Annual Report UNESCO-IHE

2014

UNESCO-IHE
Institute for Water Education

Contents

Rectorate's statement 3

UNESCO-IHE at a glance 5
- Institutional profile 5
- Education and training 5
- Research and innovation 5
- Capacity development 6
- Strategic directions 6
- Organizational structure 7
- Partnerships & Networks 8
- Focal themes & linkages 12

Education 13
- Students 15
- Educational developments 17
- Quality of education 18
- Relationship with the professional field 19

Research 21
- Research profile 21
- PhD fellows 23
- Quality of research 25
- Research developments 26
- Societal relevance and valorization 28

Capacity development 29
- Programme management 29
- Institutional strengthening 30
- Tailor-made training 31
- Policy advice 31

Home base 33
- Human resources 33
- Services 35
- Campus 37

Financial report 39

Fellowship Trust Fund 43

Annexes 45
1 Educational statistics 46
2 Short courses 47
3 PhD fellows 50
4 Research lines 55
5 Publications 57
6 Organizational chart of UNESCO-IHE 69
7 Committees 70
8 External Memberships 71
9 Projects 77
10 Partners 90
11 UNESCO-IHE & Netherlands Alumni Associations 92

Rectorate's statement

2014 was a challenging year for UNESCO-IHE. Though we have gone through trying times, we were also able to accomplish many goals with the help of our dedicated employees.

We guided over 200 MSc students to graduation, contributed to scientific breakthroughs and implemented more than 100 projects worldwide - many with very high societal and environmental impacts. We received a very favourable assessment of our research programme by SENSE, particularly at the Institute level and for some chair groups, and we developed a new quality assurance system for our education. All four of UNESCO-IHE's MSc programmes were re-accredited by the Netherlands-Flemish Accreditation Organisation (NVAO) as per 1 January 2014, for a three-year period.

A new professorial chair in Climate Change Impacts and Coastal Risks was established at UNESCO-IHE in January, following a successful proposal to the AXA Research Fund. The four-year Mau Mara Serengeti Sustainable Water Initiative (MaMaSe) project (8 million Euros) started in January.

The first International Women's Day conference was organized at UNESCO-IHE; due to positive feedback and relevance in the sector, it was decided to make this an annually recurring event. We professionalized our support services through, among other things, the automation of workflow through AFAS and a new automated declaration system. These are only a few highlights of the Institute's accomplishments; many more individual and collective achievements were achieved and are mentioned in this Annual Report.

As the year draws to a close, we are in the midst of working on a new strategy for 2015-2025, and will finalize the draft of our strategic directions report through extensive stakeholder involvement. We are also working on a new implementation and business plan for the strategy. We foresee that 2015 will be a yet another challenging year in which the Institute will go through some organizational changes. Although changes are never easy, they do offer opportunities to improve and to grow stronger as an Institute, and we are taking this opportunity to continue to professionalize our activities.

In September, the farewell event of Rector András Szöllösi-Nagy was organized on the occasion of his retirement. Prof. Szöllösi-Nagy was Rector at UNESCO-IHE from 2009 to 2014. He further developed the Institute in many ways, increased it international visibility and acted as a passionate advocate for putting water on the Sustainable Development Goals agenda during his time at UNESCO-IHE.

His role in advocating for water as a human right reminded us once again of the unique role that UNESCO-IHE has in enabling people, especially in developing and transition countries, to improve sustainable management of their water and environmental resources. It is this shared vision that we believe will unify our efforts, and it is the commitment of the Institute's employees and partners to this vision in combination with their vast expertise that makes us very optimistic about the future of UNESCO-IHE.

Prof. Stefan Uhlenbrook
Vice-Rector and Officer in Charge

Ms. Drs. Greet Vink
Business Director

UNESCO-IHE at a glance

Institutional profile

Vision
UNESCO-IHE envisions a world in which people manage their water and environmental resources in a sustainable manner, and in which all sectors of society, particularly the poor, can enjoy the benefits of basic services..

Mission
The mission of UNESCO-IHE is to contribute to the education and training of professionals, to contribute to the knowledge base through research, and to build the capacity of sector organizations, knowledge centres and other institutions active in the fields of water, the environment and infrastructure in developing countries and countries in transition..

Mandate
The institute has the UNESCO mandate to play a global role in training a new generation of water professionals, facilitating the development of capable organizations and providing an enabling environment for well-informed decision-making that will achieve integrated improvement in water management practices. Related academic activities are mostly done in collaboration with partners worldwide, with a specific focus on developing and transition countries.

Goals
In support of its mission, the Institute has three main goals:
- Generate new knowledge, initiate innovations, and promote the uptake of technologies and policies that will address the issues of the global water agenda, in particular those related to the Millennium Development Goals (MDGs) and the post-2015 Sustainable Development Goals (SDGs);
- Seek, evaluate and facilitate responses including the development of human capital for the sustainable management of water, to meet the needs of all sectors of society, particularly the poor; and
- Strengthen and promote principles of good governance that drive institutional and management change to support the sustainable management of water.

Core activities
UNESCO-IHE carries out education and training, research and innovation, and capacity development activities in the broad fields of water engineering, water management and governance, aquatic environment, water supply and sanitation..

Education and training
UNESCO-IHE offers both degree programmes (PhD and MSc levels) and non-degree programmes (short courses, online courses and tailor-made training) for engineers, scientists and professionals from various disciplines working in the water, environment and infrastructure sectors. UNESCO-IHE is increasingly implementing its educational activities with partner institutes worldwide, making water education more accessible and affordable for an increasing number of students.

Education and training

UNESCO-IHE offers both degree programmes (MSc and PhD levels) and non-degree programmes (short courses, online courses and tailor-made training) for engineers, scientists and professionals from various disciplines working in the water, environment and infrastructure sectors. UNESCO-IHE is increasingly implementing its educational activities with partner institutes worldwide, making water education more accessible and affordable for an increasing number of students.

Research and innovation

The Institute’s research activities concentrate on six main research themes and contribute to the knowledge base concerning the water environment, and complement its education and capacity development activities. Significant parts of the research programme are done via PhD research (in programmes implemented in cooperation with partner universities), MSc thesis research and post-doctoral research programmes.

UNESCO-IHE at a glance

Capacity development

UNESCO-IHE engages in institutional strengthening projects and provides advisory and consultancy services to knowledge institutes, water sector organizations, knowledge networks and UNESCO member states. Through these operations, the Institute increases its global impact and helps to build sustainable organizations that are equipped to properly manage water resources and deliver water services sustainably. The Institute also has a policy forum function and acts as an intermediary between science and policy making.

Strategic Directions

Aim

Water is critical to the world's prosperity and environmental sustainability and is expected to grow in importance even further over the coming decades. Meeting the global challenges requires a strong foundation of knowledge to enable well-informed decision-making and improve water management practices. This places water issues very high on the international political agenda, and water is critical for the development for the post-2015 development agenda and Sustainable Development Goals (SDG) as currently formulated.

The challenges for water education and capacity development are enormous. Global environmental changes will expose the future university graduates to water problems of unprecedented complexity and magnitude, as the (global and regional) changes introduce new drivers and pressures on the systems that have not been experienced before. Positive feedback loops can reinforce and increase the existing complexity and magnitude. In relation to this, employers of water professionals expect their staff to continue learning throughout their professional lives to keep abreast of the latest knowledge and skills in the water sector. Not only for employers, but in particular for the individuals themselves and universities, continuous professional development (CPD or lifelong learning) is essential.

The water and environment sector faces particular capacity challenges. The projected personnel shortages and staff successions in developing countries and countries in transition are extremely critical for sustainable development. This must be addressed systematically by closing the gap: training young, ambitious and talented students as well as mid-career water professionals and providing a lifelong learning context that effectively transfers existing knowledge, generates new knowledge, and equips professionals with the skills and competencies they need to be effective.

Therefore, the strategic aim of the Institute is to increase its impact and outreach over the next decade through the Institute's growing stature as a world-class centre of water education, research, and capacity development.

Strategic Directions UNESCO-IHE 2015-2025

The Strategic Directions UNESCO-IHE 2015-2025 entitled 'Excelling in impact by developing talent, providing solutions and contributing to global sustainability in partnership' were developed and consequently approved by the Governing Board in 2014. Work on the Institute's strategy will continue into 2015 with the formulation of the implementation plan and work plan.

The strategy for the next ten years will have to be implemented in a dynamic and changing environment due to i.e. economic uncertainties, societal and environmental changes, an SDG agenda which has not yet been consolidated, changes in donor policies. Despite these uncertainties, UNESCO-IHE is exceptionally well-placed to implement the high-quality and high-impact water education, research and innovation, and capacity development programmes needed to address the huge water and sustainability challenges we are faced with. The Institute is confident that its ambitious strategy will enable it to excel by developing talent, providing solutions and contributing to global sustainability in partnership.

In its education strategy, UNESCO-IHE acknowledges the need for more creative and innovative water education in order to enable future water professionals to meet the huge water and sustainability challenges of the 21st century. Complex water problems cannot be solved with traditional disciplinary approaches and focus will shift even more to an issue-oriented, solution-focused and multi-disciplinary approach with the aim of educating a new generation of reflexive engineers and adaptive water managers trained in trans-disciplinary ways of producing and using knowledge in real-world situations.

The Institute investigates to move from the current 18-month MSc programmes to: (i) a science-based one-year MSc programme on Water and Sustainability; and

(ii) a two-year Research MSc programme aimed at those students who aspire a career in academia or R&D. This change would require a significantly improved quality of student intake through stricter entrance requirements, careful reconsideration of content to make it more oriented towards skills, competencies and lifelong learning, as well as adaptations to existing joint MSc programmes implemented in collaboration with partner universities. The current joint programmes will be critically assessed, and new programmes will only be considered if the prospective partners are reputable and complementary. There must also be a clear external demand and financial commitment for continuing existing joint programmes and establishing new ones.

The Institute's highly specialized e-learning courses with a focus on water and sustainability in a development context will be enhanced to apply modern didactical approaches, offer more personalized study tracks and support lifelong learning. E-learning will also play a key role in the MSc preparation phase.

The research and innovation strategy of UNESCO-IHE is geared to five key elements of sustainability – meeting basic needs, protecting the integrity of the resource base, ensuring equity and reducing conflict, mitigating risks and building resilience, and enabling economic development – and will retain its focus on excellence. To that end, the UNESCO-IHE PhD Graduate School for Water and Development will be launched in 2015. It will operate as a single-entry PhD training and research point in water and development with multiple degree providers (international top-level universities).

The Institute will continue to focus on the research themes identified in 2013, which are well connected to relevant international programmes:

- Safe Drinking Water and Sanitation
- Water-Related Hazards and Climate Change
- Water and Ecosystems Quality
- Water Management and Governance
- Water, Food, and Energy Security

Information and Knowledge Systems

The commitment to innovation will increase, i.e. the translation of research outputs into products, services, processes and new activities must be improved. Most innovations launched by the Institute will continue to be technological in nature, but their adoption also has social, economic, environmental, governance, institutional and political dimensions. Examples include research into low-cost water and wastewater treatment systems, pro-poor and emergency sanitation, resource recovery from waste, forecasting systems and nature-based flood defences.

To prevent the failure of innovative ideas in the real world, UNESCO-IHE intends to grow the absorption and innovation capacity of partners and promote entrepreneurship in the water sector by increasing the number of public-private partnerships and related training courses. Also, more demonstration sites and living labs will be set up with local governments, businesses, and other parties. These sites will become focal areas for stakeholder engagement with a key role reserved for local partners in the co-design of research activities.

In the area of capacity development for social innovation, UNESCO-IHE will concentrate on a number of strategic objectives. It will take on various roles to sustainably strengthen the capacity of individuals and organizations through joint learning and change; shift to higher-value development services (e.g. advisory services, change processes and customized training) to address the complexity of water issues and the diversity of stakeholders; target individual water professionals, a wide variety of water sector organizations, NGOs, and civil society organizations, potential long-term partners and water sector leaders; and strive to be the leading global provider of capacity development services for the water sector by 2025.

In order for the strategic goals to be reached, the organization will be strengthened through the investigation of simplifying and increasing the effectiveness of UNESCO-IHE's governance structure, to establish a more programme-driven and theme-oriented approach. Staff efficiency will be increased through professionalization of process management services and IT systems, efficiency improvements in education and research, and maximum integration of student costs into externally funded projects.

Organizational Structure

Rectorate & Roles

The day-to-day management of the Institute is handled by the Rectorate, which consists of the Rector (vacant since November 2014), the Vice Rector of Academic and Student Affairs (Officer in Charge), and the Business Director.

UNESCO-IHE at a glance

The Rectorate reports to the UNESCO-IHE Governing Board about programmatic issues and to the IHE Delft Foundation Board on financial matters. The Rectorate provides leadership to three academic departments and six process management units.

Governing Board

The Governing Board comprises representatives of ministries, universities and the private sector, all appointed by the Director-General of UNESCO.
The functions of the Governing Board are:

- to determine, within the framework decided by the General Conference, the general policy and the nature of the Institute's activities through a set of guidelines for the development of the Institute's programme, including a balance of priorities within the programme;
- to adopt the programme of work and its budget estimates;
- to examine the biennial and other reports on the activities and expenditures of the Institute prepared by the Director and to advise the latter on the execution, evaluation and follow-up of the Institute's programme and other matters he/she may bring to its attention;
- to submit the biennial report on the Institute's activities to the Executive Board and to the General Conference;
- to submit through the Director-General proposals to the Executive Board and the Intergovernmental Council of the International Hydrology Programme for appropriate action by the General Conference with regard to the programme of work of the Institute.

For a complete list of Governing Board members, refer to Annex 7 - Committees.

Foundation Board

The Foundation owns the buildings and facilities that UNESCO-IHE uses, and employs most of UNESCO-IHE's staff. The IHE Delft Foundation Board, responsible for management of the Foundation, is also responsible for providing the Institute with the resources for the implementation of contracts with third parties. They consequently bear the financial risks and responsibilities attached to contracting, and are responsible for safeguarding the continuity of the Institute's operations by overseeing the finances and ensuring proper embedding of the Institute in the Dutch legal systems. [Source: article 3.2 from the Cooperation Agreement (second renewal)]..

For a complete list of Foundation Board members, refer to Annex 7 - Committees.

Academic Departments

UNESCO-IHE has three Academic Departments with academic staff responsible for education, training and research programmes. These are the Environmental Engineering and Water Technology, Water Science and Engineering, and Integrated Water Systems and Governance departments.

