements with universities have been concluded in order to meet the demand for exchange options in different fields. Agreements were signed with partners in Hong Kong and South Korea.

2.4.7.7 Student participational structure

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

The Student Council consists of twelve full-time members from various groups and nationalities. These student members are elected for a one-year term by Wageningen University students. The election turnout in 2019 was 35.2%. In 2019, important topics on the Student Council's agenda - aside from the regular topics, such as the Education and Examination Regulations - were the Bring Your Own Device policy arising from the Study Anytime, Anywhere project, the shortage of graduation study and group workspaces (a follow-up to the discussion of Wageningen University's 2019 budget jointly addressed with the Student Staff Council) and the Student Financial Support Regulation.

2.4.7.8 Complaints and appeals

Advisory Committee on Disputes (ACD)

In 2019, Wageningen University's Advisory Committee on Disputes (ACD) received 27 appeals. Of these, 23 were lodged against the rejection of an application for a student grant. The other appeals were against a decision to not allow the involved party to be admitted to a BSc study programme and against decisions based on the Grants, Vaccination and Travel Expense Allowance Regulation for internships/graduation courses, the FS Regulation and the Extra Student Grants and Loans Regulation for students in Applied Communication Science (MCS), Development and Rural Innovation (MDR), International Development Studies (MID) and Management, Economics and Consumer Studies (MME). In 26 cases, an amicable settlement of the disagreement was possible, and the GAC did not need to provide a recommendation to the Executive Board. In one other case, the GAC advised the Executive Board to declare the objections inadmissible because of inexcusable delays.

Examinations Appeals Board

In 2019, the Examination Appeals Board (EAB) of Wageningen University received 59 appeals, of which 25 appeals were against a binding negative study recommendation. Of the other appeals, 21 were directed against a decision not to admit the appellant to an MSc programme, eight against an evaluation and two against a decision to exclude the appellant from participating in a field trip. The other appealed decisions concerned a reprimand due to fraud, the rescheduling of an examination date in support of a student practicing a professional sport and a refusal to grant an exemption. In 54 cases, the parties agreed on an amicable settlement and the EAB consequently did not handle the appeal. In one case, the student and the Examining Board reached an amicable settlement after a hearing by the EAB. In four cases, the EAB issued a ruling after hearing the student and the Examining Board. In three cases, the EAB declared the appeal to be founded and in one case the EAB declared the appeal unfounded.

2.4.8 Alumni

The alumni network of Wageningen University in 2019, had a network of 53,000 graduates and PhDs, spread across some 150 countries. At the end of December 2019, the online alumni platform Connect counted 8,500 members in 60 country groups. In 2019, there were 35 national and international alumni meetings. The first Alumni Open Day took place on 5 October during the Dutch Science Weekend. On this day, various WUR sites opened their doors to alumni and Spinoza laureate Prof. Marcel Dicke presented a World Lecture. The first two alumni sub-chapters in China were established, one in Nanjing and the other in Wuhan.

In 2019, the alumni network 'Wageningen Ambassadors' consisted of 35 prominent Dutch WUR alumni, leaders in the business community and in the public and semi-public sectors, who use their network and experience to connect WUR and society. In 2019, the Ambassadors supported eight projects, including a leadership skills training programme for Wageningen University students participating in the Honours Programme, a TEDx Wageningen and the Wageningen Youth Institute affiliated with the Youth Institute of the World Food Prize Foundation. This competition is intended to motivate students to contribute solutions for solving the global food problem and to become acquainted with WUR in this way.

2.4.9 Outlook

In 2020, Wageningen University will continue the implementation of the quality agreement, which has to lead to strengthening the quality of education, improving the support of students, and reducing the work pressure for lecturers. In this context, the implementation of the ambitions and objectives as set out in the "Vision for Education" will be continued. The skills teaching guideline for the Bachelor's study programmes will be further developed and a new framework for the Master's programmes will be developed to create greater flexibility, among other things. Furthermore, work will continue on implementing the recommendations of the Quality Assurance Institutional Audit, and the recommendations of the programme accreditations. The activities of the `Educational Reform with IT Acceleration Agenda' will be continued, including flexibility in education and collaboration with Education Technology companies.

In 2020, attention will be focused on the further development and integration of the 'Education Ecosystem', a cohesive portfolio of campus education, online education and education for professionals. Furthermore, the focus in 2020 will be on things such as making preparations for Osiris to go live in November, introducing the WUR App Store with educational course applications and the further rollout of Bring Your Own Device (BYOD).

2.5 Research

2.5.1 Policy and organisation

The research at Wageningen University is conducted through chair groups. Each chair group, led by a professor, has its own sphere of expertise within the domain of "healthy food and living environment". Wageningen University leads six graduate schools within an overarching organisation.

The Wageningen Graduate Schools:

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

In addition, Wageningen University participates in the following graduate schools which are led by other organisations:

- Institute for Sustainable Process Technology (ISPT)
- Research Institute and Research School for Economic and Social History (N.W. Posthumus Institute)
- Graduate School of Polymer Science and Technology (PTN)
- Interuniversity Centre for Educational Research (ICO)
- Netherlands Institute for Catalysis Research (NIOK)
- Interuniversity graduate school Dutch Institute of Systems and Control (DISC)

The Wageningen University graduate schools have three main tasks:

- · They are responsible for coordinating, developing and facilitating the PhD curriculum of Wageningen University.
- They also ensure the safeguarding, monitoring and advancement of the quality and progress of academic research (PhD candidates, postdocs and researchers).
- Finally, they encourage and coordinate a coherent research programme for the university within the mission of the graduate school.

The research conducted by the Wageningen Research Foundation can be classified into the following categories: Knowledge Base Research (KBR), Policy Support Research (PSR), Legal Research Tasks (SRT) and top sector and contract research.

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

In addition, WUR decided to make extra investments in a number of research themes. Strategic resources of Wageningen University, knowledge base resources of the Wageningen Research Foundation and R&D resources from the Top Sectors will be used for this purpose. These investment themes (in previous years there were five) were redefined to create three themes:

- · Connected Circularity
- The Protein Transition
- · Digital Twins.

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

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

The Policy Support Research (PSR) is carried out in two programmes: Nature, Landscape & Rural Areas and Agro.

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

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

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

2.5.2 Internationalisation

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

Brussels/Europe is of significance to WUR, given how many research funds are allocated through the Brussels framework programmes for research and innovation, and due to a great deal of relevant policy in the domain of agriculture, food and the living environment. The current Horizon 2020 programme and the next Horizon Europe programme to be started up in January 2021 are of major importance to WUR, because they contribute to the scientific positioning, collaboration with partners in and outside Europe, network formation and the attraction of talent. In Horizon 2020, Wageningen is by far the largest player within the nutrition and agriculture theme, and in 2019, various attractive projects where once again funded. At the present time, the new framework programme for research and innovation, Horizon Europe, is being developed in Brussels, whereby the Wageningen EU account team is attempting to strengthen the strategic programming of Horizon Europe through means of various international networks and is also attempting to support the European Commission in the development of Horizon Europe, including its missions and partnerships.

In Africa, additional attention was devoted to new regions, such as North Africa and the Sahel. Policymakers and donors are extensively focussing on these areas due to the issue to migration. We have created a One Wageningen Sahel platform that combines available WUR expertise and developed a joint research strategy. A core group is in the process of identifying the available knowledge and expertise for Ethiopia. This will become the basis for developing a joint strategy with Ethiopian partners, for the future contribution of One Wageningen research to the food systems in Ethiopia. In addition, research was initiated into circular agriculture in Africa and the cultivation and yield of legumes, such as peas, chickpeas and soy were improved. Approximately 600,000 farmers were reached with this initiative.

In the Asia focus area, as part of the One Wageningen India Strategy, a Request for Proposals was prepared to acquire the input of an external (consulting) party regarding the India Business Plan. Master plans to elevate production to a higher level were developed to strengthen the agri-food sector in Jordan and Malaysia. Finally, a number of training activities for scientists in Asian regions were conducted and the necessary attention was devoted to further expanding our relationship with South Korea, Japan, Vietnam, Thailand and Indonesia.

China is of great importance to WUR. WUR adjusted its China strategy in 2019. Activities are more critically selected with a focus on three regions: Beijing and surrounding areas, the Yangtze Delta and the Pearl River Delta. As a result, the many fragmented projects will disappear and a number of large programmes will emerge linked to the Beijing Jingwa Innovation Centre, the joint PhD programme with China Agricultural University (CAU) and the Tsinghua Suzhou Institute for Environmental Innovation. While our business relations with China are increasing in complexity, the business risks are also increasing. To deal with these risks, we developed guidelines for the China Platform (the WUR-wide account team) and the China Office in 2019. Adherence to these guidelines will avoid and/or significantly limit reputational damage and economic risks.

In collaboration with the recently expanded China Office, several projects were developed with the public private sector in China.

The priority countries in Latin America are Brazil, Colombia and Mexico, followed by Argentina and Chile as secondary priorities. Attention is also devoted to the Caribbean Netherlands in this account. The projects in Columbia, particularly in the area of sustainable palm oil and water reuse in agriculture, are largely completed and an active search for follow-up projects was conducted to enable us to continue working on both themes together with Columbian partners. Further collaboration in the dairy farming sector was coordinated with the Agricultural Council in Brazil. In addition, Wageningen knowledge made a substantial contribution to the sustainable development of agriculture in the Amazon region. Furthermore, an initial step was taken towards further collaboration in research with the University of Sao Paulo. In Mexico, initial contact was sought with the new government/Ministry of Agriculture in the area of the Biobased Economy and discussions are underway to improve and formalise the relationship with Mexico's National Council of Science and Technology (CONACYT), which is also responsible for issuing grants.

2.5.3 Results

Academic awards

The awarding of nine Veni and five Vidi grants in 2019 brought the total number of laureates since the beginning of the innovational incentive in 2002 up to 100 Veni, 48 Vidi and 12 Vici grants. Since the ERC grants were set up by the European Research Council 7 in 2007, 8 ERC Starting Grants and 12 ERC Advanced Grants were awarded to Wageningen researchers. The ERC Consolidator Grant was set up in 2013, of which Wageningen has received one. Four of them have now been awarded to Wageningen researchers.

PhD graduations

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

At year-end 2019, WUR had 2,073 PhD candidates. EPS (202), WASS (424), PE&RC (392), VLAG (477), WIAS (200) and WIMEK (376). A few PhD candidates are affiliated with graduate schools led by other organisations.

In 2019, the number of PhD graduations was 293, seven less than in 2018. Of the 293 PhD graduations in 2019, eight were "joint graduations", in which a partner university was also involved. For two of those, the graduation ceremony did not take place in Wageningen. Of the 293 PhD candidates, 138 were women (47%). Of the PhD candidates, 205 (70%) were not of Dutch nationality. The percentage of PhD candidates with a successfully completed Training & Supervision Plan (TSP) increased slightly to 91% (92% in 2018).

Top Sectors

In the top sector Agri & Food, the Top Consortium for Knowledge and Innovation (TKI) Agri & Food honoured 22 new public-private partnerships (PPPs) (amounting to €11.7 million, of which €3.2 million to be spent in 2019). Additionally, €1.3 million was committed to 24 new EU co-funding projects of Wageningen Research Foundation. Within the top sector Horticulture & Propagation Materials, this involved approximately 26 new PPPs (€12.4 million, of which €3.6 million to be spent in 2019), and nine EU co-funding proposals (€0.6 million). Wageningen Research Foundation participates in these PPPs funded by the Ministry of Agriculture, Nature and Food Quality (LNV) and the Ministry of Economic Affairs and Climate Policy (EZK), while the business community makes a 50% financial contribution to PPP projects (combination of cash and in-kind). A total of €600,000 was available for funding the so-called "Seed Money Projects". The funds for both forms of projects are received from the Top Sectors Agriculture & Food and Horticulture & Propagation Materials.

University Fund Wageningen (UFW)

The Wageningen University Fund (UFW) each year receives donations to promote WUR's growth and to enable it to flourish. In part thanks to the Fund's support and its relationship management efforts, as well as the efforts of individual research associates, the UFW with WUR acquired almost €3 million in gifts from national and international donor funds in 2019. This has jointly resulted in nine special WUR research projects. Together with Wageningen Academy, UFW organised a special training week for senior staff by the Rockefeller Foundation focused on sustainable food. The UFW donors also helped make it possible for 46 students from developing countries to study in Wageningen in 2019. The crowdfunding platform collected nearly €39K in donations for three projects, including from nonalumni who felt involved in a specific research project.

2.5.4 Quality assurance

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

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

The obligation to periodically have the research institutes of Wageningen Research (WR) scientifically assessed is part of the agreement between the Ministry of Economic Affairs (EZK), the Ministry of Agriculture, Nature and Food Quality (LNV) and the Wageningen Research Foundation. In the context of this agreement, Wageningen Environmental Research and Wageningen Marine Research, respectively, were assessed in May and June 2019. Both reviews were concluded with highly satisfactory results. Although the scientific quality was judged to be very good, there is a concern that only a limited segment of scientific personnel shares in the publishing. In addition, attention for the workforce age distribution was once again requested. These reports are public and were submitted to the Ministry of Economic Affairs and Climate (EZK) and the Ministry of Agriculture, Nature and Food Quality (LNV), including the board's response to the recommendations.

2.5.5 Open Science

The transition to Open Science is a priority area of the WUR 2019-2022 Strategic Plan. The library coordinates the implementation of Open Science developments and policy. The four-year WUR Open Science & Education Programme was structured in 2019 and was launched in July. As such the implementation of 'Open' in WUR research and education has become an important recurring topic for discussion at various levels. Major steps were taken and achievable objectives for the coming years were determined for the Open Access Publishing and FAIR Data themes. The Open Education, Citizen Science, Outreach to the Public and Recognition and Appreciation themes were firmly put on the map and will be further elaborated over the coming years in the One Wageningen context.

In 2019, a number of key developments were initiated to further facilitate and stimulate Open Access Publishing for WUR employees. National and local agreements were signed with a number of publishers, including Elsevier, that make Open Access publishing possible free of charge or at a

reduced rate. Over 10,000 journals are now covered by these agreements for WUR research associates. Research associates can look up these journals using the 'Journal Browser' developed by WUR, which is now being used at a national level as well.

The share of Open Access articles published by WUR research associates rose to 60% in 2019. This figure rises to 70% when articles are included for which WUR authors are corresponding author. If we are able to exploit the full potential at Elsevier, we will achieve at least 85% Open Access in 2020. Furthermore, a pilot was carried out nationally and within WUR to, pursuant to Article 25fa of the Copyright Act (Taverne amendment), to offer research associates the possibility of making peer reviewed publications available on Open Access, regardless of any restrictive publisher guidelines. An adjusted procedure for this purpose will be developed and implemented throughout WUR in 2020. This brings the objective of 100% Open Access in 2020 significantly closer.

The number of research associates finding their way to Data Management Support increased significantly in 2019. A large number of well-attended training and information sessions was organised around this theme, including about how to properly incorporate RDM into grant projects. The development of the Data Steward role within organisational units has since resulted in an active network involving 90 data stewards. The 'Bring Your Own Data training course: FAIRify your Data' for WUR employees was highly successful and will be repeated in 2020.

Under the adage 'Open if possible, closed if needed', draft sharing guidelines were developed with the objective of providing clear quidelines about when and when not to openly share research data. To identify the impact of the RDM-related policy, preparations were started for conducting an evaluation in 2020.

2.5.6 **Funding**

Wageningen University

Research at Wageningen University is funded by direct government funding, indirect government funding and contract funding. The amount of direct government funding for education and research was €264.4 million in 2019. In addition, targeted subsidies from the Ministries of EZK and OCW totalled €0.8 million. The indirect research funding, the second flow of funds, which is mostly provided by the Netherlands Organisation for Scientific Research (NWO), amounted to €33.5 million in the year under review. External funding, or the third flow of funds, amounted to €64.1 million. Of this amount, approximately €42.7 million was related to contract research, €2.4 million to top sector research, and €19.0 million to co-funding and subsidies.

In 2019, the graduate schools had slightly more than €2.6 million own resources at their disposal for the appointment of PhD candidates and postdocs.

Wageningen Research Foundation

Of the research funding at Wageningen Research, €25.9 million comes from institutional grants provided by the Ministry of Agriculture, Nature and Food Quality (LNV), €83.1 million from LNV programme funding (PSR and SRT), €7.8 million from NVWA programme funding, €2.4 million from indirect government funding from NWO, €24.8 million from co-funding and subsidies (including the EU), €60.4 million from the Top Sectors (including LNV programme funding for Top Sectors), and €98.8 million from the bilateral market/contract research (including the business community and LNV).

2.5.7 Outlook

The quality of research provides a strong starting position. 2019 was the first year of the implementation of the new WUR 2019-2022 Strategic Plan: Finding Answers Together. In terms of research in general, further improvement of research excellence is the focus. (CPI 1: Continuous improvement to maintain excellence in research). In addition, we will further intensify the excellent connection to important clients and partners, such as the government, the European Union (EU) and the business community. Examples of this that took further shape in 2019, are OnePlanet (collaboration with Radboud University, IMEC and the Province of Gelderland) and the alliance with

Utrecht University, the University Medical Centre Utrecht and TU/e. This fits in with the theme of the abovementioned strategic plan.

During the term of the new strategic plan, the development of new knowledge at Wageningen Research Foundation has been organised in five programmes, financed by the strategic knowledge base funds (KB) of the Ministry of Agriculture, Nature and Food Quality (LNV). These programmes represent the content-related ambitions of Wageningen Research Foundation and are aligned with the agendas of the Ministry of Agriculture, Nature and Food Quality (LNV) as well as other ministries, the Top Sectors, the Sustainable Development Goals, and the European agenda.

The programmes relate to the following themes:

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

For each programme, from 2019 a programme director will be responsible for the vision and strategy development, content development, external and internal positioning and profiling, and management of the execution of the programmes. This is an important innovation which aims to optimise the integral design and management of the knowledge base research. Furthermore, additional resources were invested in the three WUR-wide research themes. For this, strategic resources from Wageningen University, knowledge base resources from the Wageningen Research Foundation and R&D resources from the Top Sectors have been used. These themes from the 2019-2022 Strategic Plan are:

- · Connected Circularity
- Protein Transition
- · Digital Twins

The KB themes and the investment themes are closely coordinated. The Circular and Climate-neutral and Data-driven and High-tech KB programme leaders, respectively, are involved as coordinators of the Connected Circularity and Digital Twins investment themes. They form a team together with the Wageningen University coordinator.

2.6 Value creation

Due to our international position as a leading research institution in the field of healthy food and living environment, we have an even greater responsibility to share the knowledge we have developed and to apply it in society. This is why we share our knowledge and infrastructure, and make them deployable for the critical societal challenges in our knowledge domains. Our knowledge achieves economic and social impact through application.

In light of the strategic plan, we initiated the Road-to-Innovation Grant to enable research associates to valorise their good ideas through one of the many avenues of value creation (PPP project, IP, tech transfer, entrepreneurship, outreach, etc.). In addition, specific expertise, coaching, and funding is offered to develop a concept into a complete, concrete product. Value creation is also made more tangible by improving the perception of impact through activities such as impact stories, the TO2 Federation's Impact Report, sharing best-practices, and preparing an impact award.

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

- Collaboration, tech transfer, and co-creation with partners
- The entrepreneurial use of knowledge

- Sharing knowledge
- Wageningen Campus Ecosystem
- New professionals

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

2.6.1 Collaboration, tech transfer, and co-creation with partners

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

2.6.1.1 Co-creation and the development of new partnerships

An important component of Wageningen's knowledge valorisation is co-creation; the added value from research with stakeholders and other parties. WUR has years of experience in this area and has contributed to the foundation of large consortia. In 2019, WUR implemented many new, ongoing projects and programmes funded by public-private partnerships (PPPs), especially through the participation in the Top Sectors Agro & Food and Horticulture & Propagation Materials. WUR also participated in various consortia for the development of research, education and innovative business clusters at the regional level, of which the Foodvalley ecosystem and the Foodvalley region are key examples. Other examples of consortia include <u>The Sustainability Consortium</u>, the Taskforce <u>Together</u> against Food Waste (in Dutch) and, together with TNO, the Personalised Nutrition and Health Consortium.

In order to help devise new creative solutions for professional practice, WUR organises "Hackatons", "Business Challenges" and "Student Challenges" in which students, WUR sector experts, and interested parties collaborate on new insights and concepts.

In 2019 WUR organised the Business Day. On that day, entrepreneurs, innovators and policy makers converged on Wageningen Campus to hear about the latest developments in Wageningen and learn about their implementation in society. The attendees were positive, but the broad Business Day themes are not fully aligned with the needs of our business relations. Next year, smaller, more themeoriented meetings will be organised.

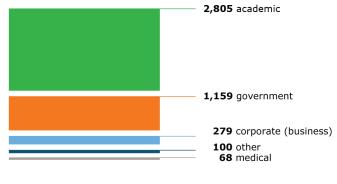
Collaboration in the 4TU context was further intensified. Two proposals for Thematic Tech Transfer, submitted together with the other TUs, were funded. In addition, the Synergia Proposal was approved and the consortium, which includes all TUs, can start working at the interface of technology and agriculture.

The turnover from EU grant programmes is a measure for the contribution of WUR to co-creation on international social challenges. In 2019, Wageningen University's revenue from EU subsidies, to the tune of €16.6 million, was slightly higher than in 2018 (€15.4 million). The turnover of Wageningen Research from EU funding programmes was €20.5 million in 2019, compared to €20.3 million in 2018. See also Table B2.15 in Appendix 2.

Research projects carried out through co-creation with stakeholders often lead to co-authored publications in academic journals and trade journals (Table B2.16 in Appendix 2). Figure 2.2 shows that the primary share of the more than 3,000 co-publications are prepared with other academic institutions, roughly one third are prepared with government organisations and one-tenth with the business community (dark blue).

Co-publications 2019

Number of co-publications (co-authored publications) of Wageningen University & Research with partners from within an outside of academia, globally



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

Figure 2.2 Number of WUR co-publications with partners in 2019

2.6.1.2 Tech transfer and innovative capacity

Wageningen University & Research sometimes claims the intellectual property for its inventions. The main objective here is to encourage the business community to use these for the development of new products or processes. This increases the innovative capacity of society. By granting patent licenses to potential market partners, knowledge can be broadly disseminated, thus leading to more innovations and impact. WUR has 140 active patent families in its portfolio and has granted 143 licenses for patents, species, models, or materials. In 2019, thirteen new patent applications were submitted, of which eight were submitted by WU and five by WR (see Table B2.4 in Appendix 2). This number is in line with the long-term trend.

In 2019, the renewed IP policy was further rolled out in close coordination with the science groups, and additional effort was devoted to screening & scouting potential IP-worthy ideas. Scouted ideas are screened and an Invention Disclosure Form (IDF) is prepared for ideas with potential. In 2019, approximately 20 IDFs were registered.

In 2019, in a 4TU context, WUR received funding for two Thematic Technology Transfer (TTT) applications. This concerns Circular Technology (in collaboration with 4TU+TNO+Shift.nl), for which WUR serves as the coordinator. This includes a €6 million fund and €2.5 million for projects that over the course of five years are to produce new spinoffs. In addition, WUR participates in TTT Smart Systems (in collaboration with 4TU+TNO+Innovation Industries), under the leadership of TU/e.

The turnover in bilateral research with the business community is a measure for the contribution of WUR to the innovative capacity of businesses. Wageningen University's contract research, bilaterally funded by the business community, amounted to €17.0 million in 2019, compared to €15.9 million in 2018. The turnover of Wageningen Research from bilateral research for the business community consisted of €47.6 million from contract research funded by the business community in 2019, compared to €47.4 million in 2018. See also Table B2.14 in Appendix 2.

Knowledge for government policy and legislation

An important part of the research conducted at WR institutes is commissioned by the Dutch and EU government. We carry out SRT (statutory research tasks) in the areas of infectious animal diseases, food safety, economic information, fisheries management, genetic resources and nature. Our policysupporting research and scientific research form the basis for government policy, rules and regulations in our domain aimed at protecting the health of people and animals, promoting exports and preserving a vibrant nature. Through the SRTs and the policy-supporting research (PSR), we make a concrete contribution to society. The knowledge is made available via KennisOnline and newsletters. An example is the provision of an estimate of the order of magnitude of the potential claim on space by seaweed production within future wind farms. On the basis of an analysis of the carrying capacity, expressed in the form of nutrient extraction, it appears that an area covering several hundred square kilometres is realistic, depending on the species cultivated.

2.6.1.4 **Customer satisfaction**

The Ministry of Economic Affairs and Climate (EZ) has submitted an impression of customer satisfaction and knowledge utilisation for all five TO2 institutes to the House of Representatives. This is why, starting in 2016, a new survey system was introduced at all TO2 institutes, in which the same questionnaire is used for all types of projects (with the exception of those that fall under the statutory research tasks and projects without a clear external commissioning party). In 2019, just as in the previous years, WR clients were very satisfied. In 2019, WR scored an 8.7 for client satisfaction and 93% of respondents deemed the research to be useful (see Tables B2.7 and B2.8 in Appendix 2).

2.6.2 The entrepreneurial use of knowledge

New enterprises contribute to the application of new knowledge and, through their growth, to economic development. Stimulating entrepreneurship and supporting start-ups are therefore important components of value creation for WUR. WUR encourages entrepreneurship among students 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 in the agri-food domain. We aim to have WUR serve the entire chain: from stimulating and inspiring students to linking up with investment funds for scale-ups.

2.6.2.1 **Entrepreneurial education**

With its regular course programme, Wageningen University offers a wide selection of degree programmes that support the enterprising student at all stages of education. In 2019, it was decided to incorporate a continuous entrepreneurship teaching guideline into the WU education programmes. Implementation will follow over the coming years in close cooperation with study programme directors. In the 2018-2019 academic year, there were 15 courses that are fully or partially focused on value creation and/or entrepreneurship for beginning Bachelor's students, Master's students, and PhD candidates. After several years of growth, student participation in entrepreneurial education stabilised at about 1,000 (non-unique) students, who completed their examination of one of the fifteen courses. Only counting the (non-unique) students who actively opted for an entrepreneurship course (in other words outside the standard curriculum), there are 443 students (for additional details see Table B2.2 in Appendix 2). In the 2018/2019 academic year, 60 new students entered our designated MSc entrepreneurial programmes (Mastertrack & C-KIC, > 48 ECTS), in which a total of 130 students are currently enrolled. In the 2018-2019 academic year, WU students have carried out 30 entrepreneurship-related projects for businesses.

The flow of students from the BSc or MSc programmes to extra-curricular follow-on activities has increased significantly. A striking result is the number of student start-ups arising from the New Venture Creation MSc course in 2019 (Xtric, Datafarms and Tipr). Approximately 75 students participated in the extra-curricular education on entrepreneurship provided through StartHub, and approximately 30 students participated in the Inspiration workshop series. StartHub has about 80 active members who regularly join the meetings and workshops. About 15% of the participants are PhD candidates.

Every year, a few student start-ups apply for the accelerator programme in response to the Climate KIC call. The number of candidates and participants in the 'Learning Journey' also steadily increases every year. Each year the Learning Journey generates student start-ups that continue to grow in the StartHub's extracurricular programme. Last year, this was Crickett, Reefolution and Remode.

2.6.2.2 StartHub

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

In 2019, the incubator organised a total of 36 practical workshops on entrepreneurship as part of the StartHub programme, with more than 410 participants. The events were attended by 1,229 students from entrepreneurial courses and by 1,337 participants (students and recent graduates) in StartHub activities. There were 74 intake interviews with enterprising student teams, of which over 40 have actually launched their start-up in 2019. In 2019, a legal entity was founded by StartHub members and tenants. Two start-ups received a student start-up loan from StartLife in order to expedite their activities. In 2019, 27 start-ups had offices in the Student Incubator, which resulted in a 94% occupancy rate for this temporary location.

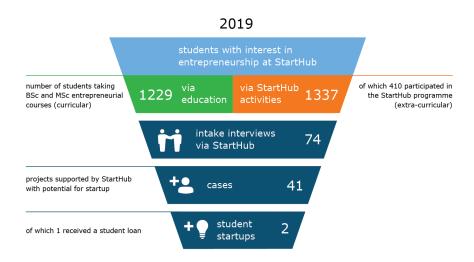


Figure 2.3 Education and incubator programmes for entrepreneurship for WU students

2.6.2.3 StartLife

The StartLife Foundation, co-founded by WUR, supports Food & Agri start-ups in developing into leading businesses. StartLife's mission is to promote entrepreneurship in the food and agricultural sector, and to support entrepreneurs and their teams in transforming innovative ideas into companies with a global impact. StartLife has developed a successful acceleration programme for this purpose and, in this programme, works together with a broad network of mentors, coaches, companies, investment funds and suppliers of specific services for start-ups. In 2019, 42 start-ups formally joined StartLife and make use of StartLife's network, programmes and/or pre-seed loans. Of these, three were WUR spinoffs. In 2019, over half a million euros in pre-seed loans was granted to 17 StartLife start-ups. Fifteen StartLife starters in 2019 acquired a total of approximately €6 million in follow-up financing; or an average of €400K per start-up.

In 2019, the number of StartLife partnerships grew to nine corporate partners (+3) and ten programme partners (+1). Discussions were held in 2019 about ways in which StartLife, in cooperation with partners, can strengthen the FV 2030 entrepreneurship programming.

In 2019, Rabobank, Anterra Capital, StartLife and WUR organised the fourth edition of the European F&A Next event with 572 participants, including corporations, investors (129), start-ups and scale-ups (162) in the Food and Agricultural domain, from 38 different countries. F&A Next is a two-day event at Wageningen Campus that aims to accelerate innovative business ideas in the Food & Agricultural sector by bringing leading players into contact with each other.

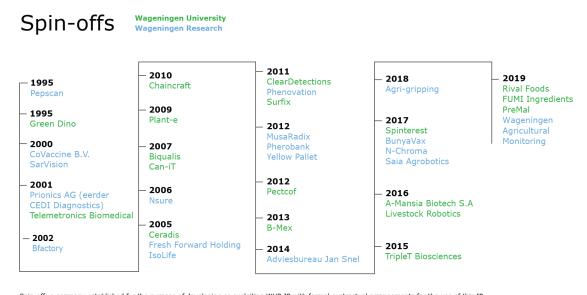
StartLife 2019 scouted startups intake interviews **15** wur 400 via StartLife startups 3 wur 42 with agreement

Figure 2.4 StartLife output

2.6.2.4 Spin-offs

Knowledge application can occur through the transfer of intellectual property to researchers who start a company or have shares in a company (a spin-off according to the VSNU definition). WUR has launched a total of 37 spin-offs. By investing in the valorisation programme StartLife, the national impact of WUR on new business activities is much higher than through academic spin-offs alone. In 2019, four spinoffs were established: Rival Foods (WU), FUMI (WU), Wageningen Agricultural Monitoring (WR) and PreMal (WU) (Table B2.6 in Appendix 2).

In 2019, WUR was awarded six Take-off grants from the Netherlands Organisation for Scientific Research (NWO) in order to conduct feasibility studies into commercialising knowledge through the establishments of spin-offs.



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

Timeline of WU and WR spin-offs

2.6.3 Sharing knowledge

Making our knowledge and knowledge infrastructure accessible to businesses, citizens and societal organisations is an important part of the value creation of WUR.

Sharing scientific knowledge through open access

WUR not only shares its scientific output in scientific journals (long-term average of roughly 5,000 annually), but also does so through field-specific publications for professionals in the sector and through publications for the general public, in print as well as electronic (social) media. Results are made available via the library, KennisOnline and other online databases and via a large number of popular websites which cater to the target group. The WUR website provides various, theme-focused publications. This enables a larger group of potential users of this new knowledge to be reached. The number of publications for professionals and the general public remained stable (Appendix 2, Table B2.17).

2.6.3.2 Science communication and Wageningen Dialogues

In addition to communication with fellow scientists, businesses, NGOs, and government bodies, WUR is active in science communication directly with society. Our organisation operates at the cutting edge of today's major social themes, which pose significant challenges for the world and elicit a wide range of diverging opinions. WUR and its stakeholders discuss these themes through the Wageningen Dialogues. For several years, WUR has gained experience with the Wageningen Dialogues concept and the dialogues within WUR and with society are being stimulated as this work progresses. In 2019, Wageningen Dialogues organised and supported multi-stakeholder dialogues about the Energy Transition, Biodiversity in Circular Agriculture, the Circular Future, Healthy and Sustainable Nutrition, the Future of Technology in Agriculture and the Sustainable Fashion Industry. This has brought more than 250 organisations in discussion with each other and WUR about complex transitions and social issues. In addition, WUR hosted the CRISPRCon, which brought 450 people from industry, academia, media, policy and various NGOs together to discuss CRISPR and other genetic technologies. In addition, five internal dialogues were held, which gave over 300 employees an opportunity to familiarise themselves with dialogue-related principles.

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

- In the speakers corner of <u>Impulse</u>
- The evenings of **Studium Generale**
- The Science Café lectures in Loburg in Wageningen
- Kinderuniversiteit
- MOOCs on edX
- Initiatives for a wide audience, such as <u>Food and Cancer information</u>
- Videos on WURtube

2.6.3.3 **Education Project Services**

Businesses, authorities, and research institutes can receive support through Education Project Services, which links issues in society with courses in our curriculum. In the different courses, students and their supervisors investigate the problem at hand, enabling students to learn to apply academic skills in order to solve problems in society. This usually takes place in a multidisciplinary environment. In the 2018-2019 academic year, this involved 222 projects for small and medium-sized businesses, start-ups, PPP consortia, the government and social organisations. In these projects 1,566 Bachelor's and Master's students and 418 employees (WU and WR) were involved (see Table B2.10 in Appendix 2).

In 2019, the first Academic Consultancy Training (ACT) Award was presented. The ACT course is a trans-disciplinary team assignment for an external client. 62 ACT student teams participated in the first ACT Award edition. The winner was the team that uses agroforestry as alternative land use for groundwater protection areas.

2.6.3.4 **Science Shop**

Social organisations that want to use Wageningen's knowledge can request research projects via the Science Shop, which is where students and researchers collaborate with clients on new solutions for society at the local or regional level. This requires a great deal of attention to the social sensitivity of students and the practical value of the recommendations provided to the client. With these types of Learning in Communities, WUR promotes dialogue between science and society. The Science Shop completed 15 projects in 2019, in which 34 WUR employees, 123 Bachelor's and Master's students, and 58 external stakeholders were involved (See Table B2.9 in Appendix 2).

In 2019, the Science Shop produced three reports, four brochures, four factsheets, 27 presentations and two dialogues.

2.6.3.5 Collaboration with primary, secondary and green education

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

Together with scientists, the Wageningen University Science Hub (WKWU) and the Food Valley Network VO-HO develop lesson materials and activities for primary and secondary education. Through this, WUR contributes to socially relevant, challenging and attractive education and improves the quality of incoming students. In the year under review, the Science Hub offered fourteen teaching products, introducing approximately 520 teachers and 12,250 children in primary education to themes and researchers from WUR. The Food Valley Network VO-HO reached nearly 13,306 lecturers through courses, workshops, and lecturer development teams with 35 lesson products. WU contributes to the National Biology Olympiad, which reaches almost 8,000 students and 230 lecturers. The Wageningen Youth Institute is part of WUR and the World Food Prize Foundation in the United States. The Youth Institute challenges secondary students to look for solutions to one of the largest challenges facing the world at the present time: 'How do we feed the world in 2050 in an equitable, sustainable and healthy way when the world population will have risen to 10 billion people?'. They reached almost 3,000 secondary education students (see Table B2.11 in Appendix 2).

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

2.6.3.6 Courses and degree programmes for professionals

Through Wageningen Academy and the Centre for Development Innovation (CDI), WUR organises courses, training programmes and degree programmes for professionals in the business community and in the public or semi-public sector. In doing so, it provides its clients with the most current and relevant Wageningen knowledge. In this process, the focus is on everyone in the agri-food business from young professionals to senior executives. Wageningen Academy feels that its role is to match the demand from this target group with the Wageningen knowledge it provides. In addition to openenrolment courses, Wageningen Academy is increasingly developing customised programmes (via co-creation). Wageningen Academy provided 43 open-enrolment courses for 1,047 participants in 2019. For companies, 21 in-house courses were provided to 805 participants. Additionally, Wageningen Academy organised study visits and distance learning programmes. At executive level, Wageningen Academy offers an Executive MBA in Food & Agribusiness in collaboration with TIAS Business School, the AgriFood Global programme together with the IESE Business School, and the European Food and Agribusiness Seminar (EFAS) in collaboration with CEIBS (China Europe International Business School). In addition, WUR provides a varied offer of study programmes through Massive Open Online Courses (MMOC), for students and professionals at edX-Wageningen.

The Centre for Development Innovation (CDI) offers an annual programme of short, open enrolment courses for mid-career professionals primarily from Africa and Asia, the MENA region (Middle East and North Africa) and to a lesser degree also from Latin America, Europe and North America. The courses cover the full range of WUR's knowledge domain, with topics such as Climate Change Adaptation, Fisheries Governance and Rural Entrepreneurship. Course participants come from government institutions, research institutes, NGOs and the business community. Sometimes CDI course participants continue on to MSc or even PhD programmes at Wageningen University. Alumni from CDI courses regularly secure follow-up assignments for- and together with - CDI or other WUR divisions. A total of 968 people participated in the 35 CDI courses in 2019. With a course duration of two to three weeks, WCDI organised approximately 12,500 course days this way. Aside from the Open Access courses, WCDI, on request, also organises tailor-made training programmes in the abovereferenced regions, generally for government organisations and/or NGOs.

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

participants, from Bachelor's students to PhD candidates and professionals. The Summer School Green Genetics is an example.

2.6.3.7 Wageningen in the region

WUR works globally but is also firmly integrated into its own locale. We participate in many regional networks, such as Foodvalley, Foodvalley Region and KIEMT, and in other location-based regions, such as the DairyCampus in the Province of Friesland or the region surrounding our location in Yerseke in the Province of Zeeland. WEcR works together with the universities of Rotterdam, Delft, and Leiden in the provincial programme ACCREZ regarding the circular economy. In 2019, the foundation was laid for the Foodvalley 2030 programme. The Province of Gelderland, WUR, corporations, SMEs, municipalities and regional parties collaborate in this region-transcending, long-term investment programme on innovation, business climate, mobility, accessibility and living. The FoodValley Regional Deal was furthermore approved in 2019. WUR is a participant in this initiative. The Province of Gelderland also committed a substantial investment to support StartLife, Local Buzz, and the further development of Wageningen Campus. Starting in 2020, this support will become part of the Foodvalley (formerly AgriFood) 2030 programme.

2.6.4 Wageningen Campus, Ecosystem & Facilities

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

2.6.4.1 Campus acquisition

Following a strong development phase, the Wageningen Campus Ecosystem has clearly taken shape over the past few years. Wageningen Campus is acknowledged and appreciated for this. Important elements for maintaining this interactive and vibrant ecosystem are excellent education and research, quality and talent, entrepreneurship and start-ups (including StartHub, StartLife, and the accommodation of various organisations and businesses), accessible, high-quality research facilities (Shared Research Facilities, see Section 2.6.4.3), and local buzz (see Section 2.6.4.2).

The Wageningen Campus Ecosystem (including the Business & Science Park Wageningen (BSPW)) will lead to more collaboration among different parties on and near the campus and to increased economic activity in the region. The collaboration with the municipality of Ede (World Food Centre/Food Innovation District) is also growing.

It is already evident that the various elements of the ecosystem of Wageningen Campus are crucial in the selection of a location by businesses and organisations. Unilever's Global Food Innovation Centre ('Hive') was commissioned at the end of 2019. The company Symrise established its office here as well. In 2019, the following parties, among others, opened their hubs on Wageningen Campus/BSPW: CJ Cheil Jedang, OnePlanet Research Centre (joint venture between IMEC, WUR, Radboud University and Radboud UMC) and KWS Vegetables. Genetwister expanded its accommodations at the BSPW.

In 2019, work was started on the construction of the business centre Plus Ultra II, which has drawn a great deal of interest from innovative companies. Over the course of 2020, this expansion will also provide a prominent place for different WUR start-up activities (StartHub), StartLife, the WUR student challenges and techno-starters.

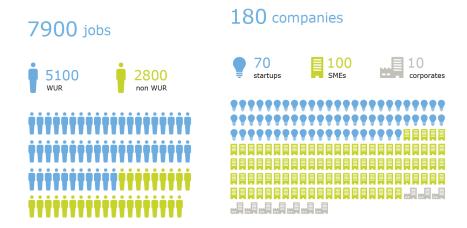


Figure 2.6 Wageningen Campus incorporates 7,900 jobs and 180 companies

2.6.4.2 Wageningen Campus community & local buzz

Together with other campus tenants, work continued on strengthening a vibrant campus community. This included the organisation and/or hosting of a wide range of public, scientific meetings with internal and external speakers, seminars, network gatherings, and cultural programmes. For example, Campus Connect, a monthly networking café that focuses on Science and Innovation in the AgriFood domain, for scientists, entrepreneurs and start-ups.

In 2019, a total of about 150 public meetings were held at Impulse. Other major networking events were the opening of the Academic Year, the Dies Natalis, Business Day, F&A-Next, and an SME event organised together with the Confederation of Netherlands Industry and Employers (VNO-NCW).

For the (campus) business community, the presence of students on campus is an important source of added value. Student Career Services organised several activities facilitating the meeting of students and businesses.

2.6.4.3 **Shared Research Facilities**

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

Important acquisitions in 2019 were the Q-Exactive HF-X Orbitrap mass spectrometer and a multiphoton microscope. SRF (Shared Research Facilities) also co-funds the facilities of the Netherlands Plant Eco-phenotyping Centre (NPEC) of Wageningen University and Utrecht University, jointly funded by the Netherlands Organisation for Scientific Research (NWO).

559 pieces of equipment are accessible through SRF, 305 of which are also accessible to external parties. SRF has invested in 86 of these pieces of equipment. Of the 559 pieces of equipment, two are owned by an external party (Unilever) and ten are located outside of WUR. The average occupancy of the SRF equipment portfolio (part of WUR's total equipment portfolio) was 60% in 2019 and the number of unique external users was 52. In addition, the equipment was also extensively used by WUR research projects for external parties.

In 2019, WUR, together with other parties in the region and on Campus, worked on a strategy for research and pilot facilities within the Foodvalley Ecosystem. This has resulted in a new grant for investment in research equipment effective from 2020. This is also why a significant portion of the activities of the SRF team will be funded by the Foodvalley 2030 Programme effective from 2020.

2.6.4.4 Physical aspects of campus development

In 2019 there were many different projects in relation to real estate and accommodation on Wageningen Campus. Great strides were made on the Wageningen Campus business strip, a central area where companies can establish their office. In November 2019, Unilever's Food Innovation Centre was opened on Wageningen Campus. In 2019, the construction of Plus Ultra Phase 2, as well as the multi-layer parking garage for the entire Plus Ultra grounds was started.

After these developments, there are two smaller locations available on the business strip for third parties. There continues to be an undiminished high level of interest by knowledge-intensive organisations in establishing an office on Wageningen Campus, and demand more than exceeds the available space. In view of the ambitions of WUR, Foodvalley Region, the Province of Gelderland and other stakeholders, the focus on the continued development of Wageningen Campus at Born Oost (the grounds where NIOO-KNAW and Aeres are currently located) was further intensified. Discussions with stakeholders and the municipality about the change in intended use have been started. Furthermore, work on traffic access plans, the urban development plan, nature-inclusive construction and other components of the zoning plan is in progress.

Construction work on the third education building was started in 2019. Due to the increasing pressure on space within WUR buildings (caused by increasing student numbers and growth in research in the various science groups), a decision was made to develop Phase 1 and 2 of this building in parallel. It also frees up space for growth in the research buildings, spaces which are currently used for education.

The technical design of the Dialogue Centre is being developed and the goal is to start construction in the summer of 2020. The Dialogue Centre will offer a central space on Campus for interaction, encounters, and academic dialogue, including PhD graduations, inaugurations, symposia, and smallscale seminars. Impulse will continue focusing on smaller groups (up to about 80 people) and on offering a programme that connects science and culture (see 2.6.4.2).

In 2019, construction of the first phase of the new greenhouse complex was started. During this phase, high-grade research compartments will be installed in a modern, sustainable, and futureoriented extension of the greenhouse building. Work on a specialised greenhouse and climate building for research into Phenotyping as part of the NPEC project, was started at virtually the same time.

The accessibility of Wageningen and Wageningen Campus remains a focus point. In 2019, the frequency of buses was increased once again, the use of (electric) bicycles increased, and the first concrete steps were taken to develop an express bicycle route to the Ede-Wageningen station and a direct bus service to Arnhem Central Station. Access for cars was upgraded slightly in the autumn of 2019 by further optimising the traffic lights at the Mansholtlaan in advance of a definitive solution for the roundabout at the Campus' main entrance. Under the direction of the Province of Gelderland, work is underway on the accessibility of Wageningen as a whole, by way of the Campus Route or an alternative route using existing infrastructure. Work is also underway on interim measures to further improve access to the Campus by cars and other means. The first administrative and process steps have since been taken in this spatial and politically-sensitive matter. WUR is working intensively with various parties (the Municipality of Wageningen and the Province of Gelderland) to take the proper measures for both the short and long term to make Wageningen and the Wageningen Campus easily accessible for all types of transport.

2.6.5 New professionals

2.6.5.1 Wageningen alumni

Our alumni contribute to achieving social objectives, such as more sustainable production and consumption, improved health, and the competitive capacity of the business community. In this way, they contribute significantly to the impact of WUR. Of the graduating MSc students, 34% found a job in either the business community or a professional field.

Alumni 2019

Percentage of outgoing MSc students that find employment per specific sector

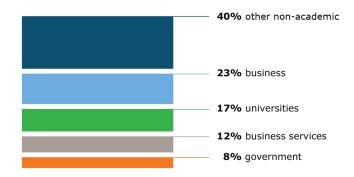


Figure 2.7 Percentage of MSc graduates who find employment per sector

In the reporting year, Wageningen University had a network of over 50,000 alumni; graduates and doctorates, spanning approximately 150 countries. Alumni are kept informed of relevant developments within WUR and the Wageningen domain through social media, such as the LinkedIn Community and Wageningen Connect. In addition, alumni meetings take place at home and abroad.

Finally, the PhD candidates also contribute significantly to the impact of WU.

WUR Student Challenge 2.6.5.2

In 2019 WUR organised the Student Challenge "ReThink Protein". Students were challenged to come up with a business idea or prototype with the potential of contributing to sufficiently healthy, affordable and sustainable protein for 9 billion people. 58 teams, consisting of 130 students from 24 universities in 14 countries, took part in the four-month challenge. The students were supported by 45 coaches from 33 organisations and companies. The four best WUR teams of the ReThink Protein Challenge represented WUR in the Dutch 4TU Impact Challenge. WUR offered the best performing WUR participant a trip to the 2020 World Expo in Dubai.

2.6.6 Outlook

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

In 2020, ongoing initiatives, such as the Road-to-Innovation Grant, entrepreneurial behaviour as a continuous teaching guideline, the Impact Award and the like, were further rolled out and expanded. The goal is to further anchor creating impact into the DNA of WUR students and employees.

2.7 **Employees**

The strategic priority areas established by the Executive Board form the basis for the HR policy of WUR. In 2019, the focus here was on developing a strategic HR Plan in which our contribution to the internal transition and collaboration within WUR is further defined on the basis of five HR themes. These are: Recruitment Introduction Period & Inclusion, Leadership & Talent Development, Organisational Development, Self-career Development & Happy Work Life, and HR Operational Excellence. Other HR-related topics will also be highlighted in a CSR context. The key figures characterising our workforce are included in more detail in the Social Annual Report (Appendix 3).

2.7.1 One Wageningen

The One Wageningen concept forms the basis for working on collaboration and (internal) mobility. The HR policy focuses on making employees aware that, through their own position, they contribute to WUR as a whole. WUR wants individual talents to develop to their full potential by offering employees a challenging, inspiring and international work environment. Through means of the detailed implementation of the five HR themes, WUR also gives substance to CSR.

2.7.2 Recruitment, Introduction Period & Inclusion themes

We make use of a clear recruitment and selection procedure to give candidates insight into WUR's job application process. The code established by the Dutch Association for Personnel Management & Organisation Development is applicable to this process. Reappointment candidates and those with long-term occupational disability take priority. Candidates with limited job prospects and employees who participate in a 'From Work to Work' programme are given priority over other internal candidates.

Considering the ageing within the organisation in combination with the increase of the number of students and the tight labour market, the expansion of (international) academic staff has top priority. This is why we invested more in recruiting activities in 2019, by creating a recruitment team to recruit new employees within the Netherlands as well as abroad. Once hired, new employees generally move to the Wageningen region; a good reason to organise international 'community building' and facilities for international employees, particularly around Wageningen. At the end of 2019, a partnership was initiated with the Expat Spouse Initiative of TU/e, whereby WUR will create a dual career centre in Wageningen to promote the integration of the partners of international employees. New employees are offered an Introduction Day, with a greater focus on international employees.

The current staff composition of WUR is not sufficiently reflective of society and is also less diverse than the student population. This is why we focus on appointing more women to managerial positions and attracting international employees. Additional focus is also placed on the employment of people with a distance to the labour market, in response to the Participation Act, the job agreement act (Wet banenafspraak), and the quota requirement for people with a work disability (quotumheffing arbeidsbeperkten). In 2019, the Job Participation Support (JOPS) team was initiated in this context. This labour participation team focuses on the placement of people with a disability.

Last year, in the context of the Gender Balance trajectory, an audit was conducted in a number of areas, such as career paths, work-life-balance, recruitment and gender in education and research. The findings will be used to further refine policy in this area. New workshops were developed in addition to the current workshops, such as Levels of Power and Unbiased Selection for the Best Match.

2.7.3 Leadership & Talent Development theme

In 2019, we devoted specific attention to leadership development for all WUR managers by preparing leadership dialogues within the various organisational units. The objective of these dialogues was to create a joint leadership vision and to interact together about the demands placed on leadership within an academic context. In addition, HR actively invested in leadership development by offering leadership programmes.

Aside from attention to leadership, we also focused on talent and the career paths available within WUR. This was not only limited to talent for leadership positions, attention was also devoted to business development, programme leaders and top experts. In 2019, a process was established that enables us to orient, develop and match talent even more effectively. Wageningen University has a tenure track programme for academic staff which leads to at least an Associate Professor 1 (UHD1) position. Further promotion to Professor holding a personal chair is an option. The Tenure Track development programme supports the career policy through development assessments and a course programme designed for this target group, which includes leadership development. Aside from this, a career path was developed for a limited group of lecturers; the Education Career Path.