Each Academic Department is composed of Chair Groups, each of which is formed around a particular discipline or specialization. To see how the Academic Department relate to the Chair Groups, refer to Annex 4 - Research Lines.
Process Management Units

The work of the Academic Departments is supported by the Institute's Process Management Units. These include Central Services, the Education Bureau, Finance, Human Resource Management, IT, and the Office of the Rector.

UNESCO-IHEs Organizational Chart can be viewed in Annex 6.

Partnerships & Networks

'Working in partnership' is the general approach at UNESCO-IHE. The majority of the activities are done in partnership, mainly working with partners from developing countries and countries in transition. Partners are often other academic institutions, but also include ministries and departments, companies and private sector organizations, water boards and water utilities, municipalities, NGOs, UNESCO institutes and other UN and international organizations.

Bilateral Partnerships

At present, UNESCO-IHE has cooperation agreements with 101 institutional partners worldwide. The following institutional agreements were signed or renewed in 2014.

For a full list of UNESCO-IHE's Cooperation Agreement partners, as well as Joint Education and Joint Research partners, refer to Annex 10 - Partners.

Signed	Partner	Goal
January 2014	World Resources Institute (WRI)	Link with the Aqueduct Monitor developed by WRI, facilitate short visits of staff, joint seminars, joint re-search.
June 2014	Agencia Nacional de Investigación e Innovación (ANII)	Funding of 23 scholarships over six years, starting in 2014
June 2014	ASEM Water Resources Research and Development Center	Support the establishment and operation of the Center, to promote a long-term partnership between water resources research institutes in Asia and Europe, to carry out research and information exchanges.
June 2014	Instituto Mexicano de Tecnología del Agua (IMTA)	Participation of IMTA students in UNESCO-IHE MSc and PhD programmes, short courses; joint capacity development activities.
December 2014	Ministry of Education, Ethiopia	Develop joint education programs, work towards establishment of model water institutes in Ethiopia, strengthen capacity of Ethiopian researchers and academicians, institutional capacity building and bring University Water Sector Partnership collaboration to a national level to ensure coherence with national education policy.
Originally signed January 2008, renewed January 2014	Wageningen University and Research Centre (WUR)	Financial and administrative arrangement for joint PhD promotions.
July 2014	University of Zagreb	Capacity building, knowledge transfer, and research activities in water science and technology, wastewater treatment technologies, risk assessment, environmental consultancy, monitoring and risk mapping.
Originally signed November 1998, renewed September 2014	Danish Hydraulic Institute (DHI)	Guest lecturing; funding for MSc students' research phase working in areas relevant to DHI; collaborative PhD research; provisions of DHI's special licenced MIKE software for education and research purposes
Originally signed August 2010, renewed May 2014	Deltares	Cooperation in research, guest lecturing, shared part-time staff, preferred partners in consortia, supervision and sponsoring of MSc and PhD research.
November 2014	Drainage Services Department of the Government of Hong Kong	Educate DSD staff in UNESCO-IHE MSc programmes; seek funding opportunities for joint research and implementation of seminars, workshops and short courses.
July 2014	Food and Agriculture Organization (FAO)	Information exchange, joint projects and capacity development activities in water accounting and auditing, assessing and reducing of land and water productivity gaps, and irrigation modernization.
September 2014	Global Water Partnership (GWP)	Annual GWP seminar at the Institute on GWP network activities, toolbox, and technical committee publications; contribution of UNESCO-IHE staff and students to GWP technical committee studies and contribution to GWP regional water partnerships.
Originally signed June 2008, renewed May 2014	International Centre for Water Hazard and Risk Management (ICHARM)	Cooperation in capacity building in water & hazards, and water & climate as well as joint research in the context of climate change.
March 2014	Ministry of Water Resources, Iraq	Institutional and human resources development of the Ministry through MSc and PhD programmes and tailormade trainings.
Originally signed 2002, 3rd renewal May 2014	International Water Management Institute (IWMI)	Information exchange, elaboration and implementation of joint projects, capacity development and joint supervision of MSc and PhD students in water management and global change, water data and water accounting, and improved options for water management to eradicate extreme poverty and support sustainable development.
March 2014	National Central University, Taiwan	Joint research on (urban) drought and flood resilience and flood emergency/disaster management
Originally signed November 2011, renewed December 2014	Rotary International	Provide scholarships for ten MSc students in 2015

UNESCO-IHE at a glance

Signed	Partner	Goal
May 2014	University of Kuala Lumpur (UniKL)	Joint project proposals, staff exchange, development of scientific topic for post-graduate studies, co-supervision of postgraduate students, exploring potential implementation of a joint MSc programme on hydropower and support on projects in hydropower and in the river management sector.
July 2014	University of Twente	Exchange of staff, joint research and sharing education activities. The agreement contains financial arrangements for PhD supervision.
November 2014	Vietnam Maritime University (VIMARU)	Training of students and staff of VMU, exploring possibility of developing a double-degree MSc programme in coastal engineering and port development and other joint research and education activities.
April 2014	Water and Environmental Studies Institute (WESI)	Development of education curricula at WESI, work towards establishment of joint academic programmes, joint project submissions and trainings.

Contribution to UNESCO's programmes & activities

As an integral part of UNESCO, UNESCO-IHE is an essential member of the UNESCO Water Family as a major pillar providing water education and research and, consequently, plays a clear role in fulfilling UNESCO's general mission: 'Building peace in the minds of men and women'. The Institute directly contributes towards UNESCO's medium-term strategy which presents the strategic vision and programmatic framework for 2014-2021 in all its fields of competence. More specifically, the Institute adds to the strategic objectives of the Natural Science Sector of UNESCO:

- Strengthening science, technology and innovation systems and policies – nationally, regionally and globally; and
- Promoting international scientific cooperation on critical challenges to sustainable development.

Through implementing its research and innovation agenda, the Institute works towards the main goal of UNESCO's International Hydrological Programme (IHP) to facilitate an interdisciplinary and integrated approach to watersheds, aquifer management and water resources, and to promote and develop international research in hydrological and freshwater sciences. Within IHP's current strategic plan entitled 'Water Security: Responses to Local Regional and Global Challenges' (IHP-VIII for 2014-2021), UNESCO-IHE is contributing to all themes. The thematic overlap between IHP-VIII and the research and innovation agenda is estimated to be as much as 80%, based on currently ongoing PhD research topics. Particularly, the Institute plays a lead role in water education (theme 6), through promoting interdisciplinary and multidisciplinary curricula and research initiatives linked to water, joint courses and research with a focus on innovation, among universities and other research institutions, including Category 2 water centres and UNESCO water chairs. The Institute is spearheading research on topics central to the IHP, including water-related disasters in a changing environment, ecohydrology, climate change/climate change adaptation, urban water management, transboundary groundwater, water governance and pro-poor sanitation.

UNESCO-IHE contributes to the PCCP programme of UNESCO (from Potential Conflict to Cooperation Potential) that facilitates multi-level and interdisciplinary dialogues in order to foster peace, cooperation and development related to the management of transboundary water resources. Therefore, various education activities are carried out, such as high-level training courses, and the establishment of a new joint MSc programme with the University of Peace (Costa Rica) and Oregon State University (USA). Research on water conflicts and cooperation is also an essential part of the Institute's research agenda. Last but not least, UNESCO-IHE collaborates to the UNESCO-led UN World Water Assessment Programme (WWAP) by contributing to the analysis and co-authoring chapters in the annual World Water Development Report.

The Institute contributes by implementing its research and innovation agenda and building institutional and human capacity in science and engineering in the field of water and environment, with a particular focus on activities

that contribute to sustainable development. Therefore, the education programme builds on the outcomes of the UNESCO-led UN Decade of Education for Sustainable Development (2005-2014). It implements capacity development projects that provide support to water sector institutions, and supports the set-up and strengthening of water education and research at local universities with a view towards supporting sustainable development. The Institute contributes towards strengthening the science-policy-society interface with respect to water and the environment.

The Institute is supporting member states by working towards improving the accessibility of tertiary water education, by increasing the number of joint programmes offered in collaboration with partner institutions from the developing world, and by increasing the flexibility of the educational offerings in terms of distance learning, funding modalities, and exchange of university credits. Capacities are built through thousands of professionals from developing countries and countries in transition trained at the MSc level and in short courses (e-learning or face-to-face) on water-related issues. In this manner, UNESCO-IHE directly contributes to reducing the scientific knowledge divide between and within developing countries and countries in transition and the industrialized world.

UNESCO-IHE also plays a critical role in addressing UNESCO's two global priorities areas: Africa and gender equality. Through its capacity development, research and education services, its large alumni network and long-standing partner organizations, including UNESCO Category 2 institutes and UNESCO chairs related to water, UNESCO-IHE has a very successful history of supporting sustainable development in Africa. Likewise, the Institute supports the development of (water) organizations that provide an enabling environment for both women and men to contribute to and enjoy the benefits of sustainable development of water resources. Notably, around 90% of the participants of the education and training programmes of UNESCO-IHE are from developing countries and countries in transition; about 40% are female and about 40% are from Africa.

Collaboration with the Dutch education sector

UNESCO-IHE is firmly embedded in the Dutch higher education sector. The education programmes are implemented in accordance with Dutch legislation and the Master's programmes are accredited by NVAO (Dutch Flemish Accreditation Organisation), which provides the quality framework and facilitates the international recognition of the degrees. UNESCO-IHE is a signatory to the 'code of conduct with respect to international students in Dutch higher education', which guarantees a service level to international students and allows for shorter immigration procedures for students.

The cooperation with Dutch universities is based on the cooperation in many joint research, education and capacity building projects implemented mainly in the developing world. The cooperation is facilitated through joint appointments of staff and guest lecturers; more specifically, each professor of UNESCO-IHE has an appointment at one of the Dutch universities. This ensures links with the relevant chair groups at these universities and gives the professors the right to award PhD degrees. PhD promotions are conferred jointly with Dutch universities, based on their right to award PhD degrees as stipulated by the Dutch Higher Education Act.

The closest ties are presently with Delft University of Technology, Wageningen University, and to a lesser extent with ISS/Erasmus University of Rotterdam. Cooperation was recently established with the University of Amsterdam, and with Twente University. Through its membership in the Socio-Economic and Natural Sciences of the Environment Research School (SENSE), a joint venture of the environmental research institutes of Dutch academic institutes, the Institute collaborates with groups of other Dutch universities, particularly VU Amsterdam, Utrecht University, Leiden University and the Open University.

UNESCO-IHE is an active member of the Platform International Education, an association that promotes activities of the Dutch institutes for higher education in the field of the institutional strengthening of education and research capacity in developing and transition countries.

Ties to Dutch water sector

UNESCO-IHE's link to the Dutch water sector is important, as it provides access to specific knowledge and adds to the relevance of the Institute in the Dutch socioeconomic context. The linkages are mainly shaped through guest lecturing and cooperation in capacity development and research projects. UNESCO-IHE is a member of the Netherlands Water Partnership and part of the Technological Innovation Campus Delft, and individual staff members have affiliations with a variety of Dutch professional associations. Match-making activities are organized to facilitate contacts between the sector and alumni as well as students of UNESCO-IHE, such as the annual Water Sector Market.

The Institute contributes directly to various objectives and programmes of the Government of the Netherlands. The DGIS–UNESCO-IHE Programmatic Cooperation (DUPC) is a special fund that contributes to the Dutch development cooperation and trade agenda and ambitions of the Ministry of Foreign Affairs. This agenda is increasingly linked to the economic development agenda of the Ministry of Economic Affairs, and the "being connected" agenda of the Ministry of Infrastructure and Environment. With its academic and project work, UNESCO-IHE contributes directly to the Top Sector for Water; significant contributions are also made to several other Top Sectors, including agriculture/food, life sciences and health, and energy.

Performance agreement

At the beginning of the year, the performance indicator report for the Dutch Ministry of Education, Culture and Science (OCW) was finalized n compliance with the Duthc Higher Education law. This medium-term indicator report covers educational quality and success rates, educational and research profiles and valorization

During the negotiations for the renewed operational agreement between the Government of the Netherlands and UNESCO for the 2014-2018 period, it was agreed that the funding of the Institute for 2017 and 2018 will be subject to an evaluation early 2016 of the Institute's performance in education, research and valorization of knowledge in assisting developing countries and countries in transition. This Annual Report includes a list of relevant indicators as stipulated in the performance indicator report.

Focal themes & linkages

UNESCO-IHE centres its education, research and capacity development programmes on the focal themes of:

- Safe Drinking Water & Sanitation
- Water-Related Hazards & Climate Change
- Water & Ecosystems Quality
- Water Management & Governance
- Water, Food & Energy Security
- Information & Knowledge Systems

In addition, important emerging areas are addressed in the education and research programmes, such as water conflict management, climate and global change adaptation, and urban water systems. The thematic priorities are solidly embedded in ongoing international programmes, including UNESCO's IHP-8 (2014-2020) programme, ICSU's Future Earth, and IAHS' Panta Rhei. Progress on these themes will be essential to contribute to address the Grand Challenges formulated by the EU Horizon 2020 programme. The critical importance of these thematic programmes is confirmed by the interest of philanthropic donors, which led to large research and capacity building programmes financed by, for instance, the Bill and Melinda Gates Foundation and Rotary International.

Nationally, UNESCO-IHE is linked to various research and innovation programmes, such as: the NWO programme on urbanizing deltas, MVI water (NWO), initiatives related to the Top Sector on Water, Water Mondial, Knowledge Platform on Water for Development (VIA Water). Furthermore, specific support is given in addressing their spearhead actions of the Dutch government policies on trade and development cooperation as related to water. More specifically, UNESCO-IHE contributes to their agenda through:

- Developing the capacity of water sector organizations, institutes and individuals in order to become self-learning, to be capable of setting their own policies and practices, to conduct sustainable water management and be internationally connected; to be capable of reducing dependency on foreign expertise;
- Enlarging, making accessible, disseminating and applying practical knowledge and skills on good water management in developing and transition countries, also by linking to Dutch know-how and expertise;
- Using and linking to existing networks to stimulate demand-driven cooperation between water professionals and institutions and stimulating the private sector with relevant knowledge towards public-private partnerships in the field of water; and
- Acting as a knowledge broker and advisor for DGIS and the Embassies of the Kingdom of the Netherlands. Helping to implement agendas such as water diplomacy, in which UNESCO-IHE's neutral UN position plays a helpful role.