2.7.4 Organisational Development theme

The objective of organisational development within WUR is to create and further expand a flexible (agile) and performing WUR organisation and to continue to build a culture of trust. This creates the capacity for reacting quickly and effectively to external opportunities and threats. This is why in 2019, we actively focused on strengthening team performance, for example, through means of providing supporting tools. In addition, the focus was on building trust, and we invested in various initiatives including leadership development and skills in conducting feedback interviews.

2.7.5 Self-career Development & Happy Work Life theme

We offer our employees several programmes in the field of sustainable employability. Sustainable employability requires constant training and development of talent and behaviour, thus limiting the need for intermittent development and downsizing. As a result, the organisation can anticipate market developments, make strategic business choices, and look to the future.

WUR employees perceive work pressure to be high and sometimes excessively high. The Executive Board, trade unions, and participational structure acknowledge this high work pressure which is largely caused by the growing number of students, changing markets, and limited and competitive grant programmes that lead to increased pressure to obtain and conduct research projects. Additionally, the complexity of operational management procedures, regulatory pressure, and monitoring and control are all experienced as sources of stress. The approach to dealing with work pressure is through organisation-wide activities, such as additional, structural funding per chair group to absorb work pressure and growth in student numbers, simplification of (HR) processes and bespoke measures on the work floor. Monitoring and sharing of experiences is achieved through a Community of Practices. When taking future measurements of employee satisfaction, it will be considered whether initiatives have led to a measurable decline in work pressure and an increase in employability. Additionally, we provide the Vital@work programme, focused on energising employees and teams, so that they are able and motivated to continue to work now and in the future in a healthy, productive and happy way. Various initiatives that contribute to a vital work life are being organised by Vital@work, including chair massages, fruit@work, sports activities, the PauseXpress and diverse workshops. The WR Foundation CLA and the CLA NU offer employees the option of making use of a Vitality Pact. Both regulations offer older employees the option to work less and receive a lower salary, while still maintaining full pension generation. The objective of this scheme is to promote sustainable employability while retaining vitality and make space for the influx of younger employees.

We address policy in the sphere of health and welfare integrally, whereby the occupational physician, Occupational Social Work (OSW), Labour And Organisational consultants and Human Resources managers actively contribute to promoting a healthy, safe work environment in consultation with employees and managers, all on the basis of their own areas of expertise. In 2019, several external reports were published concerning the importance of a safe and social work environment. We acted on this by conducting further research into preventing undesirable behaviour, the effectiveness of our infrastructure and auxiliary structures in this respect. The outcome of this research is expected to be available at the beginning of 2020.

Environmental Sciences pays a lot of attention to preventing work-related stress and encouraging effective behaviour in the context of a healthy and safe work environment. In 2019, as in previous years, a large number of workshops and lectures were given by OSW in this context.

Sick leave

We took a large number of measures to reduce work pressure. Unfortunately, this did not have an impact on the rate of absenteeism. In 2019, the absenteeism rate further increased to 4.5% for WUR as a whole. The rate at Wageningen Research was 4.7%, while Wageningen University stood at 4.4%. Especially in the case of groups which have a high absenteeism rate, we are jointly looking for potential causes and taking suitable actions.

If employees leave the organisation out of necessity, they can avail themselves of the support of an (internal) work coach. The work coach is charged with helping former employees find another job. This also limits WUR's short-term unemployment benefit (WW)/Civil Code (BW) payment obligations as much as possible. For (former) WUR employees who leave or have left employment while sick and who receive a benefit payable by WUR, an (internal) integration coach is available.

2.7.6 HR & Operational Excellence theme

In 2019, the HR corporate service processes were further digitised. At the same time, processes were simplified where possible. The basic HR processes will be further improved through means of system modifications and process simplifications.

2.7.6.1 **Employee participational structure**

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

Key topics on the agenda of the WUR Council for its meeting with the Executive Board were the 2019-2024 Quality Agreements, the 2020 budget of Wageningen University, the simultaneous Phase 1 and Phase 2 construction of the third education building, the Unwanted Behaviour complaints procedure, the 2030 Mobility Vision, the Education Career Path, as well as the shortage of workspaces for employees and students. In the year under review, the decentralised works councils and their management boards discussed various topics, including risk assessments and evaluations, the integration of the WUR 2019-2022 Strategic Plan into the plans of the relevant science groups/knowledge institutes, and accommodation matters.

Furthermore, in the context of the WUR 2019-2022 Strategic Plan, a Participational Implementation Plan 2.0 was developed in support of the 'excellent and motivated employees and students in the participational body' and 'dynamic participational body' goals.

Additionally, regular consultations with representatives of the unions in the Personeelsoverleg Stichting Wageningen Research (PO Wageningen Research Foundation) and the Overlegorgaan Personeelsaangelegenheden van Wageningen University (OPWU). In 2019, the most important topics in the Personnel Consultation (PO) meetings of the Wageningen Research Foundation were the agreements formulated in the context of the new Collective Labour Agreement (CLA) for the Wageningen Research Foundation. Topics in the 2019 POWU meetings primarily concerned the implications of the implementation of the Public Servants (Standardisation of Legal Status) Act (WNRA) for Wageningen University's employees, work pressure and the detailed agreements on the disbursement of the decentralised employment funding.

2.7.7 Corporate Social Responsibility

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

2.7.7.1 **Employment conditions**

WUR has two CAOs, the Collective Labour Agreements for Dutch Universities (CAO NU) and the Collective Labour Agreement for Wageningen Research Foundation. The current CLA-NU runs from 1 January 2020 to 1 January 2021 and in particular contains specific agreements relating to the WNRA and the Balanced Labour Market Act (WAB). Furthermore, in advance of the CLA-NU, a wage increase of 2.6% was agreed upon, effective 1 February 2019.

In July 2019, an agreement was signed for a new CAO for Wageningen Research Foundation which will be valid from 1 April 2019 until 1 April 2021. The CLA-NU contains provisions for a salary increase of 2.5%, effective 1 July 2019 and another 2.5% increase, effective 1 July 2020. It also specifically contains vitality-related agreements. This concerns vitality in relation to physical exercise, as well as vitality in terms of development and exercise (mobility).

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

2.7.7.2 Risk analyses and evaluations

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

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

2.7.7.3 Scientific integrity

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

These are:

- The Wageningen University & Research Integrity Code. This applies to all employees and guest employees of Wageningen University and Wageningen Research Foundation.
- The Netherlands Code of Conduct for Research Integrity as established by the Association of Universities in the Netherlands (VSNU). This is fully applicable for all researchers within Wageningen University & Research.
- The Corporate Governance Code of Wageningen University & Research. This code describes the principles of good governance.
- The Implementation Regulations Side Activities Wageningen University & Research. According to these regulations, employees are required to ask their employer for permission in advance to carry out side activities. It is important both for WUR and for potential clients to have insight into any side activities in order to prevent a conflict of interest. The approved side activities can be found at we@wur.

- The Whistle-blower's Regulations. These regulations describe how an employee should act if he/she suspects inappropriate behaviour at WUR.
- The Regulations Complaints procedure unwanted behaviour.
- The Personal Data Protection Regulations. These regulations provide a description of the tasks, responsibilities, and procedures with regard to the processing of personal data within WUR and is applicable to all data processing operations within WUR.
- The Camera Surveillance Regulations. This regulation provides a description of the responsibilities and procedures for the camera surveillance carried out within WUR.
- The Anti-corruption Code of Wageningen University & Research.

Employees are required to familiarise themselves with these principles and verify this by signing their appointment letter or their employment contract.

2.7.7.4 Complaints and appeals

Protection of employees against possible objectionable decisions or conduct is guaranteed through various complaints and objection regulations at WUR. The following provides an overview of the number of submitted or processed complaints in 2019 per procedure.

Wageningen University & Research

In the year under review, the WUR Scientific Integrity Committee (CWI) did not process any new complaints. In 2019, the National Scientific Integrity Body (LOWI) issued a recommendation concerning a complaint submitted in 2018. The Executive Board accepted this recommendation.

In 2019, no complaints in relation to the Regulations Complaints procedure unwanted behaviour were filed with the respective complaints committee.

Wageningen University

The Wageningen University Advisory Committee on Appeals and Objections (AWB, CLA-NU Chapters 6 and 7) received three pro forma notices of objection in 2019 that were not completed that year. In 2019, one ruling was issued in one appeal; this appeal was declared to be unfounded.

Wageningen Research Foundation

On the basis of Wageningen Research Foundation's Individual Right of Complaint Grievance Regulations, one complaint was submitted to the Grievance Committee in 2019, which was declared unfounded.

2.8 Operational management

2.8.1 General Data Protection Regulation

The General Data Protection Regulation (GDPR) has now been in effect for two years. The independence of the Data Protection Officer (DPO) within WUR is guaranteed in the organisation's charter. In addition, a number of process steps have been adopted, including, for example, escalation to the Executive Board in the event of a medium or large-scale data leak.

Effective as of 1 September 2019, all Local Privacy Officers (LPOs) were in position in the various organisation units and staff departments. The privacy officers meet every six weeks under the leadership of the corporate privacy officer to exchange privacy issues and share knowledge. The DPO attends this meeting as advisor. In addition, a Privacy and Authorisation Review Committee (PARC) was created to supervise authorisations for supplying personal data from the Wageningen Basic Administration System (WBA) to other parties. Data Delivery Agreements (DDAs) are now used to specify the requirements to be met by the supplying and receiving party of personal data, concerning data classification and management.

The functionality of SmartPia, the application that contains the mandatory register of personal data processed by the organisation and the Data Protection Impact Assessments (DPIAs), was further

expanded. In particular, the measures to be implemented on the basis of observed shortcomings in the use of personal data in scientific research or in cloud and/or other applications, must now be recorded in SmartPia.

In mid-2019, the publication WUR is serious about data was released to create awareness about personal data and the importance of the duty of care for personal data in education and research. All LPOs were featured in this publications and ample attention was devoted to privacy issues in the research and educations domains. Furthermore, the LPOs launched an initiative to regularly post information on the intranet concerning principles and simple measures to help everyone work in privacy-proof ways.

In 2019, four reports of data leaks were submitted to the Dutch Data Protection Authority (Dutch DPA). In three cases, the cause was a security incident involving personal data. This involved two connected servers infected with a 'crypto currency miner' virus; a web application that allowed the data of 1,200 persons to be viewed, which came to light through means of a penetration test; and an update/release of a student administration application (SIS forms). The latter resulted in giving all employees and students with a WUR account unintended viewing rights to the personal data of all students. Grades proved to be uncompromised, because it was not possible to use the application to modify this data. The fourth reported incident concerned the theft of a laptop belonging to a professor with documents containing application data and progress reports for a number of individuals.

From the above, it is clear that cybersecurity and the protection of personal data are becoming increasingly intertwined to create a single security domain. Enhancing digital resilience will require considerable investments. Cybersecurity is not only about rapidly detecting and repairing incidents and organising this capability, it is also about preventing incidents. Security awareness runs right through the following policy domains: IT, HR, Finance, Governance and Quality Assurance. The focus must be on being in control (for example granting and withdrawing authorisations on a timely basis) of systems that contain sensitive personal data. If possible, data should be processed anonymously in the development, testing, acceptance and production (DTAP) environments, so that the use of special and other personal data is prevented. Measures that contribute to keeping valuable data of a confidential character and of crucial value to the integrity of research and study results solely within WUR's purview.

2.8.2 Application roll-out and process optimisation

In 2019, the multidisciplinary information management model was further implemented. The Domain Coordination Teams (DCTs) for Education and ICT were already operational and portfolio management-driven prioritisation took further shape. In 2019, a DCT was also created for the Business Operations domain. This has created insight into the initiatives that, within this domain, contribute to improving WUR's business operations and the WUR 2019-2022 Strategic Plan. Furthermore, the inclusion of the Business Operations domain strengthens ICT portfolio management and multidisciplinary collaboration among primary process and support staff throughout WUR. The start-up of the Research DCT is in progress.

The educational processes and systems were in a state of flux: following the acquisition of the Student Information System and a Learning Management System, work was started on implementing these systems. The Study Anytime Anyplace project resulted in a supply of laptops for first year students and pilots with selected courses, with relevant software made available on the student's laptop. Projects for the creation of a Student Portal, as well as the renewal of the timetabling software package and the multimedia software have been started. All of the above-referenced projects will be continued in 2020.

Data storage has been further expanded due to the internal focus on cybersecurity and Research Data Management under the motto "Wageningen University & Research is serious about data". New data storage services enabled data to be stored at lower costs. In 2019, WUR's High Performance Computing environment continued to be deployed, which means that the collaboration partners (WUR and the business community) can conduct pre-competitive research using joint computing power.

Various projects were initiated in 2019 in the context of greater harmonisation within the organisation and acceptance of internal systems and processes. To strengthen mutual collaboration within WUR, the MyProjects project and time recording administration system was adjusted in 2019. This has made it possible for employees from different organisation units to work together in a low-threshold way. With the start-up of the Client Relationship Management (CRM) project, further progress was made on harmonising the interaction with clients by standardising the client relationship approach to acquiring research projects. Handling contracts and licenses in clear and consistent ways is closely related to this. To respond to this need, the Client License Management (CLM) project was initiated in 2019.

Steps to improve the satisfaction level with internal HR systems were taken by making preparations for migrating the Workforce system to the Cloud. An innovative application was developed and commissioned in the area of Finance (Project Portal Control) to support the project control process used to support collaboration between corporate and decentralised departments.

Although an annual information security plan had already been developed for the IT domain, the threat assessment and the incident at Maastricht University at the end of 2019, provided motivation to intensify activities in this area, similar to other universities. An Information Security acceleration plan will be developed for this purpose at the beginning of 2020, which will then be implemented.

2.8.3 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.

2.8.3.1 Safety

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

WUR's health & safety policy (Arbo policy) and the practical implementation of this policy is set out in the implementations of the VSNU Health & Safety Catalogue. This catalogue applies to both Wageningen University and the Wageningen Research Foundation. Parts of the VSNU Health & Safety Catalogue (and the implementation thereof) concern topics such as In-house Emergency Services; Risk Assessments and Evaluations (RI&E); Hazardous Materials; Information, Instruction and Supervision (VO&T); and Arms, Neck and Shoulder Complaints (KANS).

In terms of the RI&E, it was agreed that each organisational division itself is responsible for having a current RI&E and for conducting in-depth RI&Es. In the context of safety@wur, work is underway in the area of VO&T on developing e-learning modules about working safely for students and employees. In addition to the currently available e-learning module 'Better Safe than Sorry' about working with genetically modified organisms (GMOs), the following e-learning modules were developed and are now available:

- Fieldwork
- Computer Work
- Working Safely with Hazardous Materials
- General Safety

At the end of 2019, all employees with a WUR account were given access to these e-learning courses via the Brightspace platform.

Environment

The 2019 Sustainability Report describes the policy, activities and results in the area of environment, sustainability and CSR at WUR in great detail. This section highlights the objectives achieved in 2019 for the four environmental themes of the CSR Agenda:

- Climate-adaptive Environment
- Waste and Circularity
- Sustainable Energy
- Sustainable Mobility

The CO₂ footprint is also addressed. Table 2.9 summarises the 2019 results.

Summary of the environmental results of business operations

Component/Issue	Objective	Achievements in 2019
Climate-adaptive Environment	To make our own buildings and environment climate-	Wageningen Campus: 65%
	adaptive:	
	percentage surface area that is suitable for water absorption.	
Waste and circularity	Reduction relative to 2014	+17%
	Percentage waste separation	65%
Energy	2.0% reduction per year	-1.2%
	Sustainable electricity procurement	100% ^{a)}
	Generating wind energy	66.3 million kWh
Mobility	2.0% reduction in transport-related CO ₂ emissions per year	-4%
	Share of transport in CO ₂ footprint	47%
CO ₂ footprint	Emissions: reduction relative to 2010	-50%
	Compensation for footprint ^{b)} : increase relative to 2010	+64%

a) Purchase of wind energy with Guarantees of Origin, registered with CertiQ.

Climate-adaptive Environment

The Climate-adaptive Environment quickly gained a spot on the CSR Agenda (see Table 2.8); students in particular consider this a very important topic. In 2020, WUR will carry out a risk analysis (stress test) to identify the possible effects of climate change on our buildings and environment. On the basis of this stress test, it will be possible to determine the areas on which WUR should focus, for example water capture, in order to minimise risks as far as possible. This analysis subsequently forms the basis for a set of Key Performance Indicators (KPIs) for the design of a climate-adaptive environment. In advance of this effort, in this Annual Report, we use the KPIs that form part of the GreenMetric benchmark, to provide an initial indication.

In 2019, these are as follows:

- 4% of the campus surface area is forested or is covered with forest-like vegetation
- 16% of the campus surface area is covered with landscaped vegetation
- 65% of the campus surface area is suited for water absorption.

Waste and Circularity

In 2019, WUR developed a Circularity Vision. This vision marks the transition from a waste management policy to a circular economy policy. In line with the Dutch government's circular economy policy, by 2030, WUR aims to halve the use of abiotic and other raw materials prior in relation to 2014 figures. This will not only reduce WUR's consumption of raw materials, it will also reduce our volume of waste. Furthermore, this will have an impact on procurement: circularity strategies will start to be applied in new contracts with suppliers.

WUR has three main waste streams: business waste, paper and hazardous waste. The volume of waste for each waste stream that is removed and how it is processed is now known for virtually all locations in the Netherlands. In 2019, the total waste stream increased by 369 tonnes, or 17% (see Figure 2.8 and Table 2.10). This increase is in part due to the merger of the WFSR laboratory (at that

b) Calculation of the CO₂ emissions avoided by generating renewable energy.

time still known as RIKILT) with NVWA's Laboratory for Food and Food Safety. In addition, in 2019, more construction and demolition waste was removed as a result of the in-house managed construction activities in Wageningen, Bleiswijk and Lelystad. The waste separation percentage was 65%. The 2019 Sustainability Report contains additional information about the volumes of removed waste and how it was processed.

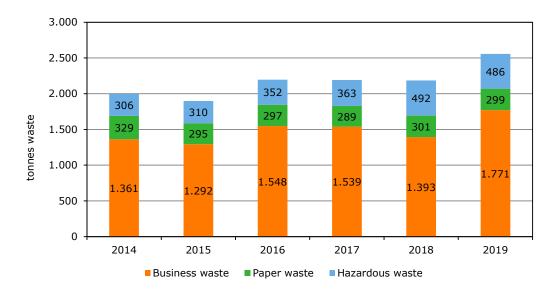


Figure 2.8 Amount of waste produced in tonnes, 2014-2019

Table 2.10 Waste streams in 2014-2019

Type of waste	2014	2015	2016	2017	2018	2019
Paper and cardboard (tonnes)	329	295	297	289	301	299
Industrial waste (tonnes)	1,361	1,292	1,548	1,539	1,393	1,771
Hazardous waste (tonnes)	306	310	352	363	492	486
Total	1,997	1,897	2,197	2,191	2,186	2,556
Separation percentage (%)	54	52	50	54	59	65
Annual change	+7	-5	+16	-0.3	-0.2	+17

Energy

In 2019, effort was devoted to creating an Energy Transition Plan that aims to drastically reduce the consumption of natural gas. Work has started on the tender for the construction of a thermal energy storage (TES) loop at Wageningen Campus, as an expansion of the existing TES network.

WUR has committed to the Long-term Agreement 3 (MJA-3) energy efficiency covenant for universities that expires at the end of 2020. The objectives in this agreement include the use of renewable energy and achieving a 30% improvement in energy efficiency in the 2005-2020 period. This represents a 2% energy reduction per year. How we aim to do this is set out in the 2030 Energy Vision. Specific measures for further energy savings and the use of renewable energy are set out in the 2017-2020 Energy Efficiency Plan.

The growth in the number of employees (+9.6 FTE) in 2019, for example through the NVWA and WFSR (RIKILT) laboratory merger, steadily increases the challenge of structurally increasing energy efficiency. Despite this, energy use in 2019 declined. Savings were achieved in various ways, for example through a reduction in user-related energy use, such as precisely adjusting climate settings and making increased use of LED lighting. In 2019, WUR consumed 2.3% less energy than in 2018, although this is partly attributable to the extremely long, hot summer of 2018. Adjusted for the climatic influence, the reduction was 1.2%. This is short of the 2% annual reduction target. Because

the annual MJA-3 target was achieved over the 2012-2018 period, WUR is on track in terms of achieving the final objective by the end of 2020.

WUR generates its own renewable energy. The wind turbines in Lelystad generated over 66.3 million kWh of wind energy in 2019. The number of solar panels on the roofs of WUR's buildings in Wageningen and Lelystad was further expanded in 2019. The over 6,000 solar panels produced 1.37 million kWh of energy, more than double the quantity produced in 2018. With the energy savings achieved and the procurement of 100% green wind energy (with Guarantees of Origin), CO2 emissions have been reduced even further compared to the 2005 base year, as Table 2.11 shows.

Table 2.11 Direct and indirect energy consumption by Wageningen University & Research

Energy Consumption	Base year 2005	2015	2016	2017	2018	2019
Electricity (kWh)	59,581,768	55,660,591	54,930,781	51,558,971	50,385,528	50,401,138
Natural gas (Nm³)	11,031,812	6,503,170	6,302,302	5,477,413	5,362,499	5,141,970
Electricity and natural gas (GJ)	886,033	706,771	693,845	637,391	623,193	616,354
CO ₂ (tonnes)	53,598	11,650	11,290	9,812	9,606	9,211
CO ₂ as a percentage of 2005	100	22	21	18	18	17
Annual energy reduction (%)		3.4	2.3	6.0	2.2	1.1

Sustainable Mobility

The 2030 Mobility Vision sets out the policy for sustainable (transport) mobility. This vision was launched at the beginning of 2019. 2019 actions from the associated implementation agenda were the quality improvement of the bicycle parking stations, the Ebike2WUR project with e-bike trial weeks for employees and the sustainability of the train and air travel policy within Europe. Furthermore, WUR contributed to the Sail to the COP initiative and sustainability – with the Mobility as a Service concept - was an important criterion in the tender for mobility services. At the end of 2019, a mobility survey was conducted to acquire better insight into the travel behaviour of employees and students.

The aim of the mobility vision is to reduce the CO₂ emissions of all WUR transport by an annual minimum of 2%. In 2019, transport emissions in CO₂-equivalents amounted to 19.4 ktonnes. This equates to a 47% share of the total calculated CO₂ emissions. Because fewer trips by air were booked for business travel in 2019, the mobility-related CO₂ emissions were 4% lower compared to 2018.

CO₂ Footprint

Each year, WUR calculates its CO₂ footprint in accordance with the ISO 14064-1, based on the Greenhouse Gas Protocol. The footprint provides insight into the direct and indirect emissions of greenhouse gases. Mapping out the emissions provides WUR with insight into what can be done to reduce and compensate for emissions. Figure 2.9 provides an overview of the CO₂ footprints calculated for recent years.

In 2019, the total CO₂ footprint amounted to 41.4 ktonnes of CO₂. As such, CO₂ emissions decreased by 50% in comparison to the 2010 reference year. CO2 emissions decreased in comparison to 2018 (-3%; 1.2 ktonnes CO₂). Figure 2.10 shows the sources that contribute to the emission of CO₂. The major sources are the buildings (especially natural gas), air travel, commuting and agricultural lands. WUR compensates for its CO₂ emissions by generating its own wind and solar energy, through thermal energy storage (TES) systems at Wageningen Campus and through the use of energy from biomass. Expressed in terms of CO₂, this halted the emission of 42.7 ktonnes of CO₂. In 2019, the CO₂ compensation footprint from sustainable energy generation was 3% higher than the total CO₂ footprint.

The same method used in prior years was used for calculating the 2019 CO₂ footprint. Because the CO₂ calculation methods and emission factors are subject to change, a survey will be conducted in 2020 to determine the necessary adjustments. The 2019 Sustainability Report and the CO2 Footprint webpage contain additional information about the CO₂ footprint.

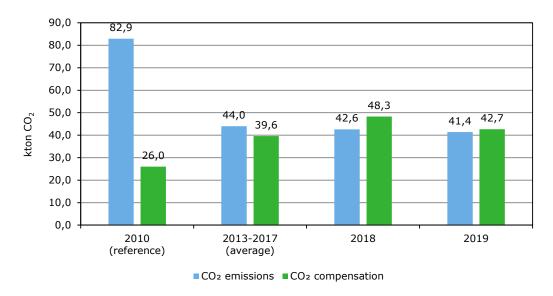


Figure 2.9 The CO₂ emissions and the CO₂ compensation in ktonnes, 2013-2019, with 2010 as the reference year

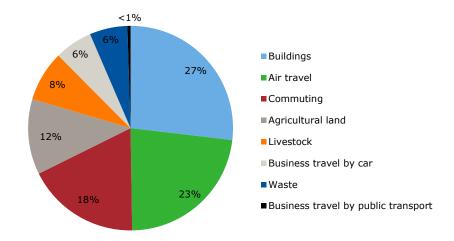


Figure 2.10 Distribution of CO₂ emission sources in 2019

2.8.4 Procurement policy and supply chain responsibility

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

In addition to the existing laws and regulations, WUR also upholds its own procurement policy. The objective of this is to ensure that all controllable expenditures take place lawfully, efficiently and effectively, in accordance with the core values. As much as possible, we follow the sustainability criteria as published on Pianoo.nl. In addition, for each contract, additional sustainability criteria, including the international social criteria, are considered and upheld, where possible. The Employee and Student Sustainability Panel can be consulted for this purpose.