Education

Context

UNESCO-IHE aims to equip graduates with the knowledge, skills and competencies they will require in order to address current and future challenges for sustainable local, regional and global water management, with a particular focus on a development context. Countries in the global South often face acute challenges related to sustainable use of natural resources, potable water supply, sanitation services and governance structures. The vision has been translated into Master's programmes that address these complex challenges for the water and environment sector and target mid-career professionals, mainly from developing and transition countries.

UNESCO-IHE students learn in an international atmosphere, gaining insights from best practices in various regions of the world. They are encouraged to develop an integrated approach in their work with the aim of achieving sustainable solutions, taking into account the multidisciplinary aspects of challenges they will encounter during their career.

The UNESCO mandate granted to UNESCO-IHE for training water professionals who will contribute to integrated water management provides a far-reaching and ambitious context for its educational programmes. The programmes are firmly rooted in fundamental principles of inclusive and sustainable water management. They embrace interdisciplinary approaches and are adaptable in order to address the trans-disciplinary challenges inherent to many water issues involving a diverse range of actors, cultures and attitudes. The academic programmes are student-centred. They incorporate a well-balanced range of didactic approaches, and link theoretical and applied knowledge with the skills and adaptability to apply that knowledge across diverse settings. Parts of some Master's programmes are offered in partnership with other institutes.

The Institute's education programmes are highly profiled and focus on water. UNESCO-IHE offers both degree programmes (MSc and PhD levels) and non-degree programmes (short courses, online courses and tailor-made training) for engineers, scientists and professionals from various disciplines working in the water, environment and infrastructure sectors.

UNESCO-IHE offers four accredited International Master of Science programmes, with a total of 16 specializations.

The Delft-based MSc specializations take 18 months, of which the first year consists of taught modules that are given at UNESCO-IHE in Delft. After successful completion of the taught modules, the student does individual research for a six-month period.

The joint programmes are MSc specializations developed with and offered in collaboration with renowned international partner institutes, the number of which has grown rapidly in recent years. These joint programmes have varying start and end dates, and part of the programme is given at one of the partner institutes, often in another country-continent.

Delivering education jointly with partners offers content, including region-specific knowledge and perspectives, that UNESCO-IHE cannot cover on its own. Sometimes having parts of the programme delivered by partners reduces financial costs for the student/sponsor, as total fees and costs of living are generally lower than for a fully Delft-based programme. For students originating from the partner's country/region, social costs may be lower

Education

MSc programmes & specializations

MSc PROGRAMME IN ENVIRONMENTAL SCIENCE		
Environmental Planning and Management		Db
Environmental Science and Technology	J	Db
Environmental Technology and Engineering	J	◌
Environmental Technology for Sustainable Development	J	
Limnology and Wetland Management	J	
Water Quality Management		Db
MSc PROGRAMME IN URBAN WATER AND SANITATION		
Sanitary Engineering	J	Db
Urban Water Engineering and Management	J	
Water Supply Engineering	J	Db
MSc PROGRAMME IN WATER MANAGEMENT		
THEMATIC PROFILES		Db
Water Conflict Management		
Water Quality Management		
Water Resources Management		
Water Services Management		
MSc PROGRAMME IN WATER SCIENCE AND ENGINEERING		
Ecohydrology	J	◌
Flood Risk Management	J	◌
Hydraulic Engineering and River Basin Development		Db
Hydraulic Engineering - Coastal Engineering and Port Development	J	Db
Hydraulic Engineering - Land and Water Development	J	Db
Hydroinformatics - Modelling and Information Systems for Water Management	J	Db
Hydrology and Water Resources	J	Db

Db Delft/based MSc specializations
J Joint programme
◌ Joint Erasmus Mundus programme

Joint Programme Partners map

as well. As a result, UNESCO-IHE MSc degrees become more accessible. See the Joint Programme Partners map for an overview of partner institutes worldwide.

Currently, 13 out of 16 specializations are offered in partnership as joint degree or double/multiple degree programmes. Of these, ten specializations are offered together with partners from the global South. The three other joint specializations are European Erasmus Mundus programmes.

The Institute offers a programme of short courses, both face-to-face (in Delft) and (increasingly) on-line. Most of the face-to-face courses are modules within the MSc programmes, where the short-course participants mix with the MSc students. This facilitates peer learning for both groups. It also allows short course participants to take the module exam in order to earn ECTS credits and build up a portfolio for an MSc degree.

Over the course of ten years, UNESCO-IHE has increased the diversity, accessibility and quality of its educational offerings, while maintaining development relevance. It has done this primarily through expanding staff capacity in the social sciences, developing educational partnerships, expanding its on-line offerings and through staff development.

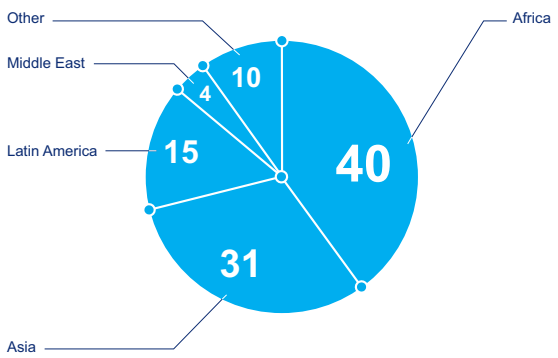
The Institute has also been successful in mobilizing fellowship opportunities from sources other than the Netherlands Fellowship Programme. Notable examples are the Bill and Melinda Gates Foundation and Rotary International.

Students

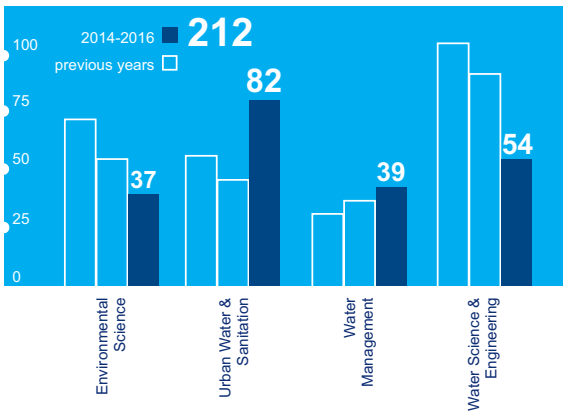
In 2014, 212 MSc students started their studies, which is a decrease as compared to last year. The same amount of students were enrolled in programmes jointly implemented with partner institutes as compared to 2013, including Erasmus Mundus. In total, 35% of all MSc students were enrolled in the joint modalities.

The complete overview of MSc student numbers can be found in Annex 1 - Educational Statistics, and the overview of short course and online course participants in Annex 2 - Short Courses.
238 MSc students completed their study in 2014. The success rate for the MSc programmes is high: on average,

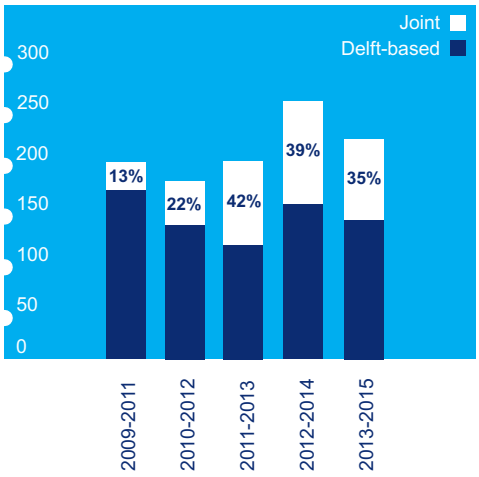
Students region of origin academic year 2014/2015



MSc students per programme



Joint/Delft/based MSc students per academic year



Education

Performance indicators education

	Quality of education	2011	2012	2013	2014
E1	MSc student success rate (%)	89	94	**93**	**92**
E2	Student satisfaction (1-5 scale)	3.91	3.95	**3.83**	**4.09**
E3	Teaching staff quality (% UTQ)	13.5	20.2	**26.1**	**25**

	Development relevance and valorization	2011	2012	2013	2014
E5	MSc graduates per year (No.)	189	175	184	**238**
E6	Short course participants per year (No.)	389	359	378	**585**
E7	On-line course participants per year (No.)	74	105	122	**147**
E8	MSc programmes intake (% from d/t countries)	83	86	90	**91**
E9	Short courses intake (% from d/t countries)	94	93	89	**89**
E10	On-line courses intake (% from d/t countries)	72	59	65	**65**
E11	On-line course offering (No.)	3	9	9	**9**

	Efficiency	2011	2012	2013	2014
E15	Teaching/management/coordination input (hrs/module)	257	248	251	**249**
E16	MSc thesis supervision input (hrs/graduate)	93	94	87	**80**

Quality of education

E1 MSc student success rate: being the percentage of students in the Delft-based programmes that has graduated by 1st August (i.e. 21.5 months after enrolling in the 18-months programme).

E2 Student satisfaction: being the overall judgment of the students in the Delft-based MSc programmes on a scale 1 (low) to 5 (high).

E3 Teaching staff quality: being the percentage of academic staff on the payroll with a University Teaching Qualification or equivalent (on 31 December).

Development relevance and valorization

E5 Number of graduates MSc programmes: being the total number MSc students graduating in this year.

E6 Number of short course participants: being the total number short course participants (including tailor made courses, refresher courses etc, i.e. all courses for which participants receive a diploma) in this year.

E7 Number of online course participants: being the total number of participants that followed an accredited online module/course in this year. Note that the total number of online participants has been much higher (>200), but the modules were not accredited. The ambition is to significantly increase the number of accredited modules to assurance the quality.

E8 MSc programmes intake from d/t countries: being the percentage of registered MSc students originating from developing/transition countries.

E9 Short courses intake from d/t countries: being the percentage of participants in accredited short face-to-face courses originating from developing/transition countries.

E10 Online courses intake from d/t countries: being the percentage of participants in accredited online courses originating from developing/transition countries.

E11 Online course offering from d/t countries: being the number of accredited online courses offered.

Efficiency

E15 Teaching and management/coordination input: being the average number of academic staff person hours spent per taught module in the MSc programmes.

E16 MSc thesis supervision input: being the average number of academic staff person hours spent per graduate on thesis research supervision.

some 90% of students obtain the MSc degree within 21.5 months. Student satisfaction rates are also high: the overall student evaluation of the quality of the programmes is over 4 on a scale of 1 (low) to 5 (high).

Nevertheless, some students leave earlier for personal reasons, while other students fail to obtain an MSc degree because either they do not pass taught modules or they fail the final thesis defence. In such circumstances, a Certificate of Post-graduate Studies for the taught part of the programme can be awarded, if a minimum of 54 ECTS credit points have been accumulated. In this way, we maximize the potential achievement for every student who enrols in a programme.

Educational developments

Monitoring efficiency of MSc programmes

The benchmarking system to monitor the efficiency of the MSc programmes, which was introduced in 2013, resulted in increased awareness of costs of the educational programmes in 2014. This, in turn, resulted in better management of staff time and out-of-pocket expenditures for running the programmes.

UNESCO-IHE Advanced Class Programme

The Advanced Class Programme, which aims to stimulate and reward the Institute's excellent MSc students, went operational. This programme is meant for ambitious and talented MSc graduates who have achieved a high level of academic excellence and who are judged to be able to make a high impact in their field of study after returning to their home countries. In 2014, 33 alumni followed the programme after graduation.

The educational development of the MSc graduates continued through a training programme designed for their specific activity and benefiting their future careers. The Advanced Class Programme offered these students the opportunity to undertake such activities as writing a scientific article for submission to a peer-reviewed journal or developing a proposal for submission to a donor for PhD research or capacity building. Their stay in the Netherlands was extended after graduation for a limited time.

Erasmus+ GroundwatCH Programme

The Erasmus+ Joint Master Programme in Groundwater and Global Change - Impacts and Adaptation (GroundwatCH) was awarded funding by the EU. The two-year programme will start for the first time in September 2015, and be given with two partners: Dresden University of Technology and the University of Lisbon. Students will kick off their studies in Lisbon, Portugal and then go to Delft, the Netherlands and Dresden, Germany. Graduates will receive MSc degrees from the three partnering institutes. The programme offers a distinctive curriculum built on the cornerstones of hydrogeology, hydrology and climatology. With this curriculum, GroundwatCH aims to address the current gaps in higher education with regard to the understanding of the interactions between groundwater, surface water, climate and global change, and how we need to consider and can benefit from these interactions when dealing with adaptation.

First-ever joint degrees awarded

For the first time in UNESCO-IHE's history, joint MSc degrees were awarded. The beneficiaries were students in the Limnology and Wetland Management programme, and students in the IMETE programme.

For the first time in UNESCO-IHE's history, joint MSc degrees were awarded. The beneficiaries were students in the Limnology and Wetland Management programme, and students in the IMETE programme. Two graduates of the Limnology and Wetland Management programme were awarded their degrees at Egerton University in June, and two at BOKU University in Vienna in April. The programme is fully designed with the effort of three institutions: UNESCO-IHE, Egerton University in Kenya and the University of Natural Resources and Life Sciences (BOKU) in Vienna, Austria.

The International Master of Science in Environmental Technology and Engineering (IMETE) is a joint programme with Ghent University and the Prague Institute of Chemical Technology. Between October 2012 and September 2014, 26 international students followed the IMETE programme. Eight students of that group graduated at UNESCO-IHE, while the other students graduated in Prague and Ghent.

Graduate Professional Diploma Programme

The Graduate Professional Diploma Programme (GPDP) has become a success, with 60 participants registered in 2014. GPDP was launched in 2013 to offer better access to the Institute's specialist knowledge, and increased flexibility for water professionals who wish to specialize

further or to redirect their current career. To qualify for the diploma, participants successfully complete a set of modules tailored to their needs in a personal study plan, either online or face-to-face in Delft. The online courses can be followed part-time, without interrupting a day-time career, at much lower cost.

In this initial phase, GPDP is restricted to the field of Sanitary Engineering and Sanitation. Over time, it will be possible to study for the diploma in other fields, as plans are underway for additional GPDPs in Water Supply Engineering, Water Treatment Technology, Urban Water Networks, Flood Risk Management and Cleaner Production and Residuals Management.

OpenCourseWare

UNESCO-IHE continued to develop OpenCourseWare (OCW) courses. At the end of the year, six courses were available through the OCW platform: Computational Hydraulics, Ecological Sanitation, Hydrology and Hydraulics, Open Source Software for Preprocessing GIS Data for Hydrological Models, Spate Irrigation Systems, and Urban Drainage and Sewerage. The material includes lecture notes, taped lecture videos and presentations. The Institute aims to make all of its educational materials available as OCW by 2017, in the form of lecture videos, notes and presentations.

OpenCourseWare are free and open digital publications of high-quality college and university-level educational materials. These materials are organized as courses, and often include course planning materials and evaluation tools as well as thematic content. OCW are free, available under an open license, and accessible via the internet. OCW is in line with UNESCO-IHE's commitment to sharing knowledge with others in and outside the water sector to contribute to solving water problems the world is facing.

Online courses

229 participants followed sixteen online courses in 2014. This modality vastly reduces the cost for students, making the Institute's offerings accessible to many more people, especially from developing countries. Increasingly, online courses include a formal assessment, allowing students to earn ECTS credits.

Quality of education

Didactic approach

All programmes emphasize the importance of knowledge integration because of its fundamental importance for sustainable water management; professionals in the water sector are increasingly required to be specialists in their own field or discipline, whilst also having a basic knowledge of adjacent and connecting fields. Therefore, UNESCO-IHE aims to develop graduates with a T-shaped competency profile. While individual programmes and their specializations vary in the mix of academic content across component disciplines, they all include teaching and exercises in broader awareness to foster a T-shaped profile of specialized knowledge, cross-linked with multidisciplinary awareness and understanding supported by various other competencies.

Students enrolled in the Master's programmes come from diverse backgrounds in terms of country of origin, academic background and age. Teaching and learning at UNESCO-IHE needs to accommodate this diversity. In addition, because of the policy to target mid-career professionals, many students require time to adjust to being in a learning environment after what may be a number of years away from formal education.

The programmes explicitly take into consideration the fact that conventional teaching is still very common in the higher education system of many of the countries from which the students originate. The programmes accommodate this through a gradual transition towards more student-centred learning. The core modules are designed to create space to bring all students to the required level in the specialization phase. Moreover, preparation materials are offered to students who need to upgrade their knowledge in a particular field, and additional reading is offered to stimulate more advanced students.

Depending on the specific learning objectives of the modules, suitable didactic approaches are selected for active learning. The approach often involves a mixture of traditional lectures with practical exercises, laboratory experiments, tutorials, workshops, self-study, essay writing and field trips. Assessment methods are aligned with the module objectives.

To adequately reflect individual performance, student-peer assessments were introduced within the more extensive group assignments to reflect the performance of individuals within the group. The link between learning objectives, activities and assessment is increasingly shared with the students at the beginning of the module so that they are aware of the rationale for learning activities and assessment.

Accreditation

All four of UNESCO-IHE's MSc programmes were re-accredited by the Accreditation Organisation of the Netherlands and Flanders (NVAO) in 2013. The accreditation is initially valid for a three-year period, to be extended to six years after a positive outcome of the NVAO-conducted institutional audit. This audit took place in 2014, and resulted in a verdict of 'positive with conditions'.

In order to work on the recommendations offered by the NVAO, a new Quality Assurance system for education was developed in 2014. This system built on the 'vision on the quality of education' established in 2013 and introduced policies, processes and tools to systematically implement this vision and monitor advancements.

The new Quality Assurance system affects the way the Institute designs programmes and modules, as well as evaluation and review systems. The Quality Assurance system was a central element to submit to the NVAO in December to prepare for the NVAO visitation to the Institute in early 2015.

Relationship with the professional field

A crucial component of the postgraduate education offered at UNESCO-IHE is the close-knit connection with the professional field, as bridging academic education and professional practice contributes to accomplishing the vision on education. The close relationship with the professional world spurs graduates to address day-to-day issues, analyze alternative solutions, assess the impacts of decisions and thus, eventually, develop critical and independent thinking. The importance of the relationship with the professional field to achieve the vision on education is highlighted not only by the number of activities that facilitate the contact with the field during the programme, but also by the intake criteria in selecting students who are mid-career professionals in their field, and thus have a direct and continuous feedback with the needs of the professional world.

Contacts with the professional field are ensured by various activities and means that UNESCO-IHE has put in place over the years. The main links between the academic environment at UNESCO-IHE and the professional life can be summarized as follows:

- Technical visits in the Netherlands that expose students to the Dutch water sector, to its culture and to Dutch traditions related to water management.
- International field trip to provide insights into professional practices in countries other than the Netherlands, where water governance, water resources management and engineering tradition have a different background and culture.
- Activities during the fieldwork and group work modules, where students themselves act as professionals in their field of study; students work in groups in which different specializations are represented, play a role as consultants and have to interact with peer colleagues and lecturers. The fieldwork requires students to act in the field, collect, analyze and interpret data, apply theories that have been discussed in class, and face issues of lack of data, and poor quality of data.
- Guest lecturers with specific expertise are invited from the international academic environment or from the professional field; guest lecturers bring to the programme their contribution as actors in the professional field and expose students to the needs and problems of the real world.
- There are various events at UNESCO-IHE during which students can meet professionals and companies working in their field of interest. UNESCO-IHE offers a rich array of lunch seminars delivered by guest lecturers, visiting professors, UNESCO-IHE staff members and professionals who provide detailed descriptions of on-going research, projects or consultancy activities. In 2014, the 50th edition of the International Port Seminar attracted a large number of participants from all continents.
- Many research projects carried out at UNESCO-IHE are driven by or carried out in collaboration with the professional world. This can be either represented by engineering companies, governmental and non-governmental agencies (in the country of origin of the graduate as well as in other countries) for, as an

example, data collection, data analysis, support in field surveys, and modelling, providing the basis for decision-making/policymaking.
- Students themselves represent a vibrant contact with the real engineering, management and scientific world, as they have several years of practice in their field of expertise. Thus, the peer-to-peer relationship itself is a rich source of confrontation and knowledge sharing.

An interesting finding from the last Alumni Tracer Survey, which is highly correlated with the relationship between education and the professional world, is related to the enlargement of their professional networking through UNESCO-IHE. Alumni were asked to rate the extent to which their professional life benefits from the contacts made at UNESCO-IHE and about their contacts with UN and Dutch organizations: 50% of the respondents from Europe, North America and Oceania have worked for or with a Dutch organization, especially in the role of partner or consultant; almost 25% of the respondents from Africa and Asia have worked for or with a Dutch organization, especially in the role of partner.

Research

Context

Research skills are among the fundamental competencies that UNESCO-IHE seeks to strengthen in its PhD fellows, graduate students and institutional partners. Building the research skills of individuals and institutional partners in the developing world brings benefits far beyond the immediate outcome of the MSc or PhD theses. Skilled researchers and research institutions can empower developing countries and countries in transition to address their own needs and problems through independent research. In addition, they facilitate the assimilation and adaptation of new ideas and technologies developed worldwide.

Research profile

Being able to assess problems (particularly water-related) and perform research on developing possible solutions is a major objective of UNESCO-IHE's activities. The research domain of the Institute encompasses various disciplines of water engineering and environmental and social sciences and concentrates on six main research themes that contribute to the knowledge base concerning the water environment. The Institute is primarily involved in applied research, but also conducts fundamental research to a lesser extent.

UNESCO-IHE is the largest international graduate-level water education and research facility in the world, with around 20 post-doctoral researchers and 225 MSc researchers active at the Institute in 2014, as well as 136 registered PhD fellows. The Institute's research activities complement its education and capacity development activities.

The majority of the PhD fellows and graduate students, as well as the partners with whom UNESCO-IHE carries out most of the research projects, are from developing countries and countries in transition. The Institute's links with the developing world provide an excellent opportunity to perform an almost constant reality check, since water issues faced by these countries require new and innovative solutions.

Research values

Research is demand-driven; research questions usually relate to real-world problems with high societal relevance. It is characterized by the following values:

- Scientific excellence: contributing to the creation of new developments through ground-breaking research with potential of having immediate practical applications; receiving world-wide recognition.
- High social impact: clear societal relevance of research themes and projects, as water is principally a societal issue, particularly in developing countries.
- Solution-driven: focus on producing new knowledge and using/adapting existing knowledge to help solve major water-related problems.
- Interdisciplinary and transdisciplinary: The research cuts across water science & engineering disciplines to environmental sciences and into dimensions of management, governance and economics, supported by the latest ICT developments, computer-based modelling and the development of decision support tools. Interdisciplinary approaches and 'system thinking' are prerequisites for developing solutions to complex water problems. The involvement of stakeholders/experts from outside the research groups (transdisciplinarity) is essential for the demand-driven character and effective uptake of research results.
- Collaboration and partnerships: Research is carried out in collaborative networks and partnerships. Partner engagement significantly strengthens the research programme by broadening the intellectual scope of

Research

Performance indicators research

	Quality of research	2011	2012	2013	2014
R1	**Publication outputs (No.)**				
	- Peer-reviewed journal article	187	268	254	**260**
	- Books	6	13	0	**5**
	- Book chapters	25	40	26	**23**
	- Conference papers	150	143	197	**102**
	- H-index of the Institute	58	58	59	**69**
	- Citation count	13,066	13,246	13,623	**19,904**
R2	**Staff meet SENSE (SEP) criteria (No.)**	17	23	39	**48**
R3	**Academic staff with PhD (%)**	79	81	89	**81**
R4	**Scientific presentations (No.)**	———— average 183 ————		**317**	**201**

	Development relevance and valorization	2011	2012	2013	2014
R6	**PhD students (No.)**	123	131	139	**136**
R7	**PhD graduations per year (No.)**	10	16	17	**16**
R8	**Journal articles with partners d/t countries (%)**	———— average 73 ————		80.5	**76.4**
R9	**Outreach presentations (No.)**	———— average 34 ————		42	**65**
R10	**International academic staff (%)**	48.8	47.8	46	**52**
R11	**PhD graduates from d/t countries (%)**	———— average 93 ————		93.8	**75**

Quality of research

R1 Publication outputs: The scientific impact of the research is measured through:
(i) the number of peer/reviewed journals articles per year,
(ii) the number of books (excluding PhD theses) per year,
(iii) the number of book chapters per year,
(iv) the number of papers in conference proceedings per year,
(v) the H/index of the Institute count (accumulative), and
(vi) the citation count (accumulative);
(v) and (vi) are based on the SCOPUS data base (that includes the vast majority of peer/reviewed journals articles from 1996 onwards).

R2 Number of staff meeting the SENSE (SEP) requirements: The number of academic staff members that meet the requirements to be member of a research school like SENSE (in line with Standard Evaluation Protocol (SEP) by KNAW/VSNU/NWO from 2009).

R3 Academic staff with PhD: The percentage of academic staff members holding a PhD degree employed on 31 December of the respective year.

R4 Number of scientific presentations: The number of oral presentations at scientific conferences per year.

Development relevance and valorization

R6 Number of PhD students: The number PhD students registered at the Institute and (co/) supervised by its academic staff members.

R7 PhD graduations per year: The number of graduating PhD researchers per year.

R8 Publications with partners from the d/t countries: The number of of journal articles with jointly published with partners/co/authors from developing countries and countries in transition.

R9 Number of outreach presentations: The number of oral presentations at science/policy fora (e.g. SWW, WWF, etc.) or to the general public.

R10 % International staff: The percentage of international academic staff members employed on 31 December of the respective year.

R11 % PhD graduates from d/t countries: Percentage of PhD graduates per year that originate from developing countries and countries in transition.

research topics and combining facilities and other resources.
- Accountability: The Institute is accountable to its partners for the quality, productivity, and societal relevance of its research activities. Research activities eventually lead to tangible results on the ground.

Societal relevance and impact for development are essential to the Institute's mission. Significant efforts have been made to create economic and societal value with research results by supporting their use and uptake in practice. We have observed considerable success in facilitating policy dialogues and providing advisory services at local, national, regional, and global levels. The Institute is highly visible in the arenas of water research and related science policy and has a favourable reputation.

Research themes

Due to the exclusive focus on water in a development context, although it does cut across many disciplines), the Institute's research agenda deviates from that of a traditional university in the Western world.

The following six research themes form the research agenda of the Institute:
- Safe Drinking Water & Sanitation: Research addresses ways to improve access to safe, sufficient, and affordable water for people to meet basic needs for drinking, sanitation and hygiene, to safeguard health and well-being, and to fulfil basic human rights.
- Water-Related Hazards & Climate Change: Water-related hazards such as floods, droughts, and pollution are increasing in frequency and intensity around the globe due to population growth and effects of climate and other environmental changes. Our research contributes to better understanding of multiple stressors and developing integrated solutions.
- Water & Ecosystems Quality: Investigating the role of aquatic ecosystems in providing environmental and human well-being, supporting development, and maintaining water integrity.
- Water Management & Governance: Social, biophysical and technological processes of water systems are intrinsically linked. Our research focuses on understanding interactions between societies, ecosystems and technologies in search for ways to effectively manage and govern water flows and water systems in a sustainable and fair manner.
- Water, Food & Energy Security: Research to support better management of water for food and energy security in a sustainable and equitable way in synergy with natural ecosystems and compatible with the respective socio-economic context.
- Information & Knowledge Systems: Research that enables better management of the information cycle of data acquisition, modelling, forecasting, optimization and knowledge management for facilitating innovation and supporting decision-making.

In addition to the established themes listed above, UNESCO-IHE is also growing in important emerging areas, such as water conflict management, water diplomacy, climate and global change adaptation, urban water systems and coastal systems, and knowledge management and innovation for addressing water-related challenges.

The Institute's research lines, and how they relate to the Academic Departments and Chair Groups, are presented in Annex 4 - Research Lines.

PhD fellows

The PhD programme at UNESCO-IHE has been growing rapidly from about 70 in 2007 to around 140 PhD fellows registered in 2014. The number of PhD fellows has remained stable this year, as has the number of PhD graduations. Hundreds of applications are received every year.

In March, Mr Almoradie from the Philippines successfully defended his PhD thesis on 'Virtual Environments for Stakeholder Participation in River and Flood Management,' and became the 150th PhD graduate since UNESCO-IHE started its PhD programme twenty years ago.

In total, 16 UNESCO-IHE PhD fellows from 13 different countries successfully defended their PhD thesis and obtained their doctoral degree in 2014. Around 30% of these fellows come from Sub-Saharan Africa.

More information on the PhD graduations and the registered PhD fellows, including the subjects of their theses, can be found in Annex 3.