The policies and procedures for procurement are determined by the Executive Board. WUR continues to fulfil a pioneering role in the area of sustainability and corporate social responsibility (CSR). In our procurement policy, we put pressure on chains to work on a transparent, sustainable and circular basis, free of modern slavery. The results are discussed regularly with the directors of operational management and the responsible member of the Executive Board. As of 2016, the Socially Responsible Procurement (SRP) growth model has been used to measure efforts in relation to Socially Responsible Procurement (SRP) and to create greater CSR awareness throughout the organisation.

In 2019, WUR's procurement, on the basis of the PIANOo criteria, was 100% sustainable and there were no complaints. More information about the activities and results of the procurement policy in relation to sustainability can be found in the 2019 Sustainability Report.

2.9 Compliance

2.9.1 Governance

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

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

The participational structure is an important partner in policy formation for the Executive Board and the managing directors of the organisational units. Each sciences group has a joint works council for employees of Wageningen University and Wageningen Research who work within the sciences groups. In addition, there are separate works councils for RIKILT, Corporate Staff and Facilities & Services. From these works councils, a Central Works Council (COR) has been formed for which members are elected by and from among the members of the works councils. The Student Council (SC) and the Student Staff Council (SSC) are participational bodies of the university. The SSC consists of members of the Central Works Council, supplemented by two directly elected employees, two directly elected PhD candidates and members of the SC. Students and staff have an equal number of votes in the SSC. The COR and SSC together make up the WUR Council. The consultation meetings between the Executive Board and the central participational body take place in the WUR Council and the SC. However, the WUR Council does not have any authority, as this remains with the COR and SSC.

Wageningen University & Research strives to ensure complete transparency regarding the governance of the organisation, behaviour and mutual rights and obligations. This is expressed in the Corporate Governance Code of Wageningen University & Research, comprised of the Code of Good Governance for Universities and supplemented by relevant provisions from the Dutch Corporate Governance Code for the Wageningen Research Foundation. This transparency is also demonstrated through the Administrative and Management Regulations, the Netherlands Code of Conduct for Scientific Integrity, the <u>Wageningen University & Research Integrity Code</u>, the <u>Anti-corruption Code</u>, the statement regarding the Positioning of Research at Wageningen University & Research, the Policy Document for Processing Personal Data, the Personal Data Protection Regulations, the Regulations for Camera Surveillance, the Guidelines for Working in Multicultural Settings, the Whistle-blower Regulations Wageningen University & Research, the Code for Transparency in Animal Testing (in Dutch) and various complaints regulations.

2.9.2 Risk management and internal control

2.9.2.1 **Risk Profile and Risk Appetite**

In recent years, Wageningen University has taken a cautious approach to entering into long-term financial obligations. This caution has led to a very positive result in 2018 and 2019. The Executive Board is of the opinion that this caution has permeated too deeply and will take measures to ensure that the available resources are used to the fullest extent for good education and research and to tackle high levels of work pressure. One of these measures in any event is the conscious allocation of more funds within the organisation than the expected income, in the knowledge that the additional resources with some delay would lead to additional costs anyway. This increases the risk profile. This is a well-considered decision, since Wageningen University has sufficient internal capital to offset any temporary shortages.

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

2.9.2.2 Risks of strategic objectives

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

The long-term financial forecast, including relevant internal and external developments and uncertainties, will be included in the multi-year projections for Wageningen University and Wageningen Research, and will be shared with the Supervisory Board. These give an indication of the risks associated with the growth in student numbers, developments in research turnover, and support decisions for large investments, such as the third modular education building as well as the progress of the Strategic Plan. The results are shared in the Continuity section.

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

2.9.2.3 Management risks

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

- The annual preparation of long-term forecasts;
- The annual preparation of a framework letter (multi-year framework to define the tasks for the upcoming financial year);

- Annual budget statement for each unit;
- Quarterly reports on the balance and the development of results and the risks;
- Monthly monitoring of financial and liquidity developments per organisational unit and department (Early Warning System);
- The Budget Allocation and Project System (BAPS) was implemented for preparing the LNV project estimates. BAPS is used to inform cluster leaders and financial departments about the depletion of the LNV's project budgets;
- Recalculation of the cost per business unit. Deviations from previous years are analysed. The recalculation is certified by the auditor.

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

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

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

In 2019, many efforts were made to improve the management of financial processes and internal control. The major concerns regarding the internal control were the tax compliance, tendering and the quality of the project management.

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

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

The internal management of IT projects has been strengthened. In accordance with a previously recommendation, the information manager role has been more clearly defined, management has been reinforced with the assistance of an Architecture Board, and domain architects have been appointed. The responsibilities of the latter two include the analysis of processes and assisting in innovation.

The Architecture Board met five times in 2019.

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

2.9.2.4 Legal risks

Tax laws demand a great deal of effort from the organisation. Topics that were addressed in 2019 include a final discussion with the Dutch Tax and Customs Authority about the introduction of the corporate tax at Wageningen Research and discussion of a new agreement concerning the pro rata VAT regulations. Remaining areas for attention include the documentation of the correctness of the transfer pricing policy used within WUR. These areas are expected to have a limited effect on the result and balance sheet. The formalisation of the new agreements with the tax authorities about the pro rata regulations have been ongoing since 2016. Other universities and universities of applied sciences are also inconvenienced by the slow decision-making and long internal procedures of the Dutch Tax and Customs Authority. Our final returns for the years 2016 up to and including 2018, still have not been processed by the tax authorities. WUR has already based its accounting system on the basis of the expected agreement and, since 2016, has prepared its returns on the basis of this methodology. As long as the tax authorities fail to provide clarity in this matter, there will be a lack of certainty about the amount of tax to be reclaimed.

The public procurement legislation and the increased control make high demands on the quality of the purchasing process. On the one hand, this requires the timely identification and tendering of purchases that should be put out to tender on the basis of national or European procurement directives and, on the other hand, this requires careful documentation of the legality of the other purchases. This matter is complex and requires intensive management of the purchasing process. Unlawful procurement produces risks, not only within the procurement process itself, but also in accounting for grants. In recent years, a great deal of attention has been devoted to improving compliance with procurement legislation. This process was all but completed in 2019 and the residual risks are limited.

2.9.2.5 **Corona Crisis**

In March 2020, it became clear that the corona crisis was going to have major consequences for WUR. In particular, the measures implemented by governments to limit the spread of the virus have a direct impact on WUR's education and research. The closure of teaching facilities demands rapid and drastic measures relating to online education, adjustment of study programmes and alternative methods of examination. The care for students and employees to be repatriated from abroad or the international students and employees who wish to return to their home country require a great deal of attention from the organisation. Research is also affected because of the many interrelationships with external parties in research projects, for example, for the supply of chemical and testing materials. For the 2020-2021 academic year, WUR expects a decrease in the influx of international students and the number of international students may very well be lower over the longer term than it has been in recent years. In addition, WUR expects the turnover of contract and Top Sectors research to decrease as a result of the economic backlash caused by government measures.

Immediately after the first infections were reported in the Netherlands, the Crisis Management Team (CMT) was activated and the daily business operations and decision-making concerning measures and preparing for potential scenarios was transferred to the CMT. At the beginning of April, the CMT was put into standby mode and business operations were returned to normal channels as much as possible. In the first weeks of the crisis, the CMT intensively communicated with the organisation via e-mail and intranet. In addition, measures were constantly coordinated with external parties, including the VSNU and the Municipality of Wageningen.

Furthermore, the Executive Board has mandated a taskforce to explore the impact of the corona crisis over the longer term (economic consequences, gamechangers and disrupters) and how WUR can effectively respond to this.

2.9.2.6 Looking ahead to 2020

The risk associated with a number of elements in WUR's risk profile will increase over the next few years. In the first place, the strong growth of the organisation leads to an increasing risk profile. This growth needs to happen in a flexible and controlled manner to allow for a timely response to everchanging exogenous factors, such as available government funding and student intake. The limited labour market causes additional risks in this regard. It is more difficult to find qualified employees, which can put pressure on the remuneration structure and the size of the flex staffing. In addition, the increasingly stringent conditions and audits of our most important funding providers and the proliferation of laws and regulations contribute to a higher risk profile. Compliance with laws and regulations and the audits performed by our funding providers sets high standards for the quality of internal business operations. At the same time, society and our own organisation expect the support processes to be as efficient and cost-effective as possible to free up as much funding as possible to be channelled into primary tasks. At times, these two objectives (more compliance vs. less overhead) are at odds with each other. Therefore, the risk management process must be further developed. It is especially important that risks are detected and discussed transparently in a timely fashion by the relevant line management. To make this possible, work on further developing the support departments has been started.

The key areas for attention in 2020 are as follows:

- Update of the risk assessments and the risk appetite. WUR's Risk Committee will carry out a risk assessment and develop a risk appetite assessment in the spring of 2020. The risk appetite indicates the risks WUR is prepared to accept for each domain. The findings will be adopted by the Executive Board and will be shared with the organisation's management, so that risks are managed on the basis of a shared vision.
- · Development of IT supported control mechanisms. Data analysis and robotisation provide the possibility of redesigning business process controls. Continuous monitoring and auditing ensure that processes can be tracked consistently. WUR aims to invest in the development of these tools and processes, which will make it easier to quarantee the correct performance of business processes. Over the course of 2020, WUR expects to have implemented continuous monitoring of the most vulnerable processes.
- Strengthening the management of the LNV subsidies, including the Top Sectors. The introduction of the new subsidy scheme for the TO2 institutes as well as the coordination with the Top Sectors regarding financial accountability requires central coordination. On a tactical and operational level, the staff departments Corporate Finance and Strategic Accounts will jointly shape the coordination with LNV. This guarantees the coordination of the substantive and financial aspects.
- Strengthening project control by centralising the development of the project control function and by centralising the internal control of projects. Special attention will be paid to collaborative, complex projects, in which WUR acts as the coordinator and is responsible for the execution involving dozens of partners in Europe and elsewhere in the world. The management of these projects requires a lot of effort from the organisation and carries risks if partners do not meet grant conditions for projects that are not adequately compensated otherwise.
- Attention to the cultural aspects within the organisation. Organisations in a dynamic environment require an open culture. Furthermore, WUR is aiming for an increased entrepreneurial culture. This is why it is important that sufficient, checks and balances are built in. This prevents tunnel vision. For such a culture, it is necessary that management provides sufficient space to the staff departments, and particularly the controller, to make use of their independent opinion in the decision-making. This requires the controller to have a strong role and management to be willing to hear other opinions. The Executive Board is of the opinion that the checks and balances generally function properly, but feels that it is important to also pay additional attention to this over the coming year.
- It is very important for the organisation to have access to accurate financial forecasts in order to be able to make the right management decisions and, in turn, to use its resources in the best possible way. The quality of these forecasts will be given additional attention in 2020.
- The corona crisis that emerged in March 2020 requires attention and the measures to be implemented over the short and long-term must be well-though-out.

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

2.9.3 Remuneration of executives

2.9.3.1 **Remuneration policy**

The remuneration of WUR's executives is established in accordance with the rules of the Standard Remuneration Act for Public and Semi-public Sector Senior Officials (WNT). The remuneration of Supervisory Board members is in accordance with the WNT standards. The compulsory report on the remuneration of executives is included in Section 2.9.3.2.

2.9.3.2 **Executive expenses and reimbursements**

This section contains consolidated information at the level of the WUR personal union and provides integral information about remunerated personal expenses and the remuneration of executives.

Table 2.12 Remuneration of executives

2010 (F	N1	D. J.
			Buchwaldt
Remuneration	194,000	194,000	194,000
minus additional tax liability for car	-	-	-
Remuneration minus additional tax liability	194,000	194,000	194,000
Compensation in the event of termination of contract	-	-	-
Personal expenses			
Representation costs	2,400	2,400	2,400
Domestic travel expenses	23,064	11,206	10,348
International travel expenses	11,011	7,338	3,141
Other expenses	-	-	-
Personal expenses	36,475	20,944	15,889
Total expenses	230,475	214,944	209,889
ion between WU & WR	Fresco	Mol	Buchwaldt
Remuneration minus additional tax liability			
Wageningen University	102,820	102,820	102,820
Wageningen Research	91,180	91,180	91,180
Compensation in the event of termination of contract			
Wageningen University			
Wageningen Research			
Personal expenses ¹⁾			
Wageningen University	29,338	15,655	12,905
	7,137		2,984
	Remuneration minus additional tax liability Compensation in the event of termination of contract Personal expenses Representation costs Domestic travel expenses International travel expenses Other expenses Personal expenses Total expenses ion between WU & WR Remuneration minus additional tax liability Wageningen University Wageningen Research Compensation in the event of termination of contract Wageningen University Wageningen Research Personal expenses 1	Remuneration 194,000 minus additional tax liability for car - Remuneration minus additional tax liability 194,000 Compensation in the event of termination of contract - Personal expenses Representation costs 2,400 Domestic travel expenses 23,064 International travel expenses 11,011 Other expenses - Personal expenses 36,475 Total expenses 230,475 ion between WU & WR Fresco Remuneration minus additional tax liability Wageningen University 102,820 Wageningen Research 91,180 Compensation in the event of termination of contract Wageningen University Wageningen Research Personal expenses¹) Wageningen University 29,338	Remuneration194,000194,000minus additional tax liability for carRemuneration minus additional tax liability194,000194,000Compensation in the event of termination of contractPersonal expensesRepresentation costs2,4002,400Domestic travel expenses23,06411,206International travel expenses11,0117,338Other expensesPersonal expenses36,47520,944Total expenses230,475214,944ion between WU & WRFrescoMolRemuneration minus additional tax liabilityWageningen University102,820102,820Wageningen Research91,18091,180Compensation in the event of termination of contractWageningen UniversityWageningen ResearchPersonal expenses¹29,33815,655

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

Tables 2.13, 2.14 and 2.15 contain the consolidated information about the remuneration of the Wageningen University & Research staff union. For users of the annual financial report, the tables provide insight into the total costs of the executives, supervisors and non-executives. This overview deviates from the statutorily prescribed overviews, given that the statutory directives require information to be supplied per entity. The statutory overviews are included in Appendix 1 of the annual reports of each entity. These are consistent with the consolidated overviews shown below.

The WNT applies to Wageningen University and the Wageningen Research Foundation. In 2019, the maximum remuneration applicable to Wageningen Research and the Wageningen Research Foundation was €194,000 (general maximum remuneration).

Table 2.13 Remuneration of executives (amounts in €)

L O Evenes	A D I Mal	L A C Duchundah
		L.A.C. Buchwaldt
		Executive Board
Executive Board	Member	Member
1-1 to 31-12	1-1 to 31-12	1-1 to 31-12
1	1	1
Yes	Yes	Yes
172,975.04	172,861.76	172,860.92
21,024.96	21,138.24	21,139.08
194,000.00	194,000.00	194,000.00
194,000.00	194,000.00	194,000.00
194,000.00	194,000.00	194,000.00
n/a	n/a	n/a
1-1 to 31-12	1-1 to 31-12	1-1 to 31-12
1	1	1
189,038.76	169,628.16	169,660.92
20,527.80	19,371.84	19,339.08
209,566.56	189,000.00	189,000.00
209,566.56	189,000.00	189,000.00
	1 Yes 172,975.04 21,024.96 194,000.00 194,000.00 194,000.10 1-1 to 31-12 1 189,038.76 20,527.80 209,566.56	President of the Executive Board Member 1-1 to 31-12

Within our organisation, those identified as top level executives with an employment contract do not have an employment contract with any other WNT-subject institution(s) as managing top level executives (entered into on or after 1 January 2019).

Table 2.14 Remuneration for supervisors (amounts in €, excluding VAT)

	M.J. Cohen	J.R.V.A. Dijsselbloem	B.J. Marttin ¹⁾	R.P. Smith	S. Korver ²⁾	M.A. Verhoef	T. Klimp ³⁾
Chair	Member	Member	Member	Member	Member	Member	Member
Period of employment in 2019	1-1 to 31-3	1-4 to 31-12	1-1 to 30-6	1-1 to 31-12	1-1 to 31-12	1-1 to 31-12	1-1 to 31-12
Remuneration							
Remuneration	4,225.26	12,675.00	5,633.70	11,517.40	11,267.40	11,517.40	0.00
Individual maximum remuneration	7,175.34	21,924.66	9,620.27	19,400.00	19,400.00	19,400.00	19,400
-/- unduly paid amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total remuneration	4,225.26	12,675.00	5,633.70	11,517.40	11,267.40	11,517.40	0.00
Reason for exceeding norm and other notes	n/a	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	n/a
Data from 2018							
Duration of appointment in 2018	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	17,060.64		11,267.40	11,871.41	11,267.40	11,267.40	0.00
Provisions for remuneration payable for	0.00		0.00	0.00	0.00	0.00	0.00
2016							
Total remuneration	17,060.64		11,267.40	11,871.41	11,267.40	11,267.40	0.00
Individual maximum remuneration	28,350.00		18,900.00	18,900.00	18,900.00	18,900.00	6,265.48

¹⁾ No payment to the person concerned in connection with a third party agreement.

²⁾ Remuneration to company Korver Beheer en Management.

³⁾ Ms. Klimp, in line with her employer's policy, has decided not to accept remuneration for her activities.

Table 2.15 Remuneration and/or dismissal benefits for non-executives (amounts in €)

Job title	Professor
Period of employment in 2019	1-1 to 31-12
Extent of employment in FTE	0.3
Remuneration	
Remuneration and taxable expense reimbursements	53,489.39
Provisions for remuneration payable for 2016	9,127.20
Total remuneration	62,616.59
Individual maximum remuneration	58,200.00
Reason for exceeding norm and other notes	Personal allowance
Data from 2018	
Job title	Professor
Period of employment in 2018	1-1 to 31-12
Extent of employment in FTE	1
Remuneration	
Remuneration and taxable expense reimbursements	150,104.33
Provisions for remuneration payable for 2016	26,217.84
Total remuneration	176,322.17

2.9.4 Side activities of board members

2.9.4.1 Relevant side activities as of 31 December 2019 - Supervisory Board

Prof. M.J. Cohen, LLM, (1947) (Chair of the Supervisory Board up to 1 April 2019) Principal appointment: none

Appointed 1 September 2013, end of current term: 1 April 2019

Membership: Appointments Committee (Chair) and Education and Research Committee

- · Chair of the Curatorium VNG
- Chair of Cedris (trade association for social employment)
- Chair of the Supervisory Board of Vfonds (Fonds voor Vrede, Vrijheid en Veteranenzorg)
- · Chair of the Committee on Individual Compensation for Victims of WWII Transport by NS
- Chair of the Supervisory Board of Openbare Bibliotheek Amsterdam
- · Chair of the Stichting voor Vluchteling-Studenten UAF
- Chair of the Amsterdams 4-5 mei comité
- Member of the Police Education Council (Chair of the Knowledge and Research committee)
- Chair of the Advisory Board of Grondrechten Functie-uitoefening Ambtenaren
- Chair of the Co-Ex Foundation (think tank for the prevention of radicalisation)
- Chair of the Supervisory Board of the NVVE (Netherlands Dignity in Dying Organisation)
- Chair of the Bart Tromp Foundation
- Chair of the Cello Oeuvreprijs Foundation
- Chair of the Board of Cappella Amsterdam
- Chair of the MS Research Netherlands Foundation
- Co-chair of OFL (Overlegorgaan Fysieke Leefomgeving)
- Chair of the Our Amsterdam Foundation

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

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

Committees: Appointments Committee (Chair), Audit Committee

- Chair of the Society for the Preservation of Nature in the Netherlands
- Member of the Committee of Recommendations of Transparency International Nederland
- Member of the Committee of Recommendations of the Maria van Renkum Foundation

Prof. S. Korver (1953)

Principal appointment: Professor by special appointment at Tilburg University

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

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

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

T. Klimp (1972)

Principal appointment: Director Finance Paints and Coatings for Commercial and R&D, Akzo

Appointed 1 September 2018, end of current term: 1 September 2022

Committees: Audit Committee Relevant side activities: none

B.J. Marttin MBA (1965) (Member of the Supervisory Board up to 1 July 2019) Principal appointment: Member of the Managing Board of Rabobank

Appointed 1 July 2011, end of current term: 1 July 2019

Committees: audit committee (chair)

- Vice-chairman of the Board of Directors of the American Chamber of Commerce
- Member of the IDH Supervisory Board (Sustainable Trade Initiative)
- Member of the Dutch Trade & Investment Board
- Member of the Board of Trustees of Hanns R. Neumann Stiftung
- Member of the Supervisory Board of ARISE BV
- Chairman of the Shareholders Council Rabo Partnerships
- Chairman of the Supervisory Board of De Lage Landen International BV
- Chairman of the Supervisory Board of Obvion NV (up to September 2019)
- Member of the Board of Directors of Rabobank International Holding BV
- Member of the Board of Rabobank Australia Ltd
- Member of the Board of Rabobank New Zealand Ltd
- Member of the Board of the Rabobank Foundation
- Member of the North America Board of Directors/Member of the North America Risk Committee

R.P. Smith (1960)

Principal appointment: none

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

Committees: Audit Committee

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

M.A. Verhoef (1959)

Principal appointment: Executive Board of Spirit en Bascule Jeugdhulp

Appointed 1 January 2017, end of current term: 1 January 2021

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

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

2.9.4.2 Relevant side activities as of 31 December 2019 - Executive Board

Prof. L.O. Fresco (1952)

Appointed per 1 July 2014 to 1 July 2018

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

- Member of the Trilateral Commission
- Member of the Advisory Board of the World Food Prize
- Member or honorary member of various international academies
- Columnist at NRC
- · Editorial staff member of De Gids
- Member of the Advisory Committee of Regio Deal Brainport Eindhoven
- Member of the Ambassador's Council of the National Holocaust Museum in formation
- · Member of the Board of the Stichting Het Nationale Ballet Fonds, an ANBI institution for fundraising by the National Opera and Ballet.
- Member of the steering committee Strategy, Public Affairs & Governance VSNU
- Non-executive member of the Syngenta Board of Directors
- Member of the Artis Advisory Board
- Member of the Management Advisory Group for the UN DG-FAO

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

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

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

- Editor of New Horizons Environmental Politics (Edward Elgar)
- Member of the Board of the Research Committee Environment and Society, International Sociological Association
- Member of the Board of the Sustainable Places Research Institute, Cardiff University, UK
- · Editorial staff member of Environmental Policy and Planning, Environmental Sociology, Current Opinion in Environmental Sustainability, Environment and Planning, Nature & Culture, Open Environmental Sciences, The International Journal of Public Policy and Environmental Development
- General member of the Board of Agrifood Capital Foundation
- Chair of the Guidance Committee of the Netherlands Environmental Assessment Agency
- Member of the Board of Euro League of the Life Sciences ELLS
- Member of the Board of IHE Delft Institute for Water Education
- General board member of VSNU, Vice-chair
- Member of the Supervisory Board of Wetsus
- Member of Rectorencollege VSNU
- Vice-chair of the VSNU Education, Research, and Valorisation Steering Committee
- Member of the Scientific Advisory Committee of the Amsterdam Institute for Advanced Metropolitan Solutions
- Member of the Board Association of European Life Sciences Universities ICA
- Member of Regieteam Groenpact 2.0
- Member of the Executive Committee of the OnePlanet Research Centre

L.A.C. Buchwaldt MBA (1961)

Finance, Business & Services Portfolio

Appointed 1 September 2017, end of current term: 1 September 2021

- Member of Member's Council Coöperatie SURF
- · Member of the steering committee Operational Management and Finance VSNU
- Member of the DUWO Advisory Council
- Member of the Supervisory Committee of the EFRO 2014–2020 Operational Programme, Eastern Netherlands region
- Member of the Steering Committee of the World Food Centre
- Member of the Triple Helix FoodValley Region
- Member of the jury for the Agricultural Entrepreneur of the Year
- Member of the Board of the FoodValley.nl foundation
- Member of the Board of ACCEZ (ACCelerating Circular Economy Zuid-Holland)
- Chair of the Advisory Council of the Belmonte Arboretum Foundation

2.9.5 Clarifications

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

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

Customised programmes for companies / organisations

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

Exchange agreements

Wageningen University has 223 exchange agreements with 175 institutions. The total number of incoming students is 383 and the total number of outgoing students is 445.

Allocation of direct government funding for private activities

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

- Post-initial education relating to establishing new study programmes and transferring knowledge to society:
- Student facilities such as sports facilities and training activities;
- Student accommodation for international Master's students. Although the provision of student accommodation is not one of the university's primary duties, the acute accommodation needs nevertheless resulted in the Executive Board's decision in 2009 to invest in temporary accommodation for international students. The Supervisory Board agreed to this, in light of the state of Wageningen's housing market, particularly for students. Accommodation is rented out at fair market prices. The objective is to achieve break-even operations with these investments. In 2019, funds were invested in temporary student accommodations at De Dreijen.

Wageningen University did not invest in spinoffs in 2019.

2.9.6 Treasury Policy

Wageningen University has incorporated the conditions of the 2016 OCW investing, borrowing and derivative regulations into its Treasury Charter. Temporary superfluous funds will be deposited into savings accounts or held in deposit with financial institutions that at a minimum have an A rating from two of the three large rating firms, and that are domiciled in an EU member state. Effective from 31-12-2019, €25 million was held in term deposits with a remaining term of 1 month. Wageningen University did not negotiate any derivatives.