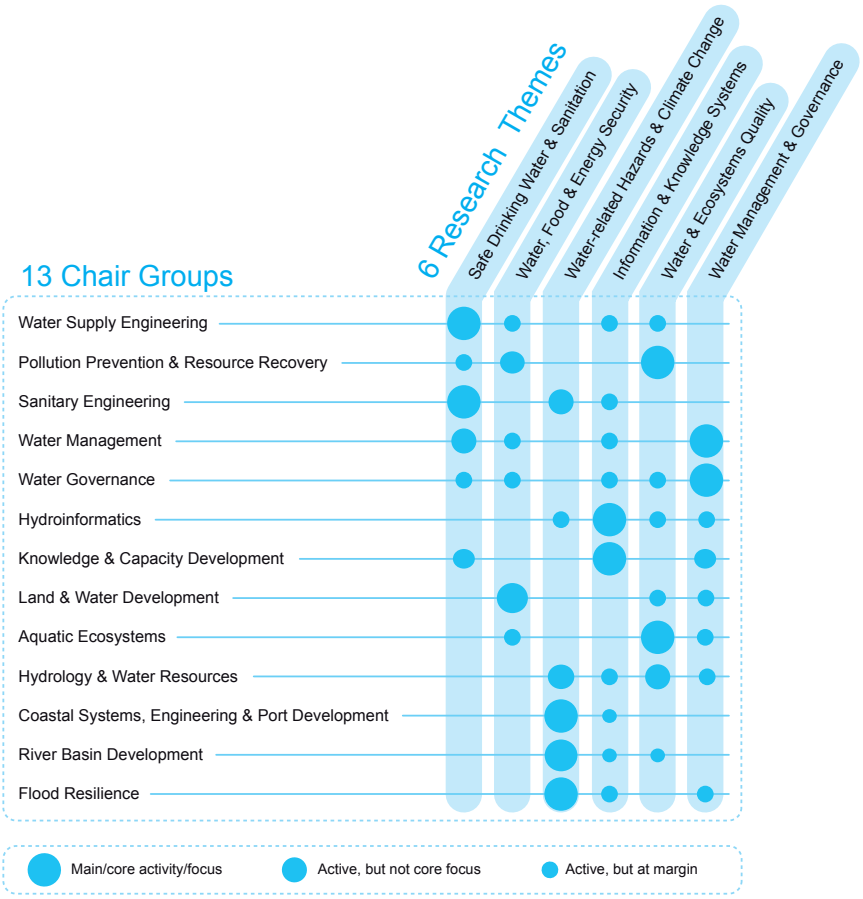
Fellows represent more than 45 different countries with more than 85% coming from developing countries and countries in transition. Almost 38% of PhD fellows are female. Over half of the PhD fellows are in a sandwich

construction, carrying out research in their region of origin supported by local supervisors, an approach that is consistent with the Institute's mission.

Most PhD fellows are not employed by the Institute, but rather funded with fellowships from various donors. UNESCO-IHE PhD graduates are often bound for careers in an academic institutions or high-level professional positions in their home countries. The PhD programme is of key importance to the Institute's capacity-building mission.

The Institute does not have the right to promote PhD students according the Dutch Higher Education Act, so PhD defences are always held in collaboration with an internationally renowned university. This partnership construction means that the defence is co-chaired by both rectors, and the PhD degree bears the logos and signatures of the partner university as well as UNESCO-IHE. These partnerships with universities support the quality of the PhD programme, as all UNESCO-IHE professors have a formal appointment with a university, and the PhD fellows are registered at one of the universities.

PhD fellows are expected to acquire the competencies outlined by the Education Qualifications Framework of the European Higher Education Area (QF-EHEA), adopted by the Netherlands in 2008, in line with the Salzburg principles for European third-cycle higher education. These competencies are designed to ensure that PhD fellows are able to generate new knowledge by conducting independent research, to communicate effectively – both with academic peers and with broader society – and to exercise professional and ethical responsibility and integrity. The PhD research should be a significant contribution to their disciplines that stand up to peer review; generally, a minimum of three chapters are published in peer-reviewed journals. It is the philosophy



of UNESCO-IHE that PhD fellows develop a T-shaped competency profile that encompasses in-depth knowledge of their research topic as well as a breadth of knowledge in related disciplines and other competencies.

Quality of research

SENSE review

UNESCO-IHE is a member of the Research School for Socio-Economic and Natural Sciences of the Environment (SENSE). This Dutch research school focuses on both the natural sciences and socio-economic fields of environmental research. SENSE is accredited by the Royal Netherlands Academy of Sciences (KNAW), and brings together excellent academic research groups from nine universities and research centres.

In 2014, the SENSE research school was reviewed, meaning that all the SENSE members were evaluated, including UNESCO-IHE. To this end, self-evaluation reports at the Institutional and Chair Group levels were written for the 2007 – 2013 review period, and a SENSE evaluation committee visited the Institute in June. The preliminary outcome of the SENSE review was positive. The research quality was deemed high; in particular the relevance and impact (both societal and research impact) were very positively assessed.

In 2014, the number of academic staff members that meet the requirements to be members of the SENSE research school increased to 48.

Grants & Awards

The emergency Sanitation Operation System (eSOS) smart toilet, developed by UNESCO-IHE, received the Africa Water Leadership Award 2014 for the Most Innovative New Technology of the Year, and was selected as Crossover Innovation with an Impact 2014 by the Federation of Dutch Creative Industries. It provides a sustainable, holistic and affordable sanitation solution during the aftermath of a disaster.

PhD fellow Aline Saraiva Okello received a Faculty of the Future Award from Schlumberger Foundation as well as the 2013 L'Oréal-UNESCO Sub-Saharan Fellowship Award. The Foundation's Faculty of the Future Programme supports female scientists from developing countries through grants to enable them to pursue PhDs and post-doctorate studies in scientific and engineering disciplines at leading universities worldwide. The L'Oréal-UNESCO fellowship is to support her PhD research on hydrology and water resources management in her home country Mozambique.

Zoran Vojinović, Associate Professor of Hydroinformatics at UNESCO-IHE, has been recognized as Water Champion by the Asian Development Bank for his work on developing a new approach for managing floods in Asia and the Pacific. The Water Champions series was developed to showcase individual leadership and initiative in implementing water sector reforms and good practices in Asia and the Pacific.

PhD alumnus Dr Temesgen (2006) from Ethiopia won the Special Prize for an innovation with the highest Social Impact given by the African Innovation Foundation. His innovation, the Aybar Broad Based Furrow Maker (BBM), promises to have the greatest social impact. It is estimated that the income of farmers will more than triple as a result of using this technology.

Awarded publications

Alumnus Dr Durgal L. Shrestha was awarded the Engineer Australia GN Alexander Medal for Hydrology and Water Resources for the paper on 'Evaluation of Numerical Weather Prediction Model Rainfall Forecasts for Streamflow Forecasting'.

UNESCO-IHE alumnus Hans Komakech has won the JRBM Best Paper Award. He received this award for his paper entitled 'Formalization of water allocation systems and impacts on local practices in the Hingilili sub-catchment, Tanzania', which was published in the International Journal of River Basin Management.

MSc alumnus Ms. Mussá's paper, on the study of trends in dry extremes of precipitation and discharge that was conducted in the Crocodile River catchment, a sub-catchment of the Incomati basin located in South Africa, won first prize for her work in the Hydrology category and was the runner-up against all the research papers presented at the 14th Waternet Symposium held in Tanzania.

The paper 'Polycentrism and pitfalls: the formation of water users forums in the Kikuletwa catchment, Tanzania', authored by alumnus Hans Komakech and Prof. der Zaag and published in Water International, received the Water International Best Paper Award of the IWRA.

Biological Wastewater Treatment: Principles, Modelling

and Design, with Professor Brdjanovic from Sanitary Engineering as one of the editors, became an IWA Publishing bestseller. The textbook was the first of its kind to assemble and integrate the post-graduate course material of a dozen professors from research groups around the world that have made significant contributions to the advances in wastewater treatment.

Research capacity

The salience of the research programme is demonstrated by a constant stream of visiting scientists who give seminars, as well as guest lecturers, policy makers and government officials, including heads of state, who attend workshops, project meetings, and conferences. This makes the Institute a vibrant place that acts as an internationally recognized hub of knowledge development and sharing hub in the water and development field. The many visitors help keep the research programme up to date and focused on real-world problems.

Recent developments have resulted in greater research capacities in emerging fields that are critical for the Institute to stay abreast and ahead of emerging problems in water related research.

The Coastal Systems, Engineering and Port Development group was reinforced by appointing two new professors. A new chair in Climate Change Impacts and Coastal Risks was established, co-sponsored by the prestigious AXA research fund, and taken up by professor Ranasinghe. The AXA fund is one of the world's very few schemes that provides support for fundamental scientific research geared towards risk mitigation. Professor Jentsje van der Meer started working as professor of Coastal Structures and Ports at UNESCO-IHE. He is a renowned expert in coastal structures and breakwater design.

Margreet Zwarteveen started as professor of Water Governance at UNESCO-IHE. She is an irrigation engineer and social scientist that joined UNESCO-IHE from the Centre for Water and Climate at Wageningen University, and has in the past assumed responsibilities for coordinating gender studies education at the university.

As a system of water accounting had been missing as an important element in the emerging system of global water governance, a new Chair Group in Global Water Accounting was established. Prof. Wim Bastiaanssen was appointed as the newly established Special Chair of Global Water Accounting, initially on a part-time basis.

The Ramsar Chair for Wise Use of Wetlands was established through a Memorandum of Agreement with Charles Sturt University (Australia) and the Secretariat of the Ramsar Convention of Wetlands. In 2014, professor Max Finlayson was appointed as Ramsar Chair in Wise Use of Wetlands, which provides a stimulus for enhancing collaboration with national and international organizations to support the educational and capacity building required for the wise use of wetlands. This will develop initiatives that can better understand wetland functioning and the link between wetlands and the communities that depend on them. The Chair will directly support the mission of the Ramsar Convention.

In September, the farewell event of Rector András Szöllösi-Nagy was organized on the occasion of his retirement. Prof. Szöllösi-Nagy was Rector at UNESCO-IHE from 2009 to 2014. He has been a passionate advocate for putting water on the Sustainable Development Goals agenda during his time at UNESCO-IHE.

Recently, the Hydroinformatics Lab was established to support mathematical modelling, high-performance computing, data management and spatial data infrastructure. The Lab provides a contribution to the Institute's research and education activities.

Research developments

Thematic cooperation

The research agenda of the Institute is reflected in other research themes of important national and international institutions and programmes. At the international level, the research agenda of the Institute is linked to ongoing programmes. Examples include the post-2015 development agenda and formulation of the Sustainable Development Goals, World Water Council, International Association of Hydrological Sciences' (IAHS) Scientific Decade Panta Rhei (2013 - 2022), International Council for Science's (ICSU) Future Earth, International Water Association's (IWA) Key Theme.

UNESCO-IHE is a member of the European Water Supply and Sanitation Technology Platform (WssTP), recognized by the European Commission and national governments as the reference in research and technology in the water sector, and includes the delivery of a strategic vision for research and the production of evidence-based reports identifying future research needs. Progress in the Institute's research themes will also be essential for addressing the Societal Challenges formulated in the EU Framework Programme for Research and Innovation Horizon 2020.

Nationally, UNESCO-IHE is linked to various research and innovation programmes such as the NWO/WOTRO programme on urbanizing deltas and conflict and cooperation over natural resources (CoCooN), an initiative related to the TopSector Water, Water Mondial, VIA Water, and the new National Knowledge and Innovation Programme on Water and Climate (NKWK).

The Institute's research agenda is firmly embedded within the Dutch cluster of water-related knowledge and research organizations through joint projects and MoUs with key organizations such as Deltares, WETSUS, IRC, Nuffic, and KWR (Water Cycle Research Institute). Intensive collaboration exists between the Institute and the Dutch partner universities. The Institute's research themes also align with the themes of the Dutch government's policy on trade and development cooperation.

UNESCO-IHE joined the Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI), a research organization represents more than 130 US universities and international water science-related organizations. CUAHSI members include universities, non-profit and international affiliates, and corporate members. The membership strengthens the Institute's cooperation with top universities, increasing the development of cutting-edge technology for observing, analyzing and modelling water processes and systems.

Publications

As a signatory to the Berlin Declaration, UNESCO-IHE promotes open access (OA) publication. UNESCO-IHE encourages its academic staff to publish their research as OA. To this end, an internal OA stimulation fund was created to fund OA initiatives. Publishing OA has a greater advantage in increasing the citation factor from users who are able to access the literature freely without having to rely on a paid subscription, and ensures research data becomes available to a worldwide audience.

The publication output of the Institute remained stable. The number of peer-reviewed journal articles increased slightly, and the number of book chapters decreased slightly. The number of PhD theses remained stable. There were five books published in 2014. The number of conference papers decreased markedly after last year's significant increase.

A special issue of Wetlands Ecology and Management was published, under the framework of the UNESCO-IHE led 'Ecology of Livelihoods' (ECOLIVE) project. The issue includes eight papers that explore the complexity of papyrus wetland ecosystems and the multidisciplinary approach needed to support wetland governance and wise use.

The first book dedicated to faecal sludge management was published by IWA Publishing, and offers a systems approach to implementation and operation of faecal sludge management. It can be used by students, teachers, researchers, practitioners and decision-makers interested in or responsible for faecal sludge management. Editors included UNESCO-IHE's Prof. Brdjanovic of Sanitary Engineering and Senior Lecturer Dr Ronteltap, as well as Dr Strande, director of the Excreta and Wastewater Management group at EAWAG.

In collaboration with the University of Southampton and the Australian National University, Prof. Ranasinghe of Climate Change Impacts and Coastal Risks contributed to the first-ever mapping of the large-scale wave attenuation characteristics over the Great Barrier Reef in Australia, using satellite altimeter data. The resulting publication in the Coral Reefs journal attracted a lot of media attention.

Annex 5 gives a full overview of publications produced at UNESCO-IHE in 2014.

Research funding

The critical importance of our thematic research programme is evidenced by donor funding by the government of the Netherlands, the European Commission, national research councils, development banks, and the private sector, but also by philanthropic foundations that sponsor large research and capacity building programmes. Examples of the latter include the Bill and Melinda Gates Foundation (focus on sanitary engineering), Vitens Evides International (focus on water services management), and Rotary International.

In 2014, UNESCO-IHE acquired a substantial number of research projects from competitive funding sources including multilateral and bilateral agencies, NGOs, and private sector organizations.

UNESCO-IHE remained very active in other research programmes as well. In 2014, the Institute's research activities were also funded by various agencies including the Dutch Ministry of Infrastructure and Environment, the European Commission through their EuropeAid and FP7 programmes, NWO Urbanising Deltas of the World programme (2014-2019), NL EVD Internationaal, the AXA Research Fund and several private sector

organizations as well as various national governments. *Annex 9 - Projects contains a complete list of projects started, ongoing or finished in 2014, including funding agencies and partners.*

Societal relevance and valorization

Societal relevance of the research is central to the mission of UNESCO-IHE. The lion's share of the Institute's research is applied research conducted with a range of partners related to issues of direct relevance to the developing world, and it is doing its utmost to optimize quality and facilitate outreach and impact. The Institute's policy is to interact in a productive way with stakeholders and key actors in the countries in which it works to jointly identify research needs, conduct research and discuss the implications of outcomes. Therefore, the research agenda concentrates on themes that are both scientifically and socially relevant, relevant to socio-economic development, sustainability, poverty, (in)equality, governance, conflict resolution, global warming, quality of life, and cultural and spiritual values of water.

UNESCO-IHE works with a wide range of both academic and non-academic partners at local, regional, and international scales, including those from government, NGOs and private sectors. These partnerships serve to firmly embed the research into policy and use contexts. The Institute engages in many additional strategies to ensure that relevant and useful research results are appropriately applied in policy making, including e.g. development policy briefs, outreach events (e.g. on environmental flows and rainwater harvesting East Africa, or on climate change adaptation in rapidly growing coastal cities in Asia), or incorporation into management and/or decision-making tools. There is abundant evidence in several countries on how this approach has influenced policies and practices.

Institute employees contribute as advisors to several governmental and non-governmental commissions, high-level panels and authorities, including ministries around the world. The Institute also provides direct policy advice at national, regional and global levels. Its status as an UN institute and its obligation to stay independent of national governmental developments is cautiously considered.

UNESCO-IHE employees make scientific findings available to a wider audience through interactions with media and publications in non-academic outlets. The Institute's various outlets, such as the website, social media, UPDATE magazine and various online newsletters, also aid in the dissemination of research results.

The Institute is involved in projects to facilitate the move from (water) conflicts to (water) cooperation. Furthermore, the Institute supports several knowledge networks with the objectives to develop capacity, develop and share knowledge, and build trust and facilitate cooperation. The Institute defines valorization as the process of supporting the utilization (uptake) of knowledge in practice to create economic and societal value. UNESCO-IHE pursues this objective through education, research and capacity building efforts as well as in its engagement in policy dialogues (e.g. formulation of the Sustainable Development Goals, OECD Initiative on Water Governance). Producing well-trained water professionals through education and research programmes is seen as the greatest asset in its valorization activities.

Many alumni at UNESCO-IHE have significant impact and often take up senior positions in their home countries, as was found in the 2012 Alumni Survey. The commercialization of research results, which is usually part of the valorization efforts of a university, is not in line with the policy of the Institute regarding making knowledge freely available wherever possible. As a UN organization, the Institute promotes and protects its intellectual property (e.g. patents) only in exceptional cases.

Public agencies, private sector, consultancies and NGOs are involved in the vast majority of MSc and PhD research projects. The researchers are mid-career professionals and often work for these organizations. Otherwise, their involvement is often related to co-supervision, data sharing, financial contributions, user of results etc. and, most preferable, as an integral part of the research team (transdisciplinary approach). It is noteworthy that a number of the PhD research projects are linked to capacity development projects, including staff development of local universities or research institutes. The research findings are often directly integrated into the education programmes (MSc curricula, on-line and refresher courses), for instance as case studies. We keep close ties with the alumni who are important stakeholders and local

Capacity development

Context

UNESCO-IHE provides capacity development services to knowledge institutes, water sector organizations, knowledge networks and UNESCO member states. Through these operations, the Institute increases its global impact and helps to build sustainable organizations that are equipped to properly manage water resources and deliver water services to all communities. Services include institutional development projects, tailor-made training for organizations and individuals, policy advice, and acting as an intermediary between science and policy making. These activities focus on different levels – such as the individual level, organizational level and the enabling environment – and on the development of a wide range of skills and competencies.

Programme management

UNESCO-IHE manages programmes in a coordinating role, containing funding for more than one project with overarching goals. Examples of programme management involving the Institute include the Asian Development Bank programme, the cooperation with the Dutch Ministry of Infrastructure and Environment, and the DGIS UNESCO-IHE Programmatic Cooperation (DUPC), of which the UNESCO-IHE Partnership Research Fund (UPaRF) is a part.

The programmatic cooperation between the Asian Development Bank (ADB) and the Institute manages a fund of 2.5 million USD to support water operations in ADB's Developing Member Countries (DMCs) and ADB staff. The cooperation supports ADB's water operations in its developing member countries (DMCs) by providing expert guidance during project preparation and implementation, to develop and implement education, training and capacity development, and to support knowledge networking programmes among (DMC) clients, partners, and knowledge hubs. The first phase of this programmatic cooperation will end early 2015, and negotiations were ongoing on the second phase of the cooperation.

A highlight within this cooperation was the 3rd Asia-Netherlands Water Learning Week held in June, which brought together leaders in dialogues and knowledge sharing on 'Green Growth and Water Security'. The Learning Week was attended by project teams from Afghanistan, Bangladesh, Bhutan, Myanmar, Mongolia, Nepal, Indonesia, Sri Lanka and Vietnam. The participants interacted with organizations and experts from the Netherlands in order to address the challenges in their countries through knowledge exchange, and leverage results from collaborative approaches in water investment projects for cities and river basins.

The cooperation with the Ministry of Infrastructure and Environment continued, and the programme provided seed money for successfully responding to the strategic needs of the Institute and the Ministry by funding 24 projects. The Ministry and UNESCO-IHE continued formulating the new MoU for the 2015-2018 period.

Capacity development

Institutional strengthening

The four-year Mau Mara Serengeti Sustainable Water Initiative (MaMaSe) project started in January, with an 8-million euro grant. Consortium partners include Egerton University, GiZ, HSBC Bank, ITC/TU Twente, Kenya Water Resources Management Authority, Mara farming, Brabantse Delta Water Board, SNV, Wageningen UR and WWF Kenya. The project will improve water safety and security in the Mara River Basin in support of structural poverty reduction, sustainable economic growth, and conservation of the basin's forest and rangeland ecosystems. This will be pursued through a broad-based, basin-scale public-private partnership designed to empower people and promote self-reliance.

Capacity building for the Iraqi Ministry of Water Resources was initiated. Following the signing of a Memorandum of Understanding between the Ministry of Water Resources and UNESCO-IHE, a needs assessment plan was approved to be implemented jointly by UNESCO-IHE and Iraqi experts.

The Institute acquired a World Bank-funded project on preparing IWRM guidelines and tools as well as training and capacity building for the Philippines. This project will be carried out between October 2014 and June 2015 with partners Deltares and the Philippines Water Partnership, in close collaboration with government agencies and educational institutes in the Philippines.

The Knowledge Network Nile Basin project ended in 2014; the project had been supported by the Dutch government since 2005. At the end of the year, an inception report produced for the coming three years with a focus on developing the Nile Basin Capacity Building Network towards a legal independent, sustainable network of water professionals.

The capacity building project Horizon 2020 for de-pollution of Mediterranean Sea was completed in October 2014. In the context of the project, UNESCO-IHE delivered a total of 32 courses involving 17 staff members and 12 external lecturers. In 2014, the Institute delivered four short courses on Faecal Sludge Management in the Netherlands and Morocco, and organized an exposure visit to the Netherlands for a group of Algerian water professionals.

A UNESCO-IHE led consortium of 24 partners was awarded a grant of 5 million euros for the implementation of its research project entitled 'Preparing for Extreme And Rare events in coastaL regions (PEARL)', within the European Commission FP7 programme. The main goal of PEARL is to develop adaptive, socio-technical risk management strategies and measures against extreme hydro-meteorological events minimizing social, economic and environmental impacts and increasing the resilience of coastal communities.

A five-year project (2015-2020) funded by USAID was acquired to support the Mehran University of Engineering and Technology in Pakistan as they develop a Center for Advanced Studies on Water. The project will be carried out by a consortium of academic institutions led by the University of Utah, and including Colorado State University, the Stockholm Environment Institute, the City University of New York as well as UNESCO-IHE.

The UNESCO-IHE led project 'MK30: Capacity building and professional development for inclusive governance and management of water and ecosystem services in the Ayeyarwady River Basin' was awarded funding by the CGIAR Research Program on Water, Land and Ecosystems. The project, which will run from 2015 to 2017, will contribute to the strategy to enhance much-needed water and water-related sector capacity development. A first outline of this strategy was developed in the context of the IWRM Strategic Study, which is being developed in close consultation with Myanmar partners and the Dutch high-level expert group.
The CUBA ENVIRONMENT project completed its first year in September. The project has a budget of about €1.2M, 75% of which is funded by the European Commission. The project includes the Cuban project partners and collaborators Higher Polytechnique Institute Jose Antonio Echeverria (CUJAE), National Institute for Water Resources (INRH) and the Food Industry Research Institute (IIIA). Activities included the refurbishment of the Sanitary Engineering lab of CUJAE with lab equipment, chemicals, consumables and transportation means to support the project activities, a pilot-plant movable membrane bioreactor for wastewater treatment and reuse as well as a pilot-plant movable saline wastewater treatment system. In addition, different workshops, training and short courses were organized and delivered in Delft, Croatia and Cuba.

With USD 11.1 million in funding from the Bill and Melinda Gates Foundation, the Stimulating Local Innovation on Sanitation for the Urban Poor in Sub-Saharan Africa and South-East Asia (SaniUP) project ran for the third year. SaniUP is the largest research and capacity building project for pro-poor sanitation ever conducted and includes five post-doc researchers, 20 PhD fellows, 60 MSc students, 500 online course participants and 130 man-years of research. It is executed with eight partners from developing countries.

In 2014, UNESCO-IHE continued to successfully run its portfolio of 17 NICHE capacity development projects. All institutional strengthening projects started or running in 2014 can be found in Annex 9 - Projects.

Tailor-made training

In 2014, tailor-made training was funded by a variety of donors, including the development banks, the DGIS - UNESCO-IHE Programmatic Cooperation, Dutch Ministry of Infrastructure and Environment, the European Commission and the NUFFIC through its foundation and NFP programme. In total, there were 258 participants in these tailor-made training courses.

The IWAVE project, supported by the International Atomic Energy Agency in Vienna, ended. Activities in 2014 included a series of training courses developed to support water-related professionals in the Philippines in the field of web-based sharing of hydrological data. These courses were organised through remote sessions, a training workshop in Delft and a final training workshop in Manila, the Philippines.

Each year, UNESCO-IHE organizes refresher courses for UNESCO-IHE alumni. The courses cover themes that are of direct relevance and importance to the region and the participants. In 2014, three refresher courses were held with 100 participants. Two of these courses were held in Asia: in Myanmar and Indonesia, and one was held in South Africa. A little over half of the participants were female. Refer to Annex 2 for more details on these refresher courses.

An overview of all tailor-made training courses can be found in Annex 9 - Projects.

Policy Advice

UNESCO-IHE has become a key player in global fora, contributing to shaping the water and development agenda for the next decade by (co-)organizing policy-oriented meetings.

In February, UNESCO-IHE hosted a two-day Knowledge Sharing and Planning workshop on integrity in the water sector. About forty water sector stakeholders from Mozambique, Ethiopia, Bangladesh, Benin, and the Netherlands as well as a number of resource persons from international initiatives attended the workshop. The workshop was co-organized by several organizations, including the Water Integrity Network. Participants were encouraged to share knowledge on existing tools and methods and to plan actions to mainstream integrity in current and future water projects and programmes. The workshop built on the 'Delft statement' which was adopted at the Water Integrity Forum that took place at the Institute in 2013.

In April, more than thirty water sector organizations and around 200 UNESCO-IHE MSc students attended the Second Water Sector Market. The Chairman of Topsector Water officially opened the market, which provided an opportunity for students to get acquainted with the private and public water sector operating from the Netherlands, making contacts that could benefit them in their careers after they return home.

UNESCO-IHE organized a high-level round table and expert workshop to discuss a National Strategy for Capacity Development in the Water Sector in Colombia, aimed at facilitating a dialogue between water sector stakeholders on capacity development. The experts in the workshop worked towards an action plan for developing a National Strategy on Capacity Development in the water sector. An important action will be the integration of this initiative into relevant policies and ongoing initiatives. Co-organizers included the Colombian Ministry for Environment and Sustainable Development and the National Planning Department.

UNESCO-IHE co-convened the second New Nile conference entitled 'New Nile Opportunities: Scientific Advances towards Prosperity in the Eastern Nile Basin', held in Addis Ababa in December. The conference, which was amply covered in the Ethiopian press, affirmed data exchange and joint research on transboundary water,

as decision-makers request research outputs across the border. The Blue Nile Hydrosolidarity project was adopted as a viable approach for joint research between Ethiopia and Sudan, and the follow-up project 'Accounting for Nile waters' was acquired.

Alumnus Dr Tom Okia Okurut, Executive Director of the National Environmental Management Authority (MENA) at the Ministry of Water and Environment in Uganda, received the second UNESCO-IHE Alumni Award. This annual award is given to one of the Institute's alumni who is at the height of her or his career and has proven to be a role model for other water professionals by showing an outstanding contribution to water management. Okurut instutionalized public dialogue as one of the key public education awareness and knowledge sharing means for increasing appreciation of environmental as integral in the social and economic development planning. His efforts were instrumental in the initiation of The Lake Victoria Civil Society Network, enabling the civil activities and programs of Lake Victoria in their respective countries as full partners in line with the protocol provisions.

An overview of all policy development and advisory services projects can be found in Annex 9 - Projects.
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Home base

Context

UNESCO-IHE Institute for Water Education brings employees, PhD fellows, students, visitors, participants and partners from all corners of the world together on the 14,000 square meters of its premises in Delft's historic city centre. But the Institute is more than just a physical location and the wide range of services it offers, it is also the people who work, study and meet there.

Human resources

To fulfil the human resources requirements of the Institute, the specific HR management objectives are to:

- maintain or, if needed, improve the Institute's role as an attractive national and international employer in the academic world and to attract scientific staff of the highest calibre through recruitment and hiring, international mobility, and remuneration;
- create an environment in which employees are continually encouraged and enabled to develop their technical, professional and personal skills, through performance and development management and review;
- maintain healthy and good employer/employee relations by creating a safe and constructive work environment, through occupational health and safety management and diverse and inclusive hiring practices; and
- ensure that human resource management policies and practices are always up to date and meet all legal requirements for employee benefits and insurance as specified by labour legislation.