2.10 Economic performance indicators

2.10.1 Direct economic value

WUR is a non-profit organisation. Positive returns are added to the organisation's reserves.

The table below shows the main sources of turnover for 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 financial report (Chapter 3).

Table 2.16 Key Figures Wageningen University & Research (amounts in € millions)

	2017	2018	2019
Turnover from research Wageningen Research (WR)			
Contract research	95.2	99.4	98.8
Top Sectors (including LNV part)	57.2	57.2	60.4
Matching market and NWO	27.4	26.5	27.2
LNV (excl. Top Sectors, incl. PSR, SRT) & NVWA programme	77.4	95.8	116.8
research			
Wageningen University turnover			
Turnover from direct and indirect government funding	255.4	272.5	298.8
Turnover from contract funding	59.1	60	64.1
Solvency as percentage of total assets			
Wageningen Research	58.8%	58.2%	60.1%
Wageningen University	47.3%	51.9%	52.3%

2.10.1.1 **Pensions**

The pension scheme for the whole of WUR was (compulsorily) placed with ABP. Pension accumulation takes place on the basis of the average earnings system (middelloonsysteem). The current coverage ratio rose from 97.1% to 97.8% in 2019. The policy coverage (the average of the current coverage ratios across the last twelve months) decreased in 2019 from 103.8% to 95.8%, ending up 8.4% under the required minimum. This coverage will on the one hand be decisive in increasing pensions. Partial indexation is possible with a policy coverage of 110% or higher. ABP may index fully starting from 123%. This means that with the current 95.8%, we are still far from this objective. On the other hand, the policy coverage can play a role in decreasing pensions.

If this policy coverage until 2020 remains below the required level of 104.2% and the current coverage ratio at the end of 2020 is also lower than 104.2%, a lowering of pensions is inevitable. ABP currently expects pensions to remain unchanged in 2020. Currently, the possibility that pensions will have to be reduced in 2021 and the years following is real. Furthermore ABP expects that it will not be possible to increase pensions over the coming years by the price index (indexation).

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

2.10.1.2 **Government funding**

WUR receives financial support from the government. The extent of these contributions in 2019 is shown in Table 2.17.

Table 2.17 Overview of government funding – Wageningen University & Research (in € millions)

Legal entity	Type of funding	Income	Government contribution
Wageningen University	Direct government funding	226.4	226.4
	Indirect government funding and research	98.5	36.7
	funding, including targeted subsidies		
	Tuition and course fees	38.1	
	Other income	21.7	1.8
Wageningen Research	Ministries of LNV and NVWA research	157.1	66.2
	programmes		
	Contract research	146.1	8.5
	Other income	40.8	0.0
Total		728.7	339.6

Funding from the central government consists of funding from which it does not directly benefit and that it does not directly control. This includes government funding for education and research of Wageningen University, the contribution from the LNV for knowledge base and top sector research, funding via contract research (NWO), and the TKI supplement for Top Sectors and other subsidies. Effective from 2019, LNV applies the TO2 grant conditions to programme research (PSR and SRT), while keeping control over the use of these funds.

2.11 Wageningen University Continuity Section

In accordance with the guidelines set down by the Ministry of Education, Culture and Science (OCW), the Continuity Section is part of Wageningen University's Annual Report. For Wageningen Research Foundation's 2020 financial outlook, refer to its annual financial report.

Table 2.18 Key figures for Wageningen University, forecast for 2020-2024 (excluding Expat Centre, price index 2019, excl. the effects of the corona crisis)

	2019	2020	2021	2022	2023	2024
Direct government funding (in € millions)	226.4	237.4	242.9	255.5	258.0	261.4
Tuition fees (in € millions)	38.1	40.9	40.4	39.9	40.3	40.6
Direct government funding and research funding	98.5	99.3	99.3	99.3	99.3	99.3
(including targeted subsidies) (in € millions)						
Investments (gross € millions)	32.7	50,9	64.3	25.8	33.3	20.9
Average number of employees (FTE) and allocation	3,005	3,323	3,449	3,501	3,503	3,531
Support staff (%)	5.1	4.9	4.9	4.9	4.9	4.9
Overhead staff (%)	17.1	16.9	16.9	16.9	16.9	16.9
Primary staff (%)	77.8	78.2	78.2	78.2	78.2	78.2
Number of enrolled BSc and MSc students	12,337	12,666	12,914	13,147	13,330	13,474
Number of PhD degrees obtained	293	290	288	288	295	307
Net result excl. valorisations (in € millions)	20.0	2.0	-7.9	-7.2	-6.7	-7.9
Net result incl. valorisations (in € millions)	20.0	2.0	6.4	-2.9	-5.9	-4.0
WU EQUITY CAPITAL						
Capital invested in fixed assets (in € millions)	248.1	276.4	315.7	314.0	319.2	312.0
Internal capital (in € millions)	212.1	215.1	221.5	218.6	212.7	208.7
Total capital (in € millions)	405.3	411.8	408.1	405.2	399.3	395.3
Solvency ratio (%)	52.3	52.2	54.3	53.9	53.3	52.8
WU LIQUIDITY						
Liquid assets (in € millions)	114.2	90.0	50.3	49.1	38.0	41.2
Current ratio	0.88	0.74	0.54	0.53	0.47	0.48

2.11.1 Principles of the financial policy

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

The allocation of the 'Van Rijn funds' to education also indirectly creates more space for research, ensuring that the balance between doing research and teaching among existing employees is restored.

- In addition, the B&T Sector Plan provides greater opportunities for targeted research programmes and the Netherlands Organisation for Scientific Research (NWO) contributes to the further build-up of new modern facilities.
- The QA Funding is used to specifically work on a number of quality initiatives pertaining to student guidance that would not have come about without this programme.
- Finally, Wageningen University has freed up funds from the reserves for the appointment of additional PhDs to provide support to the various programmes. The PhD/postdoc programme focuses on talent development, diversity, entering into and intensifying (new) partnerships, and supporting and deepening Wageningen University's investment themes.

The above-referenced programme was initiated in 2019, but will only take root in 2020. At Wageningen University, this programme involves an annual expenditure of approximately €15 million. Part of this expenditure (€11-12 million) is of a structural character and the other portion (€3-4 million) has a term of approximately four to five years. Due to the increased government funding, it is possible to increase the programme budget to a level that is more consistent with the rise in student numbers in recent years and less at the expense of the planned research.

A number of investments will be made to house the growing organisation. In 2019, work commenced on the construction of a third education building and funds were invested in Unifarm's greenhouse complex. Work on constructing the Dialogue Centre and the thermal energy storage (TES) facility for the Campus Loop will start in 2020. In addition, in 2020, WUR will develop a strategic accommodation plan to address the need for space and laboratory facilities over the long-term as well. This way, WUR aims to provide an effective, modern work environment to employees and students. WUR expects to take decisions concerning the strategic accommodation plan in 2020.

The organisation experienced significant growth in 2019, and staffing levels increased by 187 FTE to 3,005 FTE. However, in 2019, the organisation did not yet manage to attract sufficient additional personnel to fully realise its 2019 plans, in part due to the tight labour market. Scaling up in the current economic situation requires a relatively large amount of time. This means that part of the funding was not used in 2019.

Wageningen University has budgeted for significant growth in staffing levels and a significant increase in costs from 2020 onwards, which will reduce the surplus to €2.0 million. Wageningen University therefore expects the workforce to increase significantly by 318 FTE in 2020. There is also expected to be a net influx after 2020. Ultimately, the average workforce will grow by about 500 FTE by 2024, in comparison to 2019. As a consequence, personnel costs will ultimately increase by about €35 million per year. As a result of the scaling-up of facilities, an additional €13-14 million in higher operating costs are budgeted annually over the long-term starting in 2020/2021, for example as a result of opening the third education building in September 2021 and the new research facilities. In comparison to 2019, the scale-up of both personnel and facilities will cause the structural cost level to increase by about €65 million from 2024 onwards.

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

Wageningen University will continue to create value from surplus real estate. Substantial book profits are expected during the planning period. These book profits are used to fund Wageningen University's real estate.

BALANCE SHEET FOR WAGENINGEN UNIVERSITY, FORECAST 2019-2023 (in € millions)

	2019	2020	2021	2022	2023	2024
Intangible fixed assets	0.6	0.6	0.6	0.6	0.6	0.6
Tangible fixed assets	247.0	275.3	314.6	312.9	318.1	310.9
Financial fixed assets	0.5	0.5	0.5	0.5	0.5	0.5
Total fixed assets	248.1	276.4	315.7	314.0	319.2	312.0
Inventory and current assets	0.1	0.1	0.1	0.1	0.1	0.1
Receivables	42.9	45.3	42.0	42.0	42.1	42.0
Short-term securities	0.0	0.0	0.0	0.0	0.0	0.0
Liquid assets	114.2	90.0	50.3	49.1	38.0	41.2
Total current assets	157.2	135.4	92.4	91.2	80.2	83.3
Total Assets	405.3	411.8	408.1	405.2	399.3	395.3
General reserve	196.1	200.7	208.7	207.4	203.0	199.0
Appropriated public reserve	16.0	14.4	12.8	11.2	9.7	9.7
TOTAL EQUITY CAPITAL	212.1	215.1	221.5	218.6	212.7	208.7
Provisions	11.9	10.0	10.0	10.0	10.0	10.0
Long-term Debt	4.4	4.4	4.4	4.4	4.4	4.4
Short-term debt	176.9	182.3	172.2	172.2	172.2	172.2
TOTAL LIABILITIES	405.3	411.8	408.1	405.2	399.3	395.3

PROFIT AND LOSS STATEMENT FOR WAGENINGEN UNIVERSITY, FORECAST 2020-2024 (€ millions)

	2019	2020	2021	2022	2023	2024
INCOME						
Direct government funding	226.4	237.4	242.9	255.5	258.0	261.4
Other government funding	0.9	0.9	0.9	0.9	0.9	0.9
Tuition fees	38.1	40.9	40.4	39.9	40.3	40.6
Income from third-party contract	97.5	98.4	98.4	98.4	98.4	98.4
research						
Ancillary activities and other income	21.7	19.2	19.2	19.2	19.2	19.2
Total income	384.6	396.8	401.8	413.9	416.8	420.5
EXPENDITURES						
Personnel costs	245.9	261.3	270.6	276.0	277.4	280.9
Depreciation	22.8	22.6	25.0	27.5	28.0	28.2
Accommodation costs	23.3	23.0	23.8	25.6	26.5	28.3
Other expenses	72.6	87.8	90.2	91.9	91.5	90.9
Total expenditures	364.6	394.7	409.6	421.0	423.4	428.3
Operating result	20.0	2.1	-7.8	-7.1	-6.6	-7.8
Financial income and expenditures	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Result from operational activities	19,9	2.0	-7.9	-7.2	-6.7	-7.9
before tax						
Third-party share and value added	0.1	0.0	14.3	4.3	0.8	3.9
Net result	20.0	2.0	6.4	-2.9	-5.9	-4.0

2.11.2 Internal risk management

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

2.11.3 Risks and uncertainties

Over the coming years the results of Wageningen University will be affected by a number of exogenous and endogenous factors.

Corona Crisis

In March 2020, Wageningen University was confronted with the corona crisis. The government measures designed to curb this crisis and the development of the economic conditions in the countries from which we draw our international students and where our clients are located, will have an impact on Wageningen University's business operations over the short and medium-term. At the time of the preparation of this annual financial report, it was as yet not possible to determine the impact on Wageningen University's result with sufficient reliability. The potential reduction in the number of international students, the decrease in contract research and the direct costs of the crisis could produce a lower result. On the other hand, there may be a potential delay in the organisation's targeted growth, which could result in one-time lower costs in 2020. Wageningen University is taking a potential decline of 50% in the influx of international students for the 2020/2021 academic year and a significant decrease in contract funding into account. The total impact, consisting of direct costs, consequential damages and economic consequences is then estimated to be €10 million, depending on the intensity and duration of the crisis. The organisation's continuity is not at issue in any way, however. Wageningen University has sufficient financial buffers to be able to continue operating in the event of an expected drop in revenue. The potential consequences of the corona crisis have not yet been incorporated into the long-term plans.

Development of student numbers (exogenous factor)

Over the last few years, student enrolment has steadily grown. Based on the interest of potential students, student enrolment is not expected to further increase over the first few years. As a result of the increased enrolment in previous years, the total student population is expected to continue to modestly grow for a few years, assuming that the current crisis and the temporary deglobalisation trend resulting from it does not structurally persist. Wageningen University's multi-year plan is based on accommodating the projected growth of the student population.

This means a required growth in the number of lecturers and in the investments in educational spaces. In 2019, work commenced on the construction of a third education building. This education building is sufficient to accommodate the currently expected growth in student numbers up to about 13,400 by 2024. Wageningen University can temporarily accommodate this growth up to the opening of this building by using additional temporary accommodations ('portacabins'). The new education building will also be modularly designed, which means that the building can be expanded if student growth warrants this. Lower growth than planned could lead to vacancies in educational spaces. This is why Wageningen University is cautious about investing in additional educational facilities and will strive to find solutions that offer maximum flexibility in light of the possible scenario of a lower than expected student influx. Due to the planned scale-up period (September 2021), Wageningen University will primarily encounter logistics problems and risks. With the removal of the funding cap for future growth in student numbers, the risk of the continued growth in student numbers will be partially mitigated.

Development of non-EEA student numbers (exogenous factor)

About 10% of the students participating in study programmes at Wageningen University are international, non-EEA students who contribute to the general cost coverage by paying institutional tuition fees that are based on the full costs for this group of international students. The annual income that can be directly linked to these international students was €18.1 million in 2019. This equates to about 5% of total income and about 16% of the size of available liquid assets at the end of 2019. Were this category of students to decrease, a number of financially tight years might follow, but the situation will normalise after a few years. If the inflow were to cease, the number of international

students would decrease gradually, per graduating cohort. This would provide Wageningen University with some time and room to adapt.

Development of additional resource allocations (exogenous factor)

Assumptions and risks per assumption:

- A best estimate of the expected wage compensation for 2020 is included as part of the 2019 projections. Price compensation is not included in the income for 2020 and no further wage or price compensation is included for after 2020. Incidentally, the personnel costs after 2020 also do not include any increases in the context of the Collective Labour Agreement. For the years after 2020, it is assumed that the wage compensation offered will be in line with the increases in the Collective Labour Agreement.
- · Constant prices were used in the OCW macro model. Therefore, it is assumed that the OCW will fully compensate the expected price decrease ("dilution") as a result of the general increase of the EEA student population by means of a reference estimate adjustment. Allocation of the full compensation by the ministry is and will continue to be an uncertain factor.
- Any redistribution of funds as a result of the funding discussion (Van Rijn committee and the CHEPS Report) has not been taken into consideration.
- To be on the safe side, the assumption in the growth of non-EEA students (who account for a significant influx of institutional tuition fees) has been set to zero.

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

Two significant valorisations planned for the short term are scheduled for 2021 and 2022. There are still uncertainties regarding both the pace of the realisation and the amount of the valorisations. If these planned valorisations do not happen in 2021/2022, then the cumulative result over these two years will be €23 million less. The tight construction market could result in higher investments than planned. The developed strategic accommodations plan in the first place serves as a framework. For each major investment, the impact on solvency, the result and liquidity will be included in the decision-making process at that point in time and, if developments in the external environment warrants it, the investment may be adjusted.

Underinvestment of funding (endogenous factor)

There is a possibility that in 2020, Wageningen University will again not manage to spend the funding designated for upscaling due to the previously mentioned tightness on the labour market. This risk has been captured in the budget and in the long-term projections by including a significant underspending item in operations. This will make the projections more realistic, but it will also increase the risk profile.

Wageningen University has adequate reserves to compensate for any such risks. With these projections, Wageningen University has achieved its political desire to utilise less risk-evasive behaviour in budgeting and to draw from its reserves where needed.

2.12 Report criteria and scope

2.12.1 Consolidated report

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

2.12.2 Report criteria

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

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

WUR adheres to the GRI reporting guidelines in its reports. Reporting is done in accordance with the GRI "core" application level. A full overview of the GRI indicators and related data is included in the 2019 Sustainability Report.

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

2.12.3 Scope

With regards to the accountability for WUR's societal impact, the materiality analysis was leading in setting the limitations and scope of this report. In the analysis, relevant and material topics for WUR were determined on the basis of the 2019-2022 Strategic Plan. Through the Identification, Prioritisation and Validation steps, these topics were then assessed on the basis of their significance for WUR and stakeholders. This Annual Report focuses on these material topics. These topics form the CSR Agenda for Wageningen University & Research, see Table 2.8 in Section 2.3.3.

This report covers the 2019 financial year. Because the majority of the activities of Wageningen University and the Wageningen Research Foundation take place in the Netherlands, the sustainability reporting focuses on activities in the Netherlands.

Abridged Wageningen University & Research annual financial report

3.1 Wageningen University

This annual report includes the abridged Wageningen University annual financial report. It is directly derived from the full annual financial report for the 2019 financial year. The abridged annual financial report does not contain all the explanations required by law. The full Wageningen University annual financial report for 2016 can be found on the Wageningen University & Research website.

3.1.1 Results developments

In 2019, Wageningen University recorded a positive result of €20.0 million, which is a decrease of €7.6 million in comparison to 2018. This result was better than was expected in the budget.

In 2019, Wageningen University, on the basis of the financial reporting guidelines, was forced to attribute the additional funding for the Science & Technology Sector Plan (€1.8 million) and the Van Rijn funding (€4.5 million) to the result, while the additional expenditures associated with these funds only takes place in later years. As a result, the result is €6.3 million higher than if the income and expenses were to be matched on a one-to-one basis. The operating result without these exceptional items therefore amounts to approximately €13.7 million.

In 2019, Wageningen University significantly caught up in scaling up its personnel and facilities, causing expenses to increase by €29.6 million. Attracting sufficient personnel on a timely basis and realising the supporting facilities is a major challenge. In the primary process, Wageningen University has therefore been unable to spend about €14 million in funding; neither at the department level, nor at the corporate level. It is difficult to find qualified staff and recruitment takes time. This means that the workforce has not expanded in line with the regular increase in funding as a result of the growth in student numbers and the increase in indirect government and contract funding.

Table 3.1 Wageningen University results (in € millions)

	2019	2018
Departments	15.7	14.8
Central departments		
Operational result	-1.8	4.0
Incidental result	6.3	7.8
Addition made to the appropriated reserve for project costs in later years	-0.2	1.0
Operating result based on the Ministry of Education, Culture and Science	20.0	27.6
guidelines		

The departments achieved a positive joint annual result of €15.7 million, which is an increase of €0.9 million in comparison to 2018. All departments achieved a positive result. These positive results are mostly due to the abovementioned factors.

The operating result of the central departments amounted to €-1.8 million. This is €5.8 million lower than in 2018. Early on in the year, the Executive Board decided to provide additional funding to the organisation to encourage chair groups to recruit additional staff. This caused the results of the central departments to decrease. The corporate departments also found it difficult to scale up quickly and to attract additional staff. This means that a positive result was achieved in the (policy) budgets of the corporate departments too.

In addition, the Executive Board and corporate staff processed a number of result items amounting to €6.1 million that will be offset by negative results over the coming years. This concerns the funding allocated in December 2019 on the basis of the Van Rijn Committee Report (€4.5 million), the additional funding for science & technology education (€1.8 million), as well as the expenditures for internal projects for which funding was received in previous years (€-0.2 million). It was no longer possible to disburse the Van Rijn funding and the Science & Technology Education funding in 2019. However, the financial reporting guidelines require that this income be recognised in the year of receipt. The funds will be spent over the coming years, which then produces a lower result. Wageningen University has formed an appropriated reserve for these funds.

As prescribed in the regulations, direct government funding is recognised as income by Wageningen University. Income related to project costs that will be incurred in later years is calculated as income in the reporting year and a write-down in later years. The distortion this causes is neutralised via the appropriated reserve. In accordance with this approach, €0.2 million of the result was added to this appropriated reserve in 2019. The estimated proceeds from the valorisation of fixed assets were not realised in 2019 due to the nitrogen crisis, which caused real estate developers to be reticent in finalising their purchases.

3.1.2 Revenue and costs developments

Revenue in 2019 increased by €22.3 million. The basic funding - government funding excluding earmarked funds and tuition fees – rose from €240.2 million to €264.4 million.

Government funding increased by €23.9 million in 2019 in comparison to 2018. Effective from 1 January 2018, Wageningen University was funded by the Ministry of Education, Culture and Science (OCW). During the 'harmonisation' of the Wageningen University funding in 2019 in line with the OCW funding model, the so-called capping rule was abolished. The capping rule, which was part of the funding methodology of the Ministry of Economic Affairs and Climate Policy (EZK), stipulated that the government funding for Wageningen University could not increase, nor decrease, by more than 2% annually. Aside from the elimination of the capping rule, Wageningen University received additional funding in 2019 (approximately €6 million) as part of the fixed funding components so that the existing capping (approximately €12 million in 2018) has been partially offset.

Due to the higher input parameters - in this case, the number of funded registered students, degrees and PhD graduations - government funding increased by €4.0 million. As a result of the adjustment of the OCW's macro framework due to the overall increase in the number of students in academic education (reference frameworks), another €2.0 million was added to this in 2019. In May 2019, the Van Rijn Advisory Committee presented the 'Switchover' [Wissels om] Report. This reports provides various recommendations concerning the funding of higher education. On the basis of this report, the 4TU in 2019 received additional funding for science & technology education and, effective from 2020, various changes will be made to the Ministry of OCW's funding methodology. In 2019, the additional government funding in respect of the Van Rijn recommendations amounted to €4.5 million for Wageningen University. In addition, in 2019, additional funding amounting to €1.8 million was received for the Science & Technology Sector Plan.

An adjustment amounting to €4.5 million was made to compensate for increased wage costs. Furthermore, to compensate for lost earnings due to the halving of the statutory tuition fees for first year Bachelor's students, an amount of €1.4 million was added to the direct government funding. Due to an overall lump sum discount, the government funding decreased by €0.5 million. Other minor changes came to a total adjustment of €0.2 million.

The income from work for third parties increased by 7% to €98.5 million. This income consists of programme funding (research funding and targeted subsidies), which increased by 7% to €34.3 million; co-funded projects and matching market funding, which increased by 10% to €19.0 million; and contract research and Top Sectors, which increased by 6% to €45.2 million.

In comparison to 2018, personnel costs increased by €28.6 million to €245.9 million. This is due to higher staffing levels (+187 FTE), 3.4% higher salary costs per FTE, an increase in other personnel costs by €7.9 million and other effects (€0.4 million). In 2018, staffing levels increased from 2,818 FTE to 3,005 FTE.

Income was €17.8 million higher than budgeted (not including the valorisation of surplus real estate). This is in part due to the following items that were not included in the budget: the Van Rijn funding, the Science & Technology Sector Plan funding (together €6.3 million) and the higher revenue from third party project contract work, ancillary activities and other income (€11.8 million). The proceeds from tuition fees was €2.9 million lower than budgeted due to lower student enrolment from non-EEA countries, as well as regular students (€1.0 million). In addition, the waivers were recognised under expenses in the budget and as negative income in the actual figures (\leq 1.9 million).

Costs were €5.2 million lower than budgeted. The above-referenced factors relating to the upscaling of personnel and facilities played a major role in this respect. In addition, it should be noted that the costs for new activities are included in the budget under general and specific expenses. Actual implementation shows that these activities are partially carried out by new personnel. This causes a shift from tangible costs to personnel costs when comparing the budgeted and actual figures.

3.1.3 Balance sheet developments

The liquidity of Wageningen University increased in 2019 from €88.9 million to €114.2 million. The factors that affected this increase in liquidity are listed in Table 3.2.

Table 3.2 Wageningen University liquidity overview

	2019
Result excl. participating interests	19.9
Increase in fixed assets (investments minus depreciation and sales)	-10.1
Increase in short-term receivables	-0.2
Increase in short-term debts	16.7
Decrease in provisions	-0.4
Decrease in long-term debt	-0.6
Total	25.3

The increase in fixed assets is caused by investments in land and buildings (€17.7 million) and machinery and equipment (€15.4 million). The increase in short-term debts is due to the increase in the furnished advances. The total liquidity of €114.2 million includes advances of €127.0 million, of which \in 8.0 million are funds to be passed on to partners. These funds to be passed on to partners were received due to Wageningen University being the lead party for a number of consortia. These funds will be passed on to partners in 2020.

Wageningen University's solvency ratio was 52.3% on 31 December 2019. This was 52.0% in 2018.

Changes in legal structure and capital interests

There were no changes in the legal structure in 2019.

3.1.4 Outlook

For 2020, Wageningen University expects to achieve an operating result (excluding exceptional income) of €3.0 million. The result will decrease sharply compared to 2019 due to the additional expenses in relation to the continually increasing number of students. The additional staff, which were recruited towards the end of 2019, will be fully included in the budget for 2020.

Turnover is expected to increase to €396.8 million in 2020. This €4.5 million increase is caused by an increase in basic funding by €15.6 million to a total of €278.2 million and a decrease in research

funding and contract funding by €0.2 million to a total of €99.4 million. The other income (excluding exceptional income) will decrease by €0.2 million to €19.2 million.

Government funding will increase by €13.2 million to €237.8 million. Of this, €3.8 million is related to an increase in the funding variables and €4.4 million is related to anticipated additional funding to cover salary and price increases that are yet to be received. In addition, during the transfer from LNV to OCW, OCW has made additional funding available to partially offset the existing capping. The effect of the Van Rijn funding, the Quality Agreements and the Science & Technology Sector Plan totals €1.8 million.

Tuition fees will increase by €2.3 million to €40.4 million due to the rise in student numbers. The total number of Bachelor's and Master's students will increase from 12,300 students in October 2019 to an estimated 12,666 students in October 2020.

Direct personnel costs will increase by €15.8 million to €261.3 million. This is caused by an increase in staffing levels by 318 FTE to a total of 3,323 FTE, a decline in other personnel costs by €11.7 million due to a decrease in the number of temporary employees and a 3.0% rise in average salary costs due to increases and wage costs developments.

Liquidity will decrease by €24.2 million to €90.0 million. With a cash position of €90.0 million, the continuity of business operations in 2020 is guaranteed. However, should an additional need for liquidity arise, Wageningen University also has the option of requesting collegial funding from Wageningen Research.

The investment activities for Wageningen University are budgeted at €60.9 million. This mainly relates to investments in the third education building (€24.2 million), the Dialogue Centre (€7.9 million), the Unifarm and NPEG greenhouses (€5.6 million) and Plus Ultra II (€3.1 million). Facilities and Services will invest €7.6 million, of which €4.6 million will be reserved for IT hardware and €1 million for laboratory equipment. Decentralised investments are budgeted at €9.6 million. Of this, Shared Research Facilities will invest €4.0 million in laboratory equipment.

For further information on the development of the results in the coming four years, we refer to the continuity section in the Annual Report.

Abridged Wageningen University annual financial report 3.1.5

CONSOLIDATED BALANCE SHEET AFTER THE ALLOCATION OF THE NET RESULT

	31-12-2019	31-12-2018
ASSETS		
FIXED ASSETS		
Intangible fixed assets	612	1,075
Tangible fixed assets	247,032	236,401
Financial fixed assets	463	501
Total fixed assets	248,107	237,977
CURRENT ASSETS		
Inventory	52	62
Receivables and accrued assets	42,914	42,671
Liquid assets	114,208	88,858
Total current assets	157,174	131,591
TOTAL ASSETS	405,281	369,568
CAPITAL AND LIABILITIES		
EQUITY CAPITAL		
General reserve	196,079	182,161
Designated reserve	15,976	9,876
EQUITY CAPITAL	212,055	192,037
PROVISIONS	11,875	12,544
LONG-TERM DEBT & EQUALISATION ACCOUNT	4,395	4,776
SHORT-TERM DEBT	176,956	160,211
TOTAL LIABILITIES	405,281	369,568

CONSOLIDATED PROFIT AND LOSS STATEMENT

	Results for 2019	Budget for 2019	Results for 2018
INCOME			
Direct government funding	226,359	217,500	202,498
Tuition fees	38,060	41,000	37,756
Research funding and targeted subsidies	34,329	33,700	32,208
Co-funding and matching market revenue	18,962	17,300	17,206
Top Sectors	2,456	1,400	1,350
Bilateral market	42,705	36,200	41,437
Ancillary activities	16,456	19,900	16,385
Other income	5,268	0	13,666
Total income	384,595	367,000	362,506
EXPENDITURES			
Personnel costs	245,927	234,100	217,279
Depreciation	22,768	22,000	22.882
Accommodation costs	23,301	26,300	24,701
General costs	35,432	42,300	31,587
Specific costs	37,182	45,100	38,504
Total expenditures	364,610	369,800	334,953
OPERATING RESULT	19,985	-2,800	27,553
Financial income and expenditures	-122	-200	54
RESULT FROM OPERATIONAL ACTIVITIES	19,863	-3,000	27,607
BEFORE TAX	13,003	3,333	27,007
Taxation on operational activities	0	0	0
Result from participating interests	155	0	-4
RESULT FROM OPERATIONAL ACTIVITIES	20,018	-3,000	27,603
AFTER TAX			
Third-party share	0	0	0
Exceptional income and expenditures	0	0	0
NET RESULT	20,018	-3,000	27,603

CONSOLIDATED CASH FLOW STATEMENT

	2019	2018
OPERATIONAL ACTIVITIES		
Operating result	19,985	27,553
Depreciation and impairments	22,768	22,882
Change in provisions	-669	-4,452
	42,084	45,983
Change in inventory	10	13
Change in receivables	-241	3,955
Change in short-term debt	16,744	-351
Cash flow from investment activities	58,597	49,600
Interest received	16	109
Interest paid	-138	-55
Cash flow from operational activities	58,475	49,654
INVESTMENT ACTIVITIES		
Investments in intangible assets	-57	-71
Divestments in intangible assets	0	33
Investments in buildings and land (incl. WIU)	-17,719	-6,665
Investments in other tangible assets	-15,362	-10,914
Divestments of tangible assets	202	4,186
Investments in participating interests and members' capital	0	-36
Divestments of financial fixed assets	192	31
Cash flow from investment activities	-32,744	-13,436
FINANCING ACTIVITIES		
Newly acquired loans	0	0
Repayment of long-term debt	0	0
Changes to equalisation account	-381	-1,227
Cash flow from financing activities	-381	-1,227
CASH FLOW	25,350	34,991
CHANGE IN LIQUID ASSETS		
Balance of liquid assets on 1 January	88,858	53,867
Balance of liquid assets on 31 December	114,208	88,858
Change in liquid assets	25,350	34,991

STAFFING LEVELS

	2019	2018
FACULTY		
Academic staff:		
Professor	112.1	98.1
Associate Professor	202.2	211.9
Assistant Professor	258.2	248.8
Researchers	338.1	308.8
Lecturers and other academic staff	133.0	109.1
Trainee research assistants	647.7	606.2
TOTAL ACADEMIC STAFF	1,691.3	1,582.9
Support and administrative staff:		
Job grades 13+	7.9	11.1
Job grades 9 - 12	195.5	208.3
Lower than job grade 9	348.3	329.6
Not specified	13.2	
TOTAL SUPPORT AND ADMINISTRATIVE	564.9	549.0
STAFF		
TOTAL FACULTY	2,256.2	2,131.9
GENERAL SERVICES		
Job grades 13+	41.9	43.2
Job grades 9 - 12	288.2	265.0
Lower than job grade 9	175.3	176.6
TOTAL GENERAL SERVICES	505.4	484.8
Total Employees with a Wageningen	2,761.6	2,616.7
University contract ¹⁾		
Charged-on employees with a Wageningen	243.2	201.4
Research Foundation contract		
Total staffing levels	3,004.8	2,818.1

^{1) 11.9} FTE of employees with a WU contract are directly paid by the Wageningen Research Foundation. These employees are not included in this statement.

3.1.6 **Accounting Principles**

General

The annual financial report was prepared and validated by the Executive Board on 20 April 2020 and approved by the Supervisory Board on 27 May 2020. The annual financial report was prepared in accordance with the below accounting principles. Any departure from these principles is stated alongside the relevant financial information.

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

General accounting principles for the preparation of the annual financial reports

Wageningen University is part of a group that also comprises Wageningen University Holding B.V., Spinterest B.V., ISRIC Foundation and Expat Center Foundation.

The annual financial reports are prepared according to the historical cost model. Unless otherwise stated, assets and liabilities are calculated at nominal value.

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

The annual financial reports were prepared in accordance with Regeling Jaarverslaggeving Onderwijs (Reporting Guidelines for Educational Institutions), the Dutch Civil Code, Book 2, Title 9 and the Richtlijnen voor de Jaarverslaggeving (guidelines for annual reporting).

Use of estimates

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

Table 3.3 Consolidated participating interests

	Shareholder	Registered office	% 31-12-2018	% 31-12-2019
Wageningen Universiteit Holding B.V.	Wageningen	Wageningen	100	100
	University			
Spinterest B.V.	WUH B.V.	Wageningen	100	100
ISRIC Foundation	n/a	Wageningen	n/a	n/a
Expat Center Foundation	n/a	Wageningen	n/a	n/a

Table 3.4 Non-consolidated participating interests

	Registered	%	%
	office	31-12-2018	31-12-2019
Ceradis B.V.	Wageningen	3	2
Bio-Prodict B.V.	Wageningen	5	5
Surfix B.V.	Wageningen	12	0
Green Dino B.V.	Wageningen	11	11
KLV Professional Match B.V.	Wageningen	5	2
A-Mansia Biotech SA	Louvain-la-neuve	20	9
Innovation Industries	Amsterdam	0	0
Caribou Biosciences Inc.	Delaware	1	0
Plant Meat Makers B.V.		0	5

Accounting principles for the valuation of assets and liabilities

Intangible Fixed Assets

Development costs, patents and licences, software, goodwill and production rights are not capitalised unless they are purchased from third parties or the production costs can be reliably established. In addition, the intangible fixed asset must be capable of generating future economic benefits. Intangible fixed assets are valued at acquisition or production cost. Amortisation is applied in proportion to the realisation of the forecast revenue over five years. When revenue realisation cannot be reliably determined, the straight line method is used. Pursuant to statutory obligations, a statutory reserve is maintained for the capitalised amount of development costs. Write-offs as a result of impairment, sale, loss or discontinuation are listed separately.

Tangible fixed assets

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

Table 3.5Depreciation periods

Asset type	Linear depreciation
	in years
Company property / Work in progress	None
Site layout and infrastructure	60 years straight line
Buildings	
Shell	60 years straight line
Fittings	30 years straight line
Built-in equipment / furnishings	15 years straight line
Greenhouses, sheds, sundry buildings/structures	15 years straight line
Machinery and equipment	
Office furniture / machines and equipment / inventory of restaurant facilities / fiber optic	10 years straight line
network / other inventory	
Laboratory equipment / audio-visual equipment / vehicles / PR and information material	5/8 years straight line
ICT equipment including software (network hardware)	5 years straight line
ICT equipment including software (other hardware)	4 years straight line
Personal computers	4 years straight line

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 purchased for a project that following the completion of the project can no longer be used is depreciated during the term of the project.

The expenditures for major overhauls are included in the cost price of the assets as soon as these costs are incurred and comply with the capitalisation criteria. The book value of the components that are replaced is then considered as disinvested 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 impairment, sale, loss or discontinuation are listed separately.

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

Financial fixed assets

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

Inventory

This item is comprised of trading stock, finished product, livestock and stock of harvested agricultural produce. The trading stock and finished product are valued in accordance with the FIFO method at the acquisition cost or production cost increased by a margin for indirect costs. The valuation of the livestock and stock of harvested agricultural produce is based on market prices.

The value of unmarketable stock or stock with a lower market value is decreased accordingly. On the basis of the average annual use in the last ten years, antisera were found that according to this calculation had been in stock longer than three years.

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

Receivables and accrued assets

Receivables are valued at nominal value less a provision for uncollectible debts, where relevant.

Work in progress

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/furniture and equipment), 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 related 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.

Equity capital

Wageningen University does not distinguish between private and public capital.

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

Two designated reserves are formed within the equity capital at corporate level:

- the innovation fund
- reserve in relation to projects to be carried out in the future.

Provisions

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

Provisions are created for:

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

Provision for WW and BW obligations

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

Provision for WIA and ZW-flex

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

Other personnel provisions - service bonuses

The anticipated obligation arising from future service anniversary bonuses is determined on the basis of historical information and withdrawals are made on an occurrence basis. The present value is determined on the basis of the prevailing market rate of interest for Wageningen University.

Other personnel provisions - pensions

The pension scheme for the whole of WUR was (compulsorily) placed with ABP. Pension accumulation takes place on the basis of the average earnings system (middelloonsysteem). The current coverage ratio rose from 97.1% to 97.8% in 2019. The policy coverage (the average of the current coverage ratios across the last twelve months) decreased in 2019 from 103.8% to 95.8%, ending up 8.4% under the required minimum. This coverage will on the one hand be decisive in increasing pensions. Partial indexation is possible with a policy coverage of 110% or higher. ABP may index fully starting from 123%. This means that with the current 95.8%, we are still far from this objective. On the other hand, the policy coverage can play a role in decreasing pensions. If this policy coverage until 2020 remains below the required level of 104.2% and the current coverage ratio at the end of 2020 is also lower than 104.2%, a lowering of pensions is inevitable.

ABP currently expects pensions to remain unchanged in 2020. Currently, the possibility that pensions will have to be reduced in 2021 and the years following is real. Furthermore ABP expects that it will not be possible to increase pensions over the coming years by the price index (indexation).

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

Provisions for reorganisation expenses

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

Provision for product and contract risks

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

Long-term debt

Long-term debt concerns liabilities that are due in more than one year from the end of the relevant financial year.

Short-term debt

Short-term debt concerns liabilities that are due within one year from the end of the relevant financial year.

Accounting principles to determine income and expenditure

General

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

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

Direct government funding and other payments

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

Tuition and course fees

The tuition fees for the reporting year include the statutory tuition fees and the institutional tuition fees applicable for that year. 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. Grants to compensate for costs incurred by the group are systematically recorded as proceeds in the profit and loss statement in the same period in which the costs are incurred. Grants to compensate the group for the costs of an asset are systematically recorded in the profit and loss statement 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 is recorded as income in the profit and loss statement for an equal amount of incurred costs, insofar as they are contractually reimbursed by the client.

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 the accounting estimates

The accounting parameters used to estimate the unemployment insurance (WW) and civil (BW) obligations and the future transition payments were re-assessed for the 2019 financial year. For the 2019 financial year, the accounting estimate for current payments was reduced from 80% to 70% and the future unemployment insurance (WW) and civil (BW) obligation for the current workforce was reduced from 20% to 18%. The other rates, such as the percentages for the transition payment and for 'restitutions' remained unchanged. These probabilities are 20% and 10%, respectively. The adjustment of these rates for determining the provision are due to a retrospective audit and the changing economic situation for Wageningen University.

3.1.7 Auditor's report by the independent auditor

To: the Executive Board and the Supervisory Board of Wageningen University

Our opinion

The abridged annual financial report of Wageningen University included in Chapter 3.1 of the Wageningen University Annual Report 2019 (hereinafter: the abridged annual financial report) is directly derived from the full audited Wageningen University annual financial report 2019. In our opinion, the abridged annual financial report included in Chapter 3.1 of the Wageningen University & Research Annual Report 2019 is consistent with the audited Wageningen University annual financial report 2019 in all materially relevant aspects.

Abridged annual financial report

The abridged annual financial report does not contain all the explanations required on the basis of the Reporting Guidelines for Educational Institutions (Regeling Jaarverslaggeving Onderwijs) and the Standard Remuneration Act for Public and Semi-public Sector Senior Officials (Beleidsregels WNT 2019). Consulting the abridged annual financial report of Wageningen University and our accompanying report, therefore, cannot take the place of consulting the audited and approved Wageningen University annual financial report and our accompanying audit report. The abridged annual financial report and audited annual financial report do not include the events that took place after the 27 May 2020 date of the auditor's report.

The audited annual financial report and our auditor's report are included We approved the audited annual financial report 2019 of Wageningen University in our auditor's report dated 27 May 2020.

Responsibilities of the Executive Board and the Supervisory Board regarding the abridged annual financial report

Management is responsible for the preparation of the abridged annual financial report in accordance with the basic principles as described in the audited Wageningen University annual financial report. The Supervisory Board is responsible for overseeing the financial reporting process of Wageningen University.

Our responsibilities

Our responsibility is to draw a conclusion about whether this abridged annual financial report is in all materially relevant aspects, consistent with the audited annual financial report based on our audit, which was conducted in accordance with Dutch law, including the Dutch Standards on Auditing 810, "Opdrachten om te rapporteren betreffende samengevatte financiële overzichten".

Eindhoven, 27 May 2020 Ernst & Young Accountants LLP signed by H.E. Oostdijck RA

3.2 Wageningen Research Foundation

This annual report includes the abridged Wageningen Research annual financial report. This report is directly derived from the full Wageningen Research annual financial report 2019. The abridged annual financial report does not contain all the explanations required by law. The full Wageningen Research annual financial report for 2016 can be found on the Wageningen University & Research website.

3.2.1 Results developments

Wageningen Research Foundation obtained a positive net result of €14.9 million in 2019. This result is €4.5 million higher than the net result for 2018 (€10.4 million). The result from ordinary business operations before tax amounted to €19.4 million. The reason for this improved result is due to a combination of good economic market conditions, the growth provided for in the 2019 budget and the shortages on the labour market. Due to the filled orderbook and the inability to fully staff job vacancies, WR did everything in its power to achieve the contracted project objectives. As a result, relatively greater use was made of WR employees for external contracts than provided for in the budget.

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

	2019	2018
Result from institutes and primary process	13.0	9.2
Result from accommodations and internal WW/BW premiums incl. the cost of capital	7.0	9.0
Central departments:		
Incidental result	1.0	-2.9
Operational	-1.6	-1.5
Result before tax Wageningen Research	20.4	13.8
Corporate tax	-5.3	-3.4
Deferred tax asset	0.8	0.0
Net result Wageningen Research	14.9	10.4

The institutes achieved a positive joint annual result of €13.0 million, an increase of €3.8 million in comparison to 2018. The positive results of the institutes are mostly due to the abovementioned factors. The result for 2019 was positively affected by a number of incidental result components, totalling €1.0 million:

Reorganisations and "werkenderwijs" programmes and other provisions € 0.1 million Sale of fixed assets € 0.9 million

3.2.2 Revenue and costs developments

The turnover of 2019 was €344.0 million, an increase of 6.8% as a result of growing demand. For 2018, the total turnover was €321.9 million. The growth in research turnover (turnover minus ancillary activities and other income) was 9.1%. Wageningen Research's largest client is the Ministry of Agriculture, Nature and Food Quality (LNV), which generates approximately 43% of the total turnover (49% of research turnover). LNV's research programme increased by €13.6 million in comparison to 2018, to a total of €149.2 million. Another important development was the €7.8 million increase in turnover from the NVWA research programme as a result of the merger with NVWA.

In comparison to 2018, personnel costs increased by €18.0 million to €205.8 million. There are two underlying factors to account for this, namely the number of FTE excluding interns increased by 177 and there was a salary increase of 2.0%. The expenses for temporary employees and contracted personnel are higher than in 2018.

In 2019, a provision for a deferred tax asset was made relating to the differences between the valuations for tax and commercial purposes of assets that are likely to be realised in the next five years. This resulted in an incidental positive result of €0.8 million.

3.2.3 Balance developments

At the end of 2019, liquidity had increased by €11.4 million in comparison to 2018; from €117.7 million to €129.2 million. The following are the factors that explain the increase:

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

	2019
Net result	+16.6
Net decrease in fixed assets (investments minus depreciation and sales)	-2.3
Increase in short-term debt and receivables	+5.8
Decrease in provisions	-4.2
Decrease in long-term debt and receivables	-4.3
Result from participating interests	-0.2
Total change in cash and cash equivalents	+11.4

The change in fixed assets consists of €18.9 million of building and inventory depreciation; investment expenditures (including participating interests and members' capital) amounting to €24.3 million; and divestments amounting to €3.1 million.

The amount of the advances received, including funds to be passed on to partners, amounted to €71.0 million on the balance sheet date. Due to the positive result, solvency rose to 60.1%. At yearend 2018, solvency was 58.2%.

Changes in legal structure and capital interests

There were no changes to the group in 2019.

3.2.4 Outlook

Wageningen Research Foundation is expected to have a positive result of €1.0 million in 2020. Wageningen Research Foundation has defined five programmes in the WUR 2019-2022 Strategic Plan - Finding Answers Together - that are aligned with the agendas of the Ministry of Agriculture, Nature and Food Quality (LNV) as well as other ministries, the Top Sectors, the Sustainable Development Goals, and the European Agenda. The programmes are focused on continuous improvement to maintain excellence in research in line with these themes.

Total revenue for 2020 is forecasted to be €361.8 million. This is €17.8 million higher than in 2019. Most of this increase is from contract research (+€10 million), followed by the Top Sectors (both the Ministry of Economic Affairs and Climate Policy (EZK) and the business community) with an increase of €7 million. In addition, there is an increase in co-funding and subsidies of €2 million, an increase in programme funding (including SRT) of €1 million and an increase of €1 million in ancillary activities. The knowledge base stays the same and other income is budgeted €2.0 million lower.

Investment activities are budgeted at €37.6 million and are, therefore, €19.2 million higher than the budgeted depreciation. The most important investments are in the thermal energy storage systems on Campus (€10.2 million), changes in the animal accommodations of the WBVR Institute (€9.6 million) and major overhauls (€4.3 million). The decentralised investments are budgeted at €9.4 million, of which €4.1 million is for laboratory equipment and €1.5 million for software.

Wageningen Research expects a liquid assets balance of €95.0 million for 2020. This is €34.2 million lower in comparison to the actual figure realised in 2019. The budgeted decrease is mostly due to the investment expenditures.

At 60%, solvency in 2020 will remain the same as in 2019.

Abridged Wageningen Research annual financial report 3.2.5

CONSOLIDATED BALANCE SHEET AFTER THE ALLOCATION OF THE NET RESULT

Balance sheet	31-12-2019	31-12-2018
ASSETS		
FIXED ASSETS		
Intangible fixed assets	716	56
Tangible fixed assets	298,555	296,65
Financial fixed assets	39,724	42,31
Total fixed assets	338,995	339,54
CURRENT ASSETS		
Inventory	4,007	3,86
Receivables and accrued assets	83,600	86,77
Liquid assets	129,162	117,72
Total current assets	216,769	208,36
TOTAL ASSETS	555,764	547,90
EQUITY CAPITAL	0	
EQUITY CAPITAL Issued capital	0	
EQUITY CAPITAL Issued capital General reserve	0	
EQUITY CAPITAL Issued capital General reserve Statutory reserve	0 455	
EQUITY CAPITAL Issued capital General reserve Statutory reserve Other reserves	0 455 333,547	319,14
EQUITY CAPITAL Issued capital General reserve Statutory reserve Other reserves TOTAL EQUITY CAPITAL	0 455 333,547 334,002	319,14 319,14
EQUITY CAPITAL Issued capital General reserve Statutory reserve Other reserves TOTAL EQUITY CAPITAL THIRD-PARTY SHARE	0 455 333,547	319,14 319,14
EQUITY CAPITAL Issued capital General reserve Statutory reserve Other reserves TOTAL EQUITY CAPITAL THIRD-PARTY SHARE GROUP CAPITAL	0 455 333,547 334,002 0 334,002	319,14 319,14 319,14
EQUITY CAPITAL Issued capital General reserve Statutory reserve Other reserves TOTAL EQUITY CAPITAL THIRD-PARTY SHARE GROUP CAPITAL EQUALISATION ACCOUNT	0 455 333,547 334,002 0 334,002	319,14 319,14 319,14
EQUITY CAPITAL Issued capital General reserve Statutory reserve Other reserves TOTAL EQUITY CAPITAL THIRD-PARTY SHARE GROUP CAPITAL EQUALISATION ACCOUNT PROVISIONS	0 455 333,547 334,002 0 334,002 0 21,103	319,14 319,14 25,28
CAPITAL AND LIABILITIES EQUITY CAPITAL Issued capital General reserve Statutory reserve Other reserves TOTAL EQUITY CAPITAL THIRD-PARTY SHARE GROUP CAPITAL EQUALISATION ACCOUNT PROVISIONS LONG-TERM DEBT SHORT-TERM DEBT	0 455 333,547 334,002 0 334,002	319,14 319,14 319,14 25,28 47,33 156,14

CONSOLIDATED PROFIT AND LOSS STATEMENT

	Results for 2019	Results for 2018
INCOME		
Basic funding	25,869	24,487
Programme funding	93,295	73,592
Co-funding and subsidies	24,754	24,298
Top Sectors	60,419	57,249
Bilateral market	98,821	99,351
Ancillary activities	35,875	37,261
Other income	4,920	5,644
otal income	343,953	321,882
EXPENDITURES		
Personnel costs	205,805	187,831
General costs	64,679	63,685
Specific costs	50,499	53,052
Total expenditures	320,983	304,568
Other income and expenditures	0	0
OPERATING RESULT	22,970	17,314
inancial income and expenditures	-3,867	-3,881
RESULT FROM OPERATIONAL ACTIVITIES BEFORE TAX	19,103	13,433
Taxation on operational activities	-4,491	-3,433
Result from participating interests	243	442
RESULT FROM OPERATIONAL ACTIVITIES AFTER TAX	14,855	10,442
Third-party share	0	0
Exceptional income and expenditures	0	0

CONSOLIDATED CASH FLOW STATEMENT

	Results for 2019	Results for 2018
OPERATIONAL ACTIVITIES		
Net result	14,855	10,442
Depreciation and impairments	18,891	17,451
_	33,746	27,893
Change in provisions	-4,186	-1,745
Change in inventory	-138	340
Change in receivables	3,176	4,260
Change in short-term debt	3,367	20,917
Result from non-consolidated participating interests	-243	-442
_	1,976	23,330
Cash flow from operational activities	35,722	51,223
INVESTMENT ACTIVITIES		
Investments in intangible assets	-498	5
Investments in buildings and land (incl. WIU)	-9,834	-17,791
Investments in other tangible assets	-13,739	-7,229
Investments in participating interests and	-264	-458
members' capital		
Divestments of fixed assets	3,134	1,061
Cash flow from investment activities	-21,201	-24,412
FINANCING ACTIVITIES		
Change in long-term receivables from the LNV	3,945	3,944
Change in deferred corporate income tax	-845	0
Change in long-term debt to the LNV	-6,202	-6,104
Change in other long-term debt	22	-682
Decrease in lease obligations	0	0
Change in equity capital	0	0
Change in third-party share	0	0
Cash flow from financing activities	-3,080	-2,842
CASH FLOW	11,441	23,969
CHANGE IN LIQUID ASSETS		
Balance of liquid assets on 1 January	117,721	93,752
Balance of liquid assets on 31 December	129,162	117,721
Change in liquid assets	11,441	23,969

3.2.6 **Accounting Principles**

General

The Wageningen Research Foundation has its registered office in Wageningen and is registered in the commercial register under number 09098104.