UNESCO-IHE adheres to the Collective Labour Agreement (CAO) of Dutch Universities and has a diverse range of HRM policies in place that apply to all staff and that focus on performance and development management, recruitment and termination, appraisal and remuneration, health and safety, work relations, employee benefits and insurance, and international mobility and diversity.

Employee demographics

The total number of staff has been steadily increasing over the past ten years, which is in line with the overall growth of the Institute in terms of budget and number of projects.

In keeping with the Institute's mandate and international student body, UNESCO-IHE employees have become increasingly internationally diverse over the past decade. This is in line with the Institute's objective to attract foreign talent and diversify staff. This trend is expected to continue and may even accelerate. As a consequence, staff demographics have also become more diverse, reaching beyond nationality to include a range of factors, such as country of origin, age, gender, race, cultural heritage, education, physical ability, appearance and many other factors.

The percentage of women on staff remained stable over the last three years. The percentage of women serving as academic staff members saw a slight dip after having grown significantly in the six years prior. However, compared to equivalent environments such as technical universities (21% of the academic staff according to VSNU data) UNESCO-IHE has fairly good representation. The Institute is reviewing policies to assess what measures can be taken to attract and retain more talented women on its academic staff.

Academic staff members comprise 54% of total employees. Staff who directly support Education and Academic processes, such as those working in Student Affairs, at the Educational Bureau and in the laboratory,

Home base

Development of gender ratios

	2011		2012		2013		2014	
Total fte staff (% female)	158	37.0	166	36.0	160	40.0	**173**	**40.0**
Non-academic staff fte (% female)	72	54.0	74	56.2	78	57.3	**82**	**60.0**
Academic staff fte (% female)	86	22.1	85	22.8	82	25.0	**91**	**24.0**

Academic staff: gender & scale figures

Academic staff	Male	Female	% academic females at UNESCO-IHE	% females NL academic institutions (2012)
Lecturers	15	8	35%	**39%**
Senior Lecturer	18	8	31%	**29%**
Associate Professor	19	4	17%	**16%**
Professor	14	4	22%	**15%**
Total	66	24	27%	**25%**

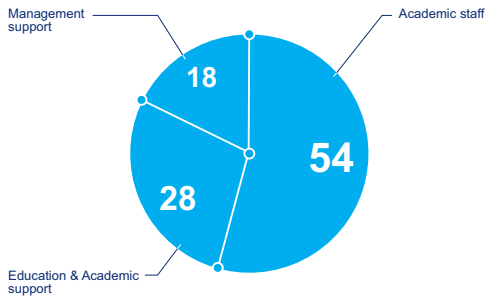
make up 18%. The remaining 28% of employees support management processes, including finance, HRM, project support, communications and IT.

Performance and development management

UNESCO-IHE's Performance and Development Management (PDM) system strengthens academic leadership and provides a clear and transparent career development system with standardized academic levels and related requirements.

The Institute implements strategically embedded career planning. This means that the Institute's strategic objectives determine the course and direction of a department or a process management unit and, ultimately, the individual's opportunities for development.

Breakdown of employee population



The PDM system provides clear job descriptions and numeric and qualitative standards for all academic staff who are required to perform in the fields of education, research and knowledge and capacity development in accordance with these criteria, specified by academic level. Promotions of academic staff are based on achievement of high academic outputs, on involvement in the scientific community, and on outreach/societal impact.

Promotions depend on fixed criteria and the evaluation of individual performance. A nomination advisory committee (NAC) is convened in the case of a promotion to the level of professor or associate professor. Every five years, formal reassessment takes place and may, in the case of underperformance, result in demotion.

Staff training

UNESCO-IHE encourages employees to further improve their academic skills and competencies by providing funds for or subsidizing educational expenses and granting time off during normal working hours for study leave. An employee may be granted a maximum of one half-day study leave per week, unless it would prevent satisfactory functioning in their normal job. For further development and in line with the CAO, an employee may take two additional development days per year, which the employee can use to work on their long-term employability in the framework of career development and to focus on future positions.

The percentage of academic staff members with a PhD decreased from 89% in 2013, and again to 81% in 2014. The University Teaching Qualification (UTQ) is now a requirement for all academic staff in the Netherlands.

UNESCO-IHE runs its own UTQ training programme, which has recently been audited by the VSNU and is now recognized as the being at the same level as those of Dutch universities. To date, 25% of academic employees have obtained their UTQ, a slight decrease from 26.1% in 2013.

Recruitment

Quality assurance procedures for our staff start at the recruitment stage. UNESCO-IHE has standardized recruitment processes for all levels of staff. The recruitment polices are subject to the Dutch NVP recruitment code, which guarantees a non-discriminatory and objective procedure for all candidates.

The Institute still maintains a full stop on job openings, meaning that there were no additional positions in 2014 unless budgeted for in the work plan, paid for by a project and/or funded by a donor as part of an agreement. Such vacancies were temporary and not intended to extend beyond the duration of the project. Departing staff were ideally replaced via internal upward or horizontal mobility, and otherwise by hiring new staff at the entry career level. The need to replace staff temporarily in case of maternity leave or long-term illness was determined on a case-by-case basis.

Internal consultation

At UNESCO-IHE, internal consultation between management and staff members, PhD fellows and MSc students is institutionally arranged through the Works Council, the PhD Association Board, and the Student Association Board, respectively.

The Works Council (WoC) represents the interests of the staff in matters such as policy, working conditions, general state of affairs, and important institutional decisions. It consults with or advises management on these matters.

The mandate of the PhD Association Board is to represent the PhD community and to facilitate cooperation with the supervisory teams, UNESCO-IHE management, and outside parties. It is also to be a voice on issues important to the academic and overall well-being of PhD fellows.

The Student Association Board represents the Institute's MSc students in all UNESCO-IHE-related matters, and discusses views and suggestions on course matters and student welfare with UNESCO-IHE management.

Code of Conduct

UNESCO-IHE endorses a culture in which people work together on the basis of mutual respect. Such an environment implies that good manners including collegiality, respect for each other and interest in each other are the norm. Codes of Conduct developed at the Institute are intended to ensure a pleasant and stimulating environment for work and study, fostering respect for people and facilities, and also regulating an appropriate response to undesirable behaviour.

All employees, guest lecturers, staff from third-party organizations, course participants, trainees and visitors to the Institute are required to comply with these policies by observing the guidelines in the Codes of Conduct. To aid transparency, all Codes of Conduct are published on the website.

Besides internal Codes of Conduct, UNESCO-IHE also adheres to the Code of Conduct with respect to international students in Dutch higher education, which specifies standards for the quality of higher education provided to international students.

New policies

A new mission policy was developed, in line with new Dutch legislation regarding labour costs. With this new policy, UNESCO-IHE labour practices are more in line with common practice at Dutch universities. The former 'mission abroad' regulations expired, and the new policy comes into effect in 2015.

As per 1 January 2015, the new labour costs scheme takes effect in the Netherlands, with the intention of simultaneously simplifying the administrative burden for employers and consolidating different labour–cost reimbursement schemes. In line with this new Dutch legislation, UNESCO-IHE's labour costs scheme was revised to meet the updated requirements.

Services

Sustainability

Carbon Matters, an independent consultancy firm, completed a long-term action plan on reducing the Institute's carbon footprint by 50% (or more) over a ten-year period. The main area with potential for reduction is building-related energy consumption. Improvements that have a major impact include generating energy on the premises and improving building insulation. Based on Carbon Matters' plan, a multi-year maintenance plan was

Home base

Performance indicators business

	Business indicators	2011	2012	2013	2014
B7	**Overhead (%)**	30	29	28	**27**
B8	**Non-academic staff contingent (%)**	48	48	49	**48**
B9	**Knowledge exchange events with the private sector (No.)**	-	2	39	**5**
B10	**Alumni assistance/cooperation requests (No.)**	6	10	20	**50**
B11	**UNESCO-IHE mentioned in media (No.)**	-	-	400	**427**
B12	**Unique visits website (No.)**	305,273	341,615	340,692	**331,604**

B7	Overhead (%): To monitor the efficiency of staff, the percentage of overhead (based on the Berenschot method 1a) is given.
B8	Non/academic staff contingent (%): The percentage of non/academic fte's staff relative to total staff.
B9	Knowledge exchange events with the private sector (number): The number of events at the Institute dedicated to knowledge exchange with private sector participation initiated or facilitated by UNESCO-IHE, where UNESCO-IHE acts as intermediary between the Dutch and international water and knowledge sectors.
B10	Alumni assistance/cooperation requests: The number of requests put forward to the UNESCO-IHE Alumni network to assist with student acquisition, project acquisition or advisory service to the Institute itself or public and private partners.
B11	UNESCO-IHE mentioned in media: The number of times UNESCO-IHE is mentioned in international online media (excluding social media).
B12	Unique visits website: The unique UNESCO-IHE website visits per year.

made to replace heating and cooling equipment.
In 2014, separate collection of plastic, paper and other waste in the restaurant area was implemented, as agreed in the contract with the Institute's waste collector, Avalex.

Communicating results

Employees engaged in research often actively pursued initiatives to make scientific findings available to a broader, non-expert audience. Such initiatives included interactions with media and publications in non-academic outlets such as Water21, H2O, AsiaWater, UNESCO's A World of Science, blogs, and other internet fora. In collaboration with project partners, UNESCO-IHE researchers also disseminated research findings in local languages. Refer to Annex 5 for the complete overview of publications produced in 2014.

In 2014, a UNESCO-IHE Honorary Fellowship was awarded to Em. Professor Brian Moss. Moss is known for his research on the nutrient enrichment of shallow lakes through an ecosystem approach. His work has covered all parts of the globe, addressing lakes as well as rivers and the landscapes that shape them.

As a signatory to the Berlin Declaration on open access and in line with its mission, UNESCO-IHE aims to share its knowledge and supports Open Access as a new norm for scholarship and research. To ensure compliance with copyright legislation, UNESCO-IHE has adopted the Creative Commons (CC) legal framework, allowing for the free dissemination of works.

UNESCO-IHE continued to make news about the Institute's activities available through regular outlets such as the website, social media, a monthly online newsletter and UPDATE magazine and a quarterly mailing to alumni. UNESCO-IHE contributes to society by co-organizing policy oriented meetings. Good performance in tangible societal contributions is a prerequisite for the academic staff members to be promoted. Some of the societal impact of staff members is shown in Annex 8, which shows a list of external memberships.

Student administration

MSc student intake for the 2014-2016 period was once again quite high: 212 students enrolled. The stable number of students in joint programmes means logistics have remained complicated, entailing multiple arrival and departure dates, registrations, and introduction days. This complicates efficient housing planning and student services, while producing a lot of administrative work.

Student services

Students staying in The Hague for longer than three weeks are supplied with a free student hotel bike. A pre-charged public transportation card for short course participants

was successfully introduced, receiving positive student feedback.

Information technology

Employees and students are provided with laptop computers that give them flexibility in working locations, can connect to the Institute's network, and run required applications. For the students, the laptop is the place where all the information –educational materials, e-books, data, models, tools – that they collect during their studies is stored. The network connects students, employees and our partners to facilitate joint education and research while serving administrative purposes.

The computer labs were virtualized in 2014, allowing unlimited numbers of students – both in Delft and participating abroad – to have access to scientific software needed for their programme. Since the computer classrooms were no longer needed, they were turned into lecture rooms.

Off-campus access to internal applications and information is offered by means of a virtual private network, and has been increased to support 250 simultaneous connections.

The available wireless network can be accessed by Eduroam users. Eduroam is an initiative in which education and research centres worldwide share each other's wireless networks for internet connectivity.

In 2014, the AFAS Profit system increasingly supported administrative processes pertaining to timekeeping, leave, electronic invoicing as well as declaring travel expenses and other costs.

UNESCO-IHE is connected to the SURFnet network, which is operated by the Dutch higher education sector, and participates in SURFconext and EDUgain, allowing collaboration with national education and research networks worldwide through state-of-the-art network facilities worldwide. SURF is one of the market leaders in this segment; SURF is also interested in capacity-building on the network site, making things easier for our partners in developing and transition countries.

Safety

A new Emergency Response policy and plan was developed in 2013 and implemented in 2014. The Emergency Response Team (ERT) of 25 trained personnel was expanded to include two persons who were trained in emergency coordination. An ERT exercise and a company-wide evacuation drill were held.

In 2014, electrical equipment was inspected and several repairs where done on large installations based on the outcome of an extensive thermal investigation.

Given the international nature of UNESCO-IHE activities, and as a response to the Ebola outbreak in West Africa, an Ebola protocol was developed to safeguard the health of staff, students and visitors. Information on the virus was shared pro-actively, including how to keep safe from infection or contamination. Dispensers with disinfectant soap were placed throughout the building.

Campus

Research facilities

The existence of and access to appropriate multidisciplinary research facilities are considered essential for the Institute's success in achieving excellence in water research and education.

On its premises in Delft, the Institute has a water lab for hydrochemistry, process technology, microbiology, aquatic ecology and soil science, including six qualified staff members and various equipment for experimental lab and field work. Through partners, researchers also have access to hydraulic labs at Delft University of Technology and Deltares, and various other hydrochemical laboratories. The vast majority of the field sites are in the tropics, where our local partners have access to a range of other research facilities and infrastructure.

The explosion of computing power and relevant ICT tools resulted in the development and application of many mathematical modelling tools that are increasingly used by students and staff and that form an essential component in all education programmes as well as in most PhD research projects. This resulted in the recent establishment of the Hydroinformatics Lab, a central modelling and computation support group at UNESCO-IHE. This lab is facilitated by the Hydroinformatics chair group, which was established over 15 years ago.

The Institute has a library that provides access to over 35,000 printed titles and over 11,000 peer-reviewed

electronic journals and other digital resources.

In 2014, the library implemented the WorldCat Local from OCLC, a discovery tool that allows UNESCO-IHE library users to find scientific information through a unique search tool, getting direct access to the full text of results without going through multiple publisher platforms. This reduced the need for training, since discovery tools are intuitive, and increased cost-effectiveness of online collections through increased access, discovery and usage of priced resources. It also simplified the collection and generation of statistics for improved performance in responding to library users' needs.

Library cooperation agreements are signed with partner libraries at Delft University of Technology, the Institute for Social Studies of Erasmus University of Rotterdam and UNESCO HQ (Paris).

Housing at maximum capacity

The increasing number of UNESCO-IHE staff, the number of in-house partners, and the number of PhD fellows has led to a situation where further expansion and growth are no longer possible on the current premises. In 2014, a proposal was made to maximize efficient use of our capacity; this proposal could be implemented in 2015.