The annual financial report was prepared and validated by the Executive Board on 20 April 2020 and approved by the Supervisory Board on 27 May 2020. The annual financial report was prepared in accordance with the below accounting principles. Any departure from these principles is stated alongside the relevant financial information. The settlements and debt ratios between the various members of the group (which are referred to as inter-group payments) have been eliminated. The figures for the previous financial year are in accordance with the figures in the annual financial report of the relevant year. Variations may arise as a result of corrections, shifts between items or changes in the rounding-off method.

General accounting principles for the preparation of the annual financial reports

Wageningen Research Foundation, Wageningen Research Holding BV and a number of subsidiaries are grouped together. Staff are employed by Wageningen Research and are allocated to the various operating companies on the basis of the actual wage costs incurred. Wageningen Research owns the real estate used by the operating companies pursuant to contracts for use.

The annual financial reports are prepared according to the historical cost model. Unless otherwise stated, assets and liabilities are calculated at nominal value.

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

The annual financial reports are prepared pursuant to the Netherlands Civil Code, Book 2, Title 9, and the accounting standards issued by the Dutch Accounting Standards Board.

Use of estimates

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

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

Consolidation

The consolidated reports incorporate the annual financial reports of Wageningen Research, its subsidiaries and other organisations over which the institution exercises control (pursuant to the actual situation) or central management. The subsidiaries are legal entities directly or indirectly controlled by 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 financial reports of Wageningen Research, its subsidiaries and other organisations over which the institution exercises control (pursuant to the actual situation) or central management are fully incorporated into the consolidated financial report. Third party shares with respect to the group capital and the group result are reported separately.

 Table 3.8
 Consolidated participating interests

	Shareholder	Registered office	% ultimo 2018	% ultimo 2019
Agri New ventures B.V.	WBG	Wageningen	100%	100%
Wageningen Research Holding B.V.	Wageningen Research	Wageningen	100%	100%
Exploitatiemaatschappij Windmolenparken Lelystad B.V.	WBG	Wageningen	100%	100%
Wageningen Business Generator B.V.	Holding	Wageningen	100%	100%
Windmolenpark Neushoorntocht B.V.	WBG	Wageningen	100%	100%
Windmolenpark Mammoethtocht B.V.	WBG	Wageningen	100%	100%

 Table 3.9
 Non-consolidated participating interests valued at acquisition cost

	Shareholder	Registered	% ultimo 2018	% ultimo 2019
		office		
Bfactory B.V.	WBG	Wageningen	17%	17%
Isolife B.V.	WBG	Wageningen	5%	5%
Telemetronics Biometry B.V.	WBG	Heteren	4%	4%
Wageningen Science & Technology Consulting	Holding	Beijing	100%	100%
Services Ltd.				
Wageningen UR Uganda LTD	WR	Uganda	100%	100%

Table 3.10 Non-consolidated participating interests valued at net asset value

	Shareholder	Registered office	% ultimo 2018	% ultimo 2019
CoVaccine B.V.	WBG	Lelystad	25%	25%
Fresh Forward Holding B.V.	WBG	Wageningen	49%	49%
Knowhouse B.V.	WBG	Horst	30%	30%
VOF Oostwaardhoeve	ANV	Slootdorp	50%	50%

ACCOUNTING PRINCIPLES FOR THE VALUATION OF ASSETS AND LIABILITIES

Intangible Fixed Assets

Development costs, patents and licences, software, goodwill and production rights are not capitalised unless they are purchased from third parties or the production costs can be reliably established. In addition, the intangible fixed asset must be capable of generating future economic benefits. Intangible fixed assets are valued at acquisition or production cost. Amortisation is applied in proportion to the realisation of the forecast revenue over five years. When revenue realisation cannot be reliably determined, the straight line method is used. Pursuant to statutory obligations, a statutory reserve is maintained for the capitalised amount of development costs. Write-offs as a result of impairment, sale, loss or discontinuation are listed separately.

Tangible fixed assets

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

Table 3.11 Depreciation periods

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

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

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

The 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 impairment, sale, loss or discontinuation are listed separately.

The expenditures for major overhauls are included in the cost price of the assets as soon as these costs are incurred and comply with the capitalisation criteria. The book value of the components that are replaced is then considered as disinvested 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.

Financial fixed assets

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

Inventory

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

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

Receivables and accrued assets

Receivables are valued at nominal value less a provision for uncollectible debts, where relevant.

Project costs yet to be invoiced

Project costs yet to be invoiced are valued at the cost of direct material use and labour, increased by a margin for indirect costs. Invoiced instalments and forecast losses on projects are deducted from this balance. The result is allocated in proportion to the progress (proportion of actual costs incurred) of a project. After accounting for the prepayments that have been received, projects with a debit balance are then included under short-term receivables. Projects with a negative balance are included under the prepayments item of short-term debt.

Equity capital

- Issued capital:
 - The nominal value of issued and paid-in capital is included under this item.
- Statutory reserve:
 - The mandatory maintenance of a statutory reserve for research and development costs capitalised in the balance sheet.
- General reserve:
 - This reserve is credited with the operating result in any year in which the result is not allocated to a specific use.

Third-party share

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

Provisions

Unless otherwise stated, provisions are valued at nominal value. The amount of the provision recognised is the best estimate of the amount that will be required to settle the relevant obligations and losses on the balance sheet date.

Provisions are created for:

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

Provision for unemployment insurance obligations

Provisions for unemployment insurance obligations are determined as the cover required for the unemployment insurance obligations on the balance sheet date and the expected future obligations in relation to personnel that have already left and personnel with a temporary employment contract.

Provision for WGA/ZW-flex

The provision for Resumption of Work for Partially Disabled Persons Act (WGA) and Sickness Benefits Act (ZW-flex) covers the obligations for which the organisation bears the risk as of 1 January 2016, as anticipated on the balance sheet date.

Other personnel provisions - service bonuses

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

Other personnel provisions - pensions

The pension scheme for the whole of WUR was (compulsorily) placed with ABP. Pension accumulation takes place on the basis of the average earnings system (middelloonsysteem). The current coverage ratio rose from 97.1% to 97.8% in 2019. The policy coverage (the average of the current coverage ratios across the last twelve months) rose in 2019 from 101.5% to 103.8%, ending up 0.4% under the required minimum. This coverage will on the one hand be decisive in increasing pensions. Partial indexation is possible with a policy coverage of 110% or higher. ABP may index fully starting from 123%. This means that with the current 103.8%, we are still far from this objective. On the other hand, the policy coverage can play a role in decreasing pensions. If this policy coverage until 2021 were to remain below the required level of 104.2% and the current coverage ratio at the end of 2021 is also lower than 104.2%, a lowering of pensions is inevitable.

With the price increase (indexation), ABP now expects that it is unlikely that it will be able to increase the pensions in the coming years. ABP estimates the probability that it will have to reduce pensions in 2021 to be low.

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

Provisions for reorganisation expenses

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

Provision for product and contract risks

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

Long-term debt

Long-term debt concerns liabilities that are due in more than one year from the end of the relevant financial year.

Short-term debt

Short-term debt concerns liabilities that are due within one year from the end of the relevant financial year.

ACCOUNTING PRINCIPLES TO DETERMINE INCOME AND EXPENDITURE

General

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

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

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

Revenue from the Ministry of Agriculture, Nature and Food Quality (LNV) falling under the ministry's funding regulation is determined on the basis of the direct costs, including a supplement for indirect

costs. The margin for indirect costs is determined once a year in accordance with the prevailing system for calculating the margin. Results are calculated in proportion to the progress of the project.

Taxation

Taxation on the profits includes the corporate tax (payable and deductible) for the entire financial year. The payable and deductible corporate income tax for the financial year is the corporate income tax expected to be payable for the taxable profit in the financial year, taking into account the fiscal legislation and facilities, calculated on the basis of tax rates set on the reporting date, and any corrections to the taxes owed for prior years, such as fiscally compensable losses from prior financial years. In addition, Wageningen Research has made a provision for a deferred tax asset, based on the difference between the valuations for tax and commercial purposes of tangible fixed assets (company buildings in particular) at the time of the introduction of the liability to pay tax. Since the period within which taxable profits at Wageningen Research can be considered probable is relatively short, in part due to the lack of a profit motive over the long-term, the deferred tax is calculated for a period of five years.

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 THE ACCOUNTING ESTIMATES

On the basis of the new findings (number of m² of contaminated soil), the Oostwaardhoeve provision was re-calculated for the 2019 financial year. In addition, the accounting parameters used to estimate the unemployment insurance (WW) and civil (BW) obligations and the future transition payments were re-assessed. For the 2019 financial year, the accounting estimate for current payments was reduced from 80% to 70% and the future unemployment insurance (WW) and civil (BW) obligation for the current workforce was reduced from 20% to 18%. The other rates, such as the percentages for the transition payment and for the 'restitutions' remained unchanged. These probabilities are 20% and 10%, respectively. The adjustments in the rates used to determine the provision are the result of a retrospective audit and the changed economic situation for Wageningen Research.

3.2.7 Other information

Appendix 1 Overview of property sales and purchases

Lands and infrastructure	На	Purchase	Sale
Purchase of land De Born Oost	0.22	121	
Sale of land De Born Oost	0.45		15
Sale of land Wageningen Campus West	41.60		2,243
Subtotal lands and infrastructure		121	2,258

Buildings	Purchase	Sale
Subtotal buildings	0	0
Total	121	2,258

Sales breakdown	Sales proceeds	Book value	Book profit
Sale of De Born Oost land	0	15	-15
Sale of Wageningen Campus West land	3,157	2,243	914
Total	3,157	2,258	899

Appendix 2 Recognition of the 2019 LNV Funding

	1,000	
Project and programme funding	_,,,,,	
Knowledge base	25,545	
Knowledge communication	248	
Policy support research (PSR)	13,798	
Top sector Agri Food	28,870	
Top Sector Horticulture		
·	12,506	
Top sector mission-driven knowledge and innovation programmes	3,802	
Statutory research tasks (SRT)	45,231	
Additional projects	21,557	
Climate portfolio including consortium co-partners	4,317	
Afghanistan project	1,641	
BRO	733	
Total received project and programme funding	157,248	
Other contributions		
- Compensation for loan repayments	2,800	
- Compensation for PO loan repayments	957	
- Compensation for IAC/ILRI loan	188	
- Correction of decline in demand due to waiver of loan	-56	
- VAT Wageningen Research	32,456	
- Payment via laser/honingregeling (literally, honey scheme)	-149	
Total 2019 Funding for WR Foundation	193,443	letter with reference number DGA-
Ministry of Agriculture, Nature and Food Quality (LNV)		DKI19283366 dated 05 December 201
Ministry of Agriculture, Nature and Food Quality (LNV) funding processed through the balance sheet	2,000	
	2,800	Balance sheet item receivables from
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments		Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments	957	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments	957	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR	957 188 32,456	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV)
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR Climate portfolio consortium co-partners	957 188 32,456 4,317	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) On balance sheet end date
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR Climate portfolio consortium co-partners WPR co-partners	957 188 32,456 4,317 1,163	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) On balance sheet end date On balance sheet end date
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR Climate portfolio consortium co-partners WPR co-partners ATVET Ministry of Agriculture, Nature and Food Quality (LNV)	957 188 32,456 4,317 1,163	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) On balance sheet end date On balance sheet end date On balance sheet end date
funding processed through the balance sheet	957 188 32,456 4,317 1,163 1,456	Ministry of Agriculture, Nature and Food Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Food Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Food Quality (LNV) On balance sheet end date On balance sheet end date On balance sheet end date
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR Climate portfolio consortium co-partners WPR co-partners ATVET Ministry of Agriculture, Nature and Food Quality (LNV) funding processed through the balance sheet LNV income accounted for	957 188 32,456 4,317 1,163 1,456 43,336	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) On balance sheet end date On balance sheet end date On balance sheet end date
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR Climate portfolio consortium co-partners WPR co-partners ATVET Ministry of Agriculture, Nature and Food Quality (LNV) funding processed through the balance sheet LNV income accounted for Increase in the LNV programme research yet to be carried out	957 188 32,456 4,317 1,163 1,456 43,336 150,108	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) On balance sheet end date Con balance sheet end date
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR Climate portfolio consortium co-partners WPR co-partners ATVET Ministry of Agriculture, Nature and Food Quality (LNV) funding processed through the balance sheet	957 188 32,456 4,317 1,163 1,456 43,336 150,108 -1,000 -312	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) On balance sheet end date Con balance sheet end date
funding processed through the balance sheet Compensation for the LNV portion of WR loan repayments Compensation for the LNV portion of PO loan repayments Compensation for the LNV portion of IAC/ILRI loan repayments VAT WR Climate portfolio consortium co-partners WPR co-partners ATVET Ministry of Agriculture, Nature and Food Quality (LNV) funding processed through the balance sheet LNV income accounted for Increase in the LNV programme research yet to be carried out VAT adjustment for the 2016-2018 livestock farming sectors	957 188 32,456 4,317 1,163 1,456 43,336 150,108 -1,000 -312 -42	Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) Balance sheet item receivables from Ministry of Agriculture, Nature and Foo Quality (LNV) On balance sheet end date Con balance sheet end date Con balance sheet end date Con balance sheet end date Don balance sheet end date

As a supplement to the information provided above, in 2019, an amount of €2,456,209 was spent on the Agriculture ATVET Afghanistan project - Main Phase with a term of 1 November 2011 up to

31 October 2021 – of which €1,455,623 was transferred to NAEC

2018: 1,782,247, of which €1,245,844 was transferred to NAEC

2017 €1,798,806

2016 €1,883,156

2015 €2,608,552

2014 €6,219,696

2013 €4,004,000

2012 €2,452,000 and

2011 €42,500

3.2.8 Auditor's report by the independent auditor

To: the Executive Board and the Supervisory Board of Wageningen Research

Our opinion

The abridged annual financial report of Wageningen University & Research for 2019 included in Chapter 3.2 of the Wageningen University & Research Annual Report 2019 (hereinafter: the abridged annual financial report) is derived from the audited Wageningen Research Foundation annual financial report 2019.

In our opinion, the abridged annual financial report included in Chapter 3.2 of the Wageningen University & Research Annual Report 2019 is consistent with the audited Wageningen Research Foundation annual financial report 2019.

Abridged annual financial report

The abridged annual financial report does not contain all the explanations required on the basis of Title 9, Book 2 of the Dutch Civil Code and the Standard Remuneration Act for Public and Semi-public Sector Senior Officials (Beleidsregels WNT 2019). Consulting the abridged annual financial report and our accompanying report, therefore, cannot take the place of consulting the audited and approved Wageningen Research Foundation annual financial report and our accompanying audit report. The annual financial report and this summary of it do not include the events that took place after the date of the auditor's report on 27 May 2020.

The audited annual financial report and our auditor's report are included We approved the audited annual financial report 2019 of Wageningen Research Foundation in our auditor's report from 27 May 2018.

Responsibilities of the Executive Board and the Supervisory Board regarding the abridged annual financial report

Management is responsible for the preparation of the abridged annual financial report in accordance with the basic principles as described in the audited Wageningen Research Foundation annual financial report. The Supervisory Board is responsible for overseeing the financial reporting process of the Foundation.

Our responsibilities

Our responsibility is to draw a conclusion about whether this abridged annual financial report is in all materially relevant aspects, consistent with the audited annual financial report based on our audit, which was conducted in accordance with Dutch law, including the Dutch Standards on Auditing 810, "Opdrachten om te rapporteren betreffende samengevatte financiële overzichten".

Eindhoven, 27 May 2020 Ernst & Young Accountants LLP signed by H.E. Oostdijck RA

Appendix 1 Education at Wageningen University

 Table B1.1
 List of Bachelor's and Master's programmes, 2019-2020

Bachelor's	Master's
WO Development Studies	
Internationale Ontwikkelingsstudies (International	International Development Studies
Development Studies)	
WO Health Sciences	
Gezondheid en Maatschappij (Health and Society)	
WO Leisure and Tourism	
Tourism* (joint degree)	Tourism, Society and Environment
WO Environmental Sciences	
Environmental Sciences*	Environmental Sciences
	Urban Environmental Management
WO Earth Sciences	
Soil, Water, Atmosphere*	Earth and Environment
WO Management Studies Group	
Bedrijfs- en Consumentenwetenschappen (Management and Consumer Studies)	Management, Economics and Consumer Studies
WO Communication Science	
Communicatie en Life Sciences (Communication and Life	Communication, Health and Life Sciences
Sciences)	
WO Chemistry	
Moleculaire levenswetenschappen (Molecular Life Sciences)	Molecular Life Sciences
WO Life Sciences and Natural Resources	
A <i>grotechnologie</i> (Biosystems Engineering)	Animal Sciences
Biotechnologie (Biotechnology)	Aquaculture and Marine Resource Management
Bos- en Natuurbeheer (Forest and Nature Conservation)	Bioinformatics
Animal Sciences*	Biosystems Engineering
International Land and Water Management*	Biotechnology
Landschapsarchitectuur en Ruimtelijke Planning (Landscape	Climate Studies
Architecture and Planning)	Development and Rural Innovation
Food Technology*	Food Quality Management
Plantenwetenschappen (Plant Sciences)	Food Safety
Voeding en Gezondheid (Nutrition and Health)	Food Technology
	Forest and Nature Conservation
	Geo-information Science
	International Land- and Water Management
	Landscape Architecture and Planning (MLP)
	Nutrition and Health
	Organic Agriculture
	Plant Sciences
	Plant Sciences Water Technology (igint degree)
WO Bislam.	Water Technology (joint degree)
WO Biology	Dialagu
Biologie (Biology)	Biology
WED E	
WED Economics Group 1	
Economie en Beleid (Economics and Governance)	
-	
Economie en Beleid (Economics and Governance)	on cluster Metropolitan Analysis, Design and Engineering (joint degree)

 Table B1.2
 Number of enrolled students at Wageningen University by type of enrolment and gender
 on 1 October 2019

Type of Enrolment	F	irst-year		Al	l enrolments	
	Male	Female	Total	Male	Female	Total
Students	1,254	1,669	2,923	5,437	6,900	12,337
Other enrolments:						
Contract education participants	13	7	20	18	10	28
Second enrolment students	65	129	194	78	144	222
Erasmus double degree	7	5	12	7	5	12
Erasmus students	80	136	216	80	138	218
Exch. Student Other	7	21	28	8	22	30
Total	1,965	2,635	4,600	5,628	7,219	12,847

 Table B1.3
 Number of students, first-year and total, at Wageningen University by study phase and
 gender on 1 October 2019

Types of Enrolment	F	irst-year		All students			
	Male	Male Female 1		Male	Female	Total	
BSc	716	913	1,629	2,720	3,208	5,928	
MSc	538	756	1,294	2,717	3,692	6,409	
Total	1,254	1,669	2,923	5,437	6,900	12,337	

 Table B1.4
 Number of Bachelor's students at Wageningen University by programme and gender on
 1 October 2019

Programme	Fi	rst-year		All students			
	Male	Female	Total	Male	Female	Total	
Agrotechnology (BAT)	42	9	51	148	24	172	
Animal Sciences (BAS)	32	108	140	97	299	396	
Business and consumer studies (BBC)	68	73	141	270	250	520	
Biology (BBI)	71	64	135	322	270	592	
Biotechnology (BBT)	57	22	79	227	98	325	
Forest and nature conservation (BBN)	37	41	78	161	135	296	
Communications and life sciences (BCL)	4	22	26	24	77	101	
Economics and policy (BEB)	31	14	45	129	62	191	
Environmental Sciences (BES)	44	79	123	113	168	281	
Food Technology (BFT)	58	89	147	217	337	554	
Health and society (BGM)	2	40	42	17	168	185	
International Land and Water Management (BIL)	47	23	70	184	114	298	
International Development Studies (BIN)	7	57	64	52	205	257	
Landscape Architecture and Spatial Planning (BLP)	53	44	97	161	135	296	
Molecular life sciences (BML)	42	30	72	161	103	264	
Plant sciences (BPW)	46	32	78	175	129	304	
Soil, Water, Atmosphere (BSW)	46	35	81	175	109	284	
Tourism (joint degree) (BTO)	17	30	47	35	93	128	
Food and health (BVG)	12	101	113	52	432	484	
Total number of enrolled students	716	913	1,629	2,720	3,208	5,928	

 Table B1.5
 Number of Master's students, first-year and total, at Wageningen University by
 programme and gender on 1 October 2019

Programme		First-year		Al	All students			
	Male	Female	Total	Male	Female	Total		
Animal Sciences (MAS)	26	54	80	103	277	380		
Aquaculture and Marine Resource Management (MAM)	18	11	29	74	50	124		
Biobased Sciences (MBS)	23	10	33	41	22	63		
Bioinformatics (MBF)	13	10	23	54	35	89		
Biology (MBI)	10	10	20	134	147	281		
Biosystems Engineering (MBE)	15	5	20	97	19	116		
Biotechnology (BBT)	21	18	39	243	162	405		
Climate Studies (MCL)	17	17	34	55	72	127		
Communication, Health and Life Sciences (MCH)	1	7	8	19	140	159		
Development and Rural Innovation (MDR)	6	12	18	26	48	74		
Earth and Environment (MEE)	5	11	16	115	74	189		
Environmental Sciences (MES)	47	57	104	156	221	377		
Food Quality Management (MFQ)	9	21	30	31	83	114		
Food Safety (MFS)	11	24	35	42	111	153		
Food Technology (MFT)	42	95	137	229	426	655		
Forest and Nature Conservation (MFN)	32	31	63	155	162	317		
Geo-information Science (MGI)	19	17	36	95	50	145		
International Development Studies (MID)	21	41	62	70	213	283		
International Land and Water Management (MIL)	14	15	29	74	77	151		
Landscape Architecture and Planning (MLP)	2	3	5	61	73	134		
Management, Economics and Consumer Studies (MME)	20	25	45	178	175	353		
Metropolitan Analysis, Design and Engineering (joint degree)								
(MMD)	18	14	32	47	35	82		
Molecular Life Sciences (MML)	6	5	11	81	50	131		
Nutrition and Health (MNH)	9	84	93	58	444	502		
Organic Agriculture (MOA)	29	41	70	86	120	206		
Plant Biotechnology (MPB)	11	13	24	83	59	142		
Plant Sciences (MPS)	58	59	117	220	204	424		
Tourism, Society and Environment (MTO)	7	16	23	19	53	72		
Urban Environmental Management (MUE)	21	22	43	52	76	128		
Water Technology (joint degree) (MWT)	7	8	15	19	14	33		
Total number of enrolled students	538	756	1,294	2,717	3,692	6,409		

 Table B1.6
 Success rate of the MSc programmes for the starting class of 2015-2016 to 2017-2018

Programme		Class o	of 2015		Cla	ss of 20	Class of 2017		
	N		%		N	9/	<u>′o</u>	N	%
		After 2	After 3	After 4		After 2	After 3		After 2
		yrs	yrs	yrs		yrs	yrs		yrs
MAM	46	33	83	93	43	33	74	34	41
MAS	131	47	83	89	137	45	84	171	46
MBE	44	36	89	93	29	21	86	45	49
MBF	25	68	92	92	20	30	80	28	50
MBI	103	28	70	86	92	27	77	90	21
MBT	127	46	88	93	158	49	80	141	38
MCH	67	46	81	87	67	40	69	64	41
MCL	29	24	69	90	25	44	68	39	26
MDR	14	57	79	86	31	39	74	21	43
MEE	83	29	76	93	75	24	76	67	39
MES	133	64	92	96	137	69	86	147	61
MFN	83	36	77	80	98	40	73	117	35
MFQ	30	57	80	87	40	48	73	39	49
MFS	63	54	89	89	91	48	78	66	41
MFT	189	47	91	95	237	53	86	232	48
MGI	35	26	74	77	44	27	84	48	31
MID	93	16	67	74	73	8	66	88	18
MIL	56	34	84	91	47	38	83	48	29
MLP	54	24	59	70	35	11	49	47	15
MME	155	43	79	85	126	40	85	129	50
MML	47	43	79	85	37	43	78	49	35
MNH	196	37	83	89	182	46	84	183	35
MOA	58	60	90	95	69	46	78	87	53
МРВ	44	45	89	89	56	30	80	51	35
MPS	116	60	85	88	137	50	82	150	52
МТО	23	26	70	78	21	48	86	23	43
MUE	60	38	72	83	49	57	86	45	56
MWT	20	90	90	90	20	65	85	18	89
Total for all programmes	2,124	43	82	88	2,176	43	80	2,284	42
Total including programme	2,124	43	83	90	2,176	44	82	2,284	42
transfers									

Table B1.7 Success rate of the BSc programmes on the basis of re-enrolments in the second year (N t+1) for the starting class of 2014-2015 to 2016-2017 (N and N t+1 in absolute numbers, after x year in %)

Programme			Class of 2014				Class of 2015				Class of 2016		
	N	1		%		1	1	0,	6	N	1	%	
		t+1	After	After	After		t+1	After	3 yrs	N	N t+1	After	
			3 yrs	4 yrs	5 yrs			3 yrs	After			3 yrs	
									4 yrs				
BAS	113	88	49	76	88	82	70	51	76	82	68	43	
BAT	42	40	40	65	83	29	27	26	78	39	31	39	
BBC	139	133	26	71	85	168	160	29	81	162	148	38	
BBI	136	117	32	69	83	133	109	40	71	156	134	28	
BBN	63	52	42	79	90	58	48	35	65	68	57	30	
BBT	78	63	40	83	94	108	85	40	69	130	102	50	
BCL	8	7	29	86	100	13	9	22	56	24	23	22	
BEB	42	35	20	80	80	44	37	16	70	51	46	22	
BES	36	33	52	79	88	35	30	37	67	55	50	50	
BFT	136	120	44	75	84	136	119	58	88	149	135	48	
BGM	63	56	57	93	96	80	68	54	85	62	55	51	
BIL	57	52	40	75	88	65	55	15	64	79	70	31	
BIN	104	84	46	87	93	81	71	38	82	86	79	41	
BLP	57	50	24	66	74	55	51	29	65	60	53	30	
BML	62	44	48	91	93	92	72	35	68	84	66	35	
BPW	52	46	30	74	87	66	57	42	81	59	53	45	
BSW	57	51	45	76	84	66	62	31	74	74	67	30	
ВТО	43	30	83	87	87	22	20	70	75	29	28	71	
BVG	130	122	57	86	92	138	129	37	80	149	138	51	
Total for all	1 /10	1,223	42	78	87	1 471	1,279	38	76	1 500	1,403	40	
programmes	1,418	1,223	42	78		1,4/1	1,2/9	38	70	1,598	1,403	40	
Total including													
programme	1,418	1,275	41	76	87	1,471	1,340	37	74	1,598	1,469	39	
transfers													

Appendix 2 Knowledge valorisation indicators

Indicators for the VSNU domain "People" 1.