Student housing

Availability of student housing is no longer a commodity and careful planning is required. The 40% cut in student housing costs realized in 2013 was maintained in 2014.

The housing intake from Delft supplier DUWO was further reduced and the more expensive housing options were eliminated. A successful negotiation with the relevant organization, and the implementation of the student hotel concept has paid off after four year of lobbying. Since October, The Student Hotel in The Hague has been used in the peak periods of October - April. As a result, regular hotels are no longer used for student accommodation.

Restaurant

In January, a customer satisfaction survey was held regarding the caterer, Sodexo. All occupants of the premises were invited to participate. The overall score was good.

Separate collection of plastic, paper and other waste in the restaurant area was implemented in 2014.

Financial report

Context

UNESCO-IHE financial operations in 2014 showed a marked increase in revenues and a limited increase in expenditures, as compared to 2013. The total turnover increased to almost €40 million. The overall result shows a surplus of €305,000. This corresponds to an operational result of 1% against turnover.

The main challenges are securing fellowships for our education operations and replenishing the general reserves to guarantee continuity of operations.

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Income

The Institute's income originates from three main sources:
1. Baseline funding from the Dutch Ministry of Education;
2. Tuition fees from MSc students, short-course participants, and PhD fellows; and
3. Project revenues

Other income sources are minor and include revenues fro m renting out conference and laboratory facilities and student housing to third parties and from PhD graduation grants received from Dutch universities for joint graduations.

Baseline funding from the Ministry of Education was reduced by 4% based on the policy document from 2013 entitled "What the world deserves" and published by the Dutch Ministry of Foreign Affairs. Dutch Parliament decided to proportionally cut funding for international education. The Dutch Ministry indicated in 2013 that they would base their decision on the level of funding for 2017 and beyond on an evaluation of the Institute's performance in education, research and valorization of knowledge pursuant to the Dutch aid and trade policy from 2016. The Ministry of Education, Culture and Science recently notified the Institute that it will maintain the (increased) proportional budget cut for 2017 and will not base this cut on an evaluation. The IHE Foundation has filed a formal objection to this change in policy; the plea is under review.

Income from tuition fees increased significantly (13%) due to a 23% increase in programme expenditures (stipends) from fellowships. The average number of MSc students per year decreased by 5%, while the intake of PhD fellows increased by 10%. The Institute secured donor funding for 228 fellowships for the 2013–2015 MSc cohort and 217 fellowships for the 2014–2016 cohort, compared with the historical average of about 200 fellows per cohort and 260 in the 2012–2014MSc cohort. Education-related expenditures (stipends) increased by 23% due to a historically higher number of MSc and PhD fellows (164, versus 149 last year) and the stipends related to these fellows.

Project income from research, non-degree courses, advisory projects and capacity development projects was 17% higher in 2014; direct project costs related to this income increased by 13%. The result is a 25% net improvement in project fee income. This is in line with the 7% increase in academic staff, a 7% improvement in productivity/billability (+92 hours per academic staff member) and a marginal decrease in the average project rate by 1%. This drop is due to the reservation for Work in Progress, allowing for projects with an expected (future) loss and time on projects at a zero rate, reaching the maximum income limits.

Financial report

Donor (main types of income)	%
NUFFIC Foundation (fellowships, short course, capacity development)	28
Dutch Ministry of Foreign Affairs (all project types and fellows)	19
European Commission (research and fellows)	14
Bill and Melinda Gates Foundation (fellows and short courses)	3
Asian Development Bank (capacity development and advisory)	2
The Rotary Foundation (fellows)	2
Fundação Renato Azeredo (capacity development, advisory, fellows)	2
Participants with private (fellowship) arrangements or funds (fellows, tuition fee)	2
Deltares Foundation (fellows, all project types)	1
The Netherlands Organisation for Scientific Research (research, fellows)	1
The World Bank (fellows)	1
Indonesian Port Cooperation (fellows)	1
ANII Agencia Nacional de Investigacion e Innovacion (fellows)	1

In addition to the baseline funding from the Ministry of Education, our main other sources of income (in % of our total project and tuition fee income) are:

The table shows about 80% of 75% of our total income, representing just over €22 million.

Expenditures

UNESCO-IHE makes a distinction between programme expenditures and non-programme expenditures. Programme expenditures relate to the direct outputs of the Institute´s main activities, while non-programme expenditures concern general items such as staff costs, building, facilities and other indirect or overhead costs. Programme expenditures are therefore directly linked to the revenue items (education, training, projects) mentioned in the income section.

Non-programme expenditures showed a limited increase of 5% in 2014 compared to 2013.

The staff and management costs increased by 15% mainly due to 5% more staff (although juniors replaced seniors), 1% increase in the Collective Labour Agreement (CAO) for Dutch Institutions for Higher Education, the repatriation of retiring UN staff, vacancy announcement for a new Rector and more temporary staff. These increases were partly compensated by lower costs for staff festivities and staff training. The total average number of staff throughout the year, including seconded staff, increased by 7.1 FTE, of which 5.9 were academic (billable) staff.

The overall costs for operation and maintenance of the building decreased by 7%. This is due to the postponed final pay-off of the lease, which did not include redemption in 2014 and to lower maintenance costs. Maintenance costs were lower due to the postponement of maintenance at the front side of the building pending resolution of damages to the building due to external construction works. The costs of running the facilities included a 13% saving. This was thanks to a delay in major IT systems investments, a more favorable copier contract and reduced paper use related to the Institute's digitalization efforts. Similar to last year, the laboratory activities increased due to the significant (Delft-based) increase in student numbers (MSc and PhD) and special programme participants (ad-hoc visitors). In future years, the Institute will investigate options for introducing lab fees for incidental users and PhD fellows.

Education-related costs increased by 30% as a result of higher costs for unoccupied student housing due to fewer participants, the SENSE accreditation and for €126K given to partially funded participants for which we did not find external co-funding. This concerned seven MSc students in the 2014-2016 from the Rotary International contract. Acquisition and marketing costs increased sharply (19%) compared to 2013 due to the production of a new corporate video, improvements online and a cash contribution towards the feasibility study for an international water leadership course.

General costs decreased by 6%, due to modest savings on various items, the validation of the USD account with an improved currency (+ €27K) rate and less hiring of consultancy services. In 2014, consultancy services were provided for AFAS improvements (f.i. digitalization), CO2 reduction, IT security, juridical services (governance, contracting), Horizon 2020, fact-finding and a temporary, part-time external secretary for the IHE Delft Foundation Board. Although our debtors' overall payment practices improved, we still needed to increase our reservation by €23K due to two new long-term outstanding debts.

Performance indicators finance

	Finance indicators	2011	2012	2013	2014
B1	Annual project turnover (M euro)	9.98	10.23	11.17	**13.09**
B2	Annual amount of matching funds (M euro)	2.2	2.77	2.47	**2.79**
	Effectiveness matching (%)	32	41	35	**21**
B3*	Funding from GoN of total income (%)	-	59	58	**60**
B4*,**	Funding from EC of total income (%)	-	14	6	**17**
B5*	Funding from foundations/NGOs (%)	-	9	6	**9**
B6*	Funding from the private sector (%)	-	6	4	**3**

* Due to the econnomic crisis, less funding was available from private organizations and foundations, but was fortunatly compensated by other funding including those from international organizations, other governments and public organizations.

** The EC PF7 and Erasmus programmes came to an end, and the first calls of the new programmes opened end 2013 and beginning 2014.

B1	Annual project turnover (M euro): The annual project turnover consists of funds from externally funded projects.
B2	Annual amount of matching funds and effectiveness matching (%): The annual amount of matching funds versus externally funded projects is monitored through the use of a proportion of the baseline funding for matching/ co/funding.
B3	Funding from GoN of total income (%): To monitor the diversity of funding the percentage of funding of the Government of The Netherlands as part of the total income is given.
B4	Funding from EC of total income (%): To monitor the diversity of funding the percentage of funding of the EC as part of the total income is given.
B5	Funding from foundations/NGOs (%): To monitor the diversity of funding the percentage of funding of foundations / NGOs as part of the total income is given.
B6	Funding from the private sector (%): To monitor the diversity of funding the percentage of funding of private companies as part of the total income is given.

Interest revenues increased modestly (2%). Due to the postponement of the final lease amount, the Institute kept €4 million extra on deposit accounts. With the improvement of the Institutes cash flow, IHE could also use long-term (1 year) saving accounts that yield more favourable interest rates.

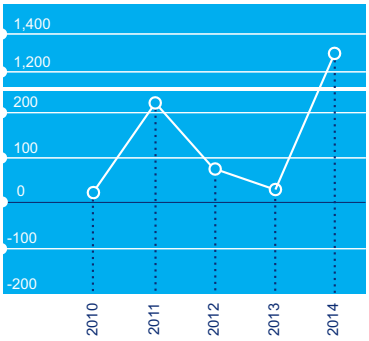
Balance sheet

The balance sheet shows a ratio of 8/92 between equity and borrowed capital, which corresponds to a solvency ratio of 8%. This ratio compares to 9% last year and needs to grow towards the targeted percentage (20%). The Institute will further replenish the reserves after the final lease payment for the building has been made,

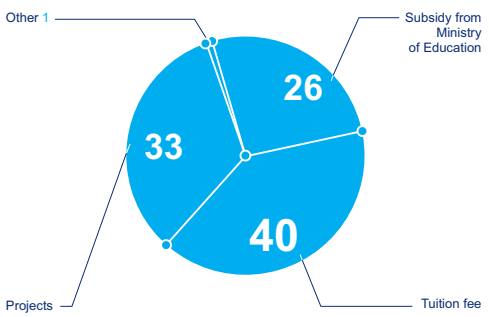
Efficiency measures in procedures and tools (e.g. new ERP administrative software) and the more explicitly output-oriented (project-based) approach are expected to continue to improve the ratio in the coming years.

The borrowed capital includes provisions and current liabilities. Reservations for leave hours and holiday bonuses have been made in the current liabilities. The provisions consist of a reservation for work anniversary payments to staff and for long-term maintenance. The current ratio is at a level of 0.98, compared to 0.89 in 2013. This means that the Institute remains creditworthy in the short term, although the ideal level of a ratio of 1 has still not been reached. For the Institute's long-term financial sustainability, the focus will be on increasing the financial reserves as foreseen in the business plan currently being implemented.

Overall financial results (euro x 1000 / academic year)



Sources of income (percentage)



Financial report

Statement of income and expenditures in euro * 1,000

	2014	2013
Income		
Ministry of Education subsidy	**10,256**	10,689
Tuition fees	**15,862**	14,029
Projects	**13,090**	11,174
Other	**517**	451
Total income	**39,726**	36,343
Programme expenditures		
Tuition expenses (stipends, guest lecture, etc.)	**11,693**	9,493
Projects	**7,928**	7,031
Total programme expenditures	**19,622**	16,525
Non-programme expenditures		
Staff and management	**14,909**	12,980
Buildings	**1,750**	1,888
Facilities	**1,300**	1,491
Education-related costs	**1,191**	920
Acquisition and marketing	**385**	325
General costs	**420**	447
Interest	**-157**	-154
Total non-programme expenditures	**19,798**	17,897
Operating result	**305**	1,922
Extraordinary charges / appropriations from Fellowship Trust Fund	0	-1830
Overall result	305	92

Balance sheet in euro * 1,000

	31 Dec 2014	31 Dec 2013
Assets		
Fixed assets	**4,796**	5,332
Accounts receivable	**10,079**	2,214
Cash and banks	**19,038**	17,566
Total	**33,913**	25,112
Equity and liabilities		
Equity	**2,329**	2,025
Fellowship Trust Fund	**261**	262
Provision	**675**	556
Current liabilities	**30,648**	22,269
Total	**33,913**	25,112

Fellowship Trust Fund

The UNESCO-IHE Fellowship Trust Fund was created to raise funds from private and public organizations, companies, alumni and other individual benefactors for partial or full sponsorship of an individual's studies at UNESCO-IHE. This support enables water professionals who possess the intellectual stamina and ability to receive postgraduate education at UNESCO-IHE, but lack the proper funding. Every contribution is directed towards its equivalent value in terms of output.

In 2014, the Fellowship Trust Fund provided financial support to one student whose name and country of origin are listed in the Financial Statement below. The student was enrolled in an MSc programme in the 2012-2014 academic period and was only partially supported by the Fellowship Trust Fund. We thank the sponsor Stichting Meyboom for their generous contribution, which will enable students to further or complete their academic programmes at the Institute.

Financial statement FTF	euro	
Fund on 1 January 2014		**262,318**
Gifts		
Stichting Meyboom	**25,000**	
Interest	**2,060**	
Total		**27,060**
MSc fellowships		
Adecar Nugroho Tjindra, 2012-2014, Indonesia	**25,000**	
Total		**25,000**
Fund on 31 December 2014		**264,377**

Annexes

Annex 1
Educational statistics

Registered degree programme participants for the academic year 2014-2015

Programme	Source of funding			Region of origin					Gender		Total
	Full NFP	Co-financed NFP	Other	Africa	Asia	Latin America	Middle East	Other	Female	Male	
MSc Programmes 2013-2015	**76**	**0**	**149**	**100**	**66**	**28**	**10**	**21**	**81**	**144**	**225**
Water Science and Engineering	25	0	66	30	44	7	1	9	22	69	**91**
Water Management	16	0	17	20	7	5	1	0	14	19	**33**
Environmental Science	20	0	34	28	7	4	5	10	27	27	**54**
Municipal Water and Infrastructure	15	0	32	22	8	12	3	2	18	29	**47**
MSc Programmes 2014-2016	**74**	**0**	**138**	**86**	**71**	**27**	**8**	**20**	**85**	**127**	**212**
Water Science and Engineering	26	0	28	27	8	10	2	7	26	28	**54**
Water Management	11	0	28	15	8	11	2	3	15	24	**39**
Environmental Science	14	0	23	20	11	3	0	3	15	22	**37**
Urban Water and Sanitation	23	0	59	24	44	3	4	7	29	53	**82**
PhD programmes 2014	**31**	**3**	**102**	**42**	**40**	**30**	**8**	**16**	**51**	**85**	**136**
Total	**181**	**3**	**389**	**228**	**177**	**85**	**26**	**57**	**217**	**356**	**573**
Percentage	31.6	0.5	67.9	39.8	30.9	14.8	4.5	9.9	37.9	62.1	

Annex 2
Short courses

Short course	Date		Participants	Female participants
Advanced Water Transport