1.1 Research into entrepreneurship

Table B2.1 Percentage of MSc graduates who find employment per sector

	2017	2018	2019
Business community 1)	19%	19%	23%
Business services 2)	14%	10%	12%
Government 3)	8%	12%	8%
Other non-academic sectors 4)	38%	39%	40%
Universities 5)	21%	20%	17%

Source: National Alumni Survey

1.2 Entrepreneurship

Table B2.2 Entrepreneurship education; number of students per course

Course code	Course name	2016/2017	2017/2018	2018-2019
CPT-22806	Innovation Management and	101	96	72
	Transdisciplinary Design			
MST-51306	Economics of Science and Technology	23	29	30
MST-35306	Principles of Entrepreneurship	68	70	67
	Subtotal of minor courses	192	195	169
AEP-52306	Business Cases Agri-Food	44	67	45
	Entrepreneurship			
ELS-51306	Competence Management for Building	16	23	15
	Entrepreneurial Teams			
ELS-66100	Entrepreneurial Skills	23	33	58
ELS-66700	Pursuing and Realising Entrepreneurial	76	66	72
	Projects			
MST-23406	New Venture Creation: from Idea to	64	39	32
	Business Plan			
MST-33806	Circular Economy: Theory and Practice	28	40	40
MST-53806	Business and Society	24	14	12
	Subtotal of other courses	275	282	274
	TOTAL	467	477	443

¹⁾ Industry, trade, transport.

²⁾ Information and communication, financial services, legal services, human resources, press and information, other business services.

⁴⁾ Research institutes, universities of applied sciences, other education sectors, hospitals (including academic medical centres), health and wellbeing institutions, other healthcare, other sectors.

⁵⁾ Academic universities (not including academic medical centres).

1.3 Lifelong Learning

Table B2.3 Courses for professionals

Wageningen Academy (WU)	2017	2018	2019
Number of open registrations	943	1,030	1,047
Number of open enrolment courses	42	40	43
Number of course participants in in-company courses	606	992	805
Number of in-company courses	25	36	21

WCDI (WR)	2017	2018	2019
Course participants open registrations	816	840	968
Number of courses given	33	31	35

Indicators for the VSNU domain "Results" 2

2.1 **Patents**

Table B2.4 Number of new patent applications for Wageningen University & Research and total active patent families in portfolio

	2017	2018	2019	Total active patent families in Wageningen University & Research portfolio
WU	6	12	8	57
WR	4	10	5	83
Wageningen University &	10	22	13	140
Research new applications				

2.2 Licences

 Table B2.5
 Number of licenses for patents, breeds, models and materials in 2019

	Number of
	licenses
_WU	13
WR	130
Total for Wageningen University & Research	143

2.3 Entrepreneurship

 Table B2.6
 Number of new spin-offs and student or staff start-ups

	2017	2018	2019
Number of spin-offs	4	1	4
Number of start-ups	5	7	3

2.4 Client satisfaction and knowledge utilisation Wageningen Research Foundation

Table B2.7 Customer satisfaction in 2019

Customer satisfaction	Number	Score	Total	Final score
very satisfied	299	10	2,990	
satisfied	202	8	1,616	
neutral	41	6	246	
dissatisfied	9	4	36	
very dissatisfied	17	2	34	
Total number of respondents	568		4,922	8,7

 Table B2.8
 Knowledge utilisation in 2019

Assessment of project results	Percentage
Useful	93%
Not useful	1%
No comment	6%

Of these, the project results were used for:

Knowledge utilisation	Percentage
New/renewed product	7.8%
New/renewed process	3.5%
policy formation	8.8%
strategic decision-making	2.4%
legal obligation	67.5%
basic knowledge	2.9%
follow-up research	1.0%
not yet known	6.1%

Indicators for the VSNU domain "Collaboration" 3

Collaboration 3.1

 Table B2.9
 Number of completed research projects for the benefit of societal, non-affluent
 organisations

Initiative	Target group	Number of completed	Number of	Number of	Number of
		research projects in	students	WU/WR	external
		2019	involved	employees	stakeholders
			(Bachelor's	involved	involved in
			and	(including	projects
			Master's)	project leaders)	
Science Shop	Societal	15	123	34	58
	organisations				

Table B2.10 Number of student projects carried out in response to requests from various societal stakeholders

Initiative	Target group	Number of student projects conducted in	students	Number of WU/WR employees
		2019	involved (Bachelor's and Master's)	involved in supervision
Education Project	SMEs & start-ups	84	una riaster sy	
Services	PPP consortiums	11		
	Government	26	1,566	418
	Societal organisations	44		
	Knowledge institutes	34		
	Other	23		

Contribution to other education; number of pupils and teachers reached, number of Wageningen University employees involved and teaching product selection

Initiative	Target group	Number of pupils reached	Number of teachers	Number of WU employees	Total selection of
			reached	involved	teaching materials
Smaaklessen support point	Primary education	380,000	16,500	6	7
& EU Schoolfruit					
- Curriculum					
- Smaaklessen					
EU Schoolfruit and	Primary education	525,600	22,850	6	4
vegetables programme					
Wetenschapsknooppunt	Primary education	12250	520	52	14
FoodValley Network VO-HO	Secondary	12936	13306	46	35
	education (senior)				
National Biology Olympiade	Secondary	7,970	230	10	n/a
	education (senior)				
Wageningen Youth Institute	secondary	2.820	15.309	12	2
	education				

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	2019
Average utilisation (%)	59%
Of which from external users (%)	9%
Number of external users	52

Table B2.13 Number of temporary exchanges/secondments with the business community

	2017	2018	2019
Number of WUR employee secondments with the business	5	9	9
community			

3.2 **Funds**

Table B2.14 Wageningen University & Research turnover from the business community (in € millions)

	2017	2018	2019
WU			
Business community contribution to top sector research	0.0	0.0	0.0
Contract research for the business community	15.0	15.9	17.4
Total business community contribution to research at WU	15.0	15.9	17.0
WR			
Business community contribution to top sector research	11.5	10,9	12.9
Contract research for the business community	42.7	47,4	47.6
Total business community contribution to research at WR	54.2	58.3	61.6
TOTAL BUSINESS COMMUNITY CONTRIBUTION TO RESEARCH at Wageningen University & Research	69.2	74.2	79.0

Table B2.15 Wageningen University & Research turnover from EU grant programmes (in € millions)

Total EU Turnover Wageningen University & Research	37.2	35.7	37.1
WR	21.7	20.3	20.5
_wu	15.5	15.4	16.6
	2017	2018	2019

3.3 **Publications**

Table B2.16 Number of public-private Wageningen University & Research co-publications

Other	216	273	100
Medical	58	55	68
Government	772	870	1,159
Academic	2,519	2,755	2,805
Corporate (business community)	136	213	279
	2017	2018	2019

Source: Scopus, Elsevier B.V. All rights reserved. All rights reserved. SciVal $^{\mbox{\scriptsize 8}}$

Table B2.17 Number of professional publications, publications for the general public, other publications

Type of publication	WU			WR		
	2017	2018	2019	2017	2018	2019
PROFESSIONAL PUBLICATIONS						
a. Journal articles	102	90	99	219	171	206
b. Books	5	2	7	7	4	19
c. Book chapters	22	24	10	7	19	8
d. Annotations	0	0	0	0	0	0
e. Conference papers	6	1	5	6	0	2
f. Protocols	0	0	0	0	0	0
g. Reports	136	164	151	567	692	676
PUBLICATIONS FOR THE GENERAL PUBLIC						
a. Books	0	0	0	0	0	0
b. Book chapters	0	1	0	0	0	1
c. Article in news paper/magazine/journal	30	2	30	10	3	9
OTHER PUBLICATIONS						
a. Book reviews	7	10	10	0	0	1
b. Book editorships	18	19	17	7	2	5
c. Journal editorships	37	36	29	4	1	3
d. Inaugural speeches	2	2	2	0	0	1
e. Abstracts	258	275	336	86	141	137
f. Designs	0	0	0	0	0	0
g. TV or radio appearances	34	24	57	25	36	50

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Appendix 3 Corporate Social Responsibility Report

The WUR Corporate Social Responsibility Report contains information about the total staff at WUR, such as the relationship between permanent and temporary staff, the number of full-time and parttime workers, data on target groups, and information on sick leave.

The growing economy and the growth in student numbers has resulted in a persistent and significant increase in the number of employment contracts in 2019. This increase was 330 IER (Individual Employment Relationships) at the WR Foundation, while the increase at WU was 246 IER.

WR staff on 31 December 2019 in IER and FTE

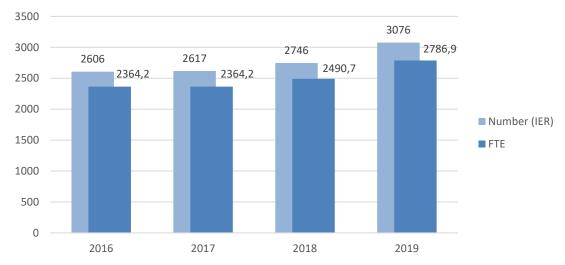


Figure B3.1 WR staff in IER and FTE

WU staff on 31 December 2019 in IER and FTE

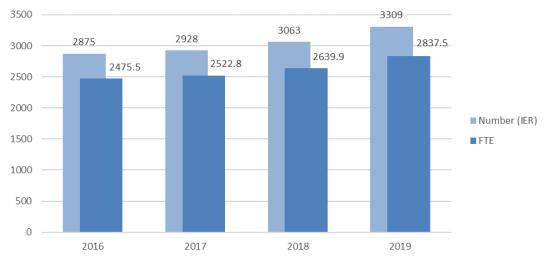


Figure B3.2 WU staff in IER and FTE

The increase in the number of employment contracts also has consequences for the proportion of temporary/permanent employees, age distribution, and employment structures at WUR.



Figure B3.3 Temporary/Permanent ratio at WR and WU plus Men/Women ratio

The percentage of employees with a temporary employment contract at WR Foundation has increased by 4.7 percentage points to approximately 17.2%. At WU, the percentage of employees with a temporary employment contract grew by 3.5 percentage points to 45.5%. This includes the employment contracts of PhD candidates.

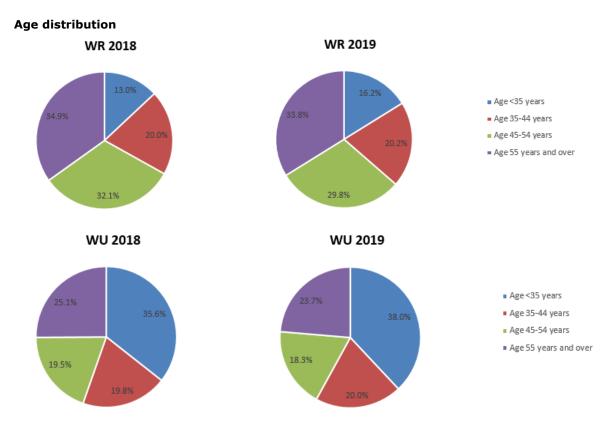


Figure B3.4 Age distribution WR and WU

The increase in the number of temporary employment contracts also has an effect on age distribution. A clear increase is visible in the age category under 35 years, particularly for the Wageningen Research Foundation. The figures above also show that there is a difference in the staff composition at WR Foundation and WU. Almost 67% of employees at WR Foundation are 45 years or older. Just over half of them is 55 years or older.

This ratio is very different at WU. Roughly 42% of employees is 45 years or older and more than half is 55 years or older. The largest group of employees (approx. 38%) is under 35 years of age. This difference is primarily due to the relatively large number of (temporary) employment contracts for PhD candidates and postdoc researchers at WU.

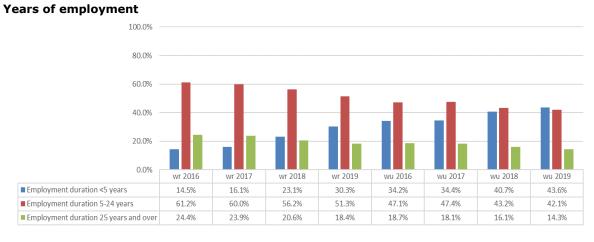


Figure B3.5 Years of employment at WR and WU

The trend outlined here also corresponds to the duration of the employment contracts. There has been an increase of 7.2 percentage points in personnel with up to five years of employment at the WR Foundation and 2.9 percentage points at WU.

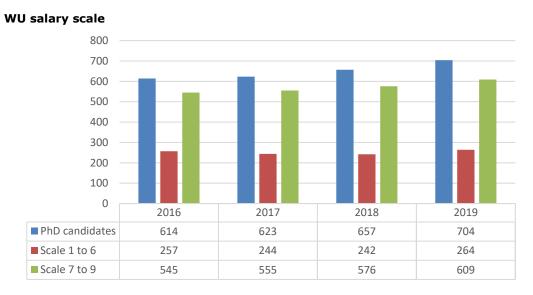


Figure B3.6 WU salary scale up to and including Grade 9 and PhD candidates

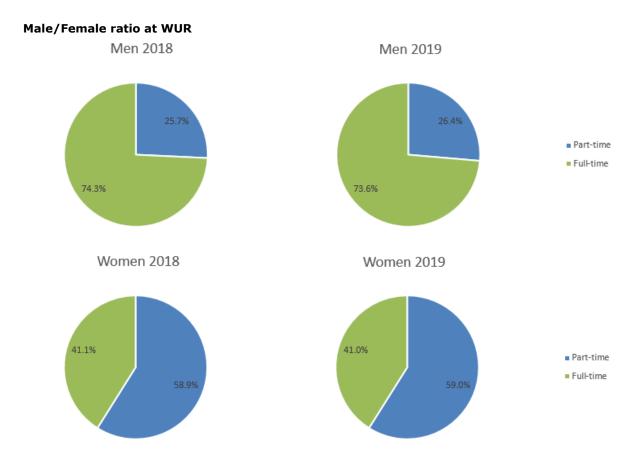


Figure B3.7 Male/Female ratio within full-time/part-time

The percentage of male employees working part-time increased slightly by 0.7 percentage points, while among women it increased by just 0.1 percentage points.

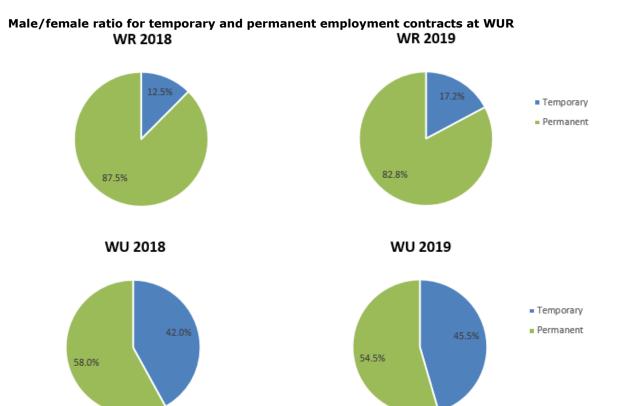
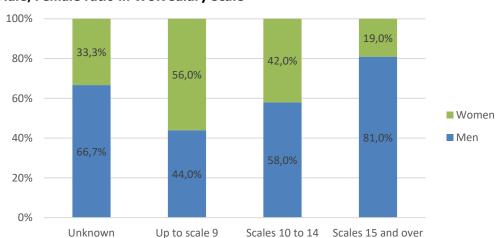


Figure B3.8 Men/women ratio within permanent/temporary employment

The increase in the number of employment contracts also affects the ratio of temporary/permanent employees. At WUR, this percentage increased among men, as well as women. The percentage of men in temporary employment increased by 3.4 percentage points, while for women it increased by 3.9 percentage points. As a result the percentage of men in permanent employment increased to 72.7% and is significantly higher than the percentage of women in permanent employment (63.2%).



Male/Female ratio in WUR salary scale

Figure B3.9 Male/Female ratio per salary scale

In recent years, there was an additional focus on gender diversity and on the advancement of women to top positions in the organisation, thereby improving the quality of WUR. The result of these efforts is visible in the above figure.

Tenure Track - Male/Female ratio per job category

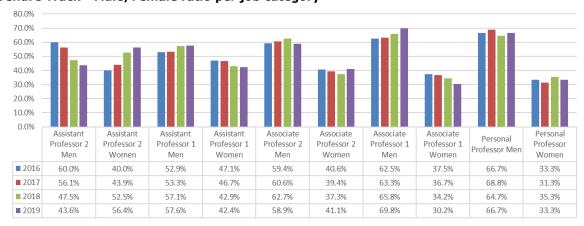


Figure B3.10 Male/Female ratio in the Tenure Track programme

The impact of the diversity policy in particular is evident from the influx into the tenure tracks. Of the influx into the Assistant Professor 2 position, 56.4% were women, an increase of 3.9 percentage points. Furthermore, there also was an increase in the ratio of women in the influx into the Associate Professor 2 position, namely by 3.8 percentage points to 41.1%. The percentage of women in the Personal Professor position declined somewhat in 2019, by 2 percentage point to 33.3%.

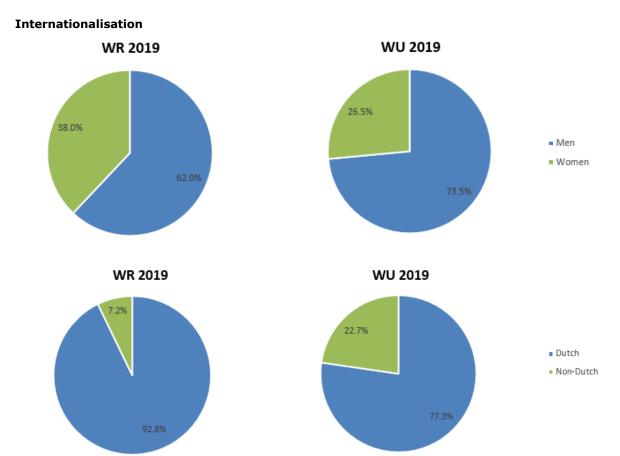


Figure B3.11 Dutch/International

In addition to the work done to improve gender diversity, efforts have also been made in the area of recruiting more international employees due to the limited international diversity in current staffing levels. In 2019, this resulted in an increase in the percentage of international WU employees by

2.6 percentage points to 22.7%. At the WR Foundation, the percentage of international employees is limited, although it slightly increased by 0.6 percentage points to 7.2%.

The increase in the number of employees also occurred in the lower salary categories and in the PhD Candidate category. This increase is approximately 8% (rounded) in all categories.

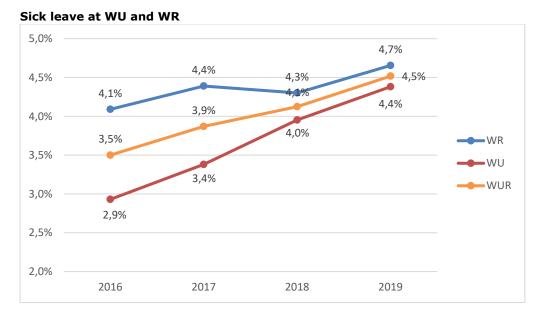


Figure B3.12 Sickness absence 2016-2019

The graph above shows that the average sickness absence at WUR has been steadily increasing since 2016 and exceeded 4.5% in 2019. This is 1 percent above the 3.5% target. In 2019, there was an equal increase at WU and the WR Foundation, namely 0.4 percentage points.

Sickness absence 2016-2019 excluding pregnancy	2016	2017	2018	2019
Sickness absence percentage incl. absences > 1 year	3.5	3.9	4.1	4,5
Sickness absence percentage excl. absences > 1 year	2.9	3.2	3.2	3.4
Average duration of absence (calendar days)	14.5	16.3	18.4	17,9
Absence frequency (%)	1	0.9	1.0	0.9
Staff without absenteeism due to illness (%)	48,8	52	48,8	52,5
Number of individual cases of absence through illness*	5,427	5,070	5,562	5,803
*Only those instances that began during the reporting period				

Sick leave percentage per age group	2016	2017	2018	2019
< 25 years	1	1.7	1.6	1,8
25 - 34 years	2.1	2.2	3.3	3,6
35 – 44 years	3.1	3.4	3.3	4.2
45 – 54 years	3.8	4.2	4.2	4.3
55+ years	4.6	5.2	5.3	5.8

The increase in absenteeism in all age categories has been significant since 2016, but in 2019, the increase was highest in the age category 35 up to and including 44 years. In that category, there was an increase of 0.9 percentage points, from 3.3% to 4.2%. In all age categories, with the exception of the age category < 25 years, the absenteeism rate is well above the 3.5% target, while in previous years this only was the case for the age category 45 years and up.

Appendix 4 Glossary

Limitations	The scope of reporting, namely where the organisation has set the boundaries of the activities reported on. The boundary determines which information is consolidated in the report as well as what information is included regarding activities in the supply chain that could be of particular interest to users, but over which the organisation may have limited or no control.
Dialogue with	The entirety of interactions between an organisation and its stakeholders. This is not limited to
stakeholders	physical or virtual meetings specifically organised for that purpose.
Governance	The entirety of regulations for managing an organisation and the monitoring of their proper
oo verrianie	implementation. On the one hand, governance involves the relationships between shareholders
	supervisors, management, and other stakeholders. On the other hand, governance also has an
	internal definition which includes management and control, internal control measures, and
	division of authority and responsibilities.
Social aspects of	Social aspects of entrepreneurship which are identified when looking at businesses from a
entrepreneurship	broader perspective than the traditional financial perspective. These include economic,
	environmental, and social aspects. It is used here as a synonym for Corporate Social
	Responsibility or sustainable business.
Societal information	All information related to the social aspects of business.
Societal results	The performance of an organisation with regard to the social aspects of business.
Societal reporting	External information on the organisation's policies and results with regard to the social aspects
	of business. Societal reporting is a generic term for typically non-financial information published
	in sustainability reports, CSR reports, or integrated in the annual report by the organisation in
	order to satisfy stakeholders' comprehensive information requirements.
Material topics	The topics most relevant to a specific organisation that, as such, are eligible for inclusion in
	societal reporting. A topic is more relevant, and therefore more material, when the organisation
	has a significant impact in that area. Topics that satisfy stakeholders' comprehensive
	information requirements and which could be decisive to stakeholders' decision making and
	considerations with regard to the organisation must also be considered material.
Performance indicator	A key figure used by the organisation with regard to a specific topic in order to monitor its
	development as well as to measure the organisation's progress and account for its results.
Scope	The range of reporting, namely the entirety of topics reported on. The scope of reporting
	concerns the organisation's choices regarding whether or not to report on specific topics.
Stakeholders	Internal or external individuals or parties who may reasonably expect the organisation to take
	their legitimate interests and expectations into account.
Value creation	An organisation's business operations require various forms of capital to or from which value
	can be added or detracted. An organisation creates economic, environmental, and social value
	for its stakeholders. Value creation refers to the process to which the organisation owes its
	existence.
Value chains	An organisation is active in a chain of activities leading to the production and delivery of
	products and/or services which are sold, used, and discarded by end users. For some
	organisations, activities in the value chain progress both "upstream", such as the activities of
	suppliers, and "downstream", such as the use of products and/or services. The hallmark of a
	value chain is the addition and detraction of value at various places and moments due to the
	activities of the various players in the chain.

Colophon

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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, 5,000 employees and 12,000 students, Wageningen University & Research is one of the leading organisations in its domain. The unique Wageningen approach lies in its integrated approach to issues and the collaboration between different disciplines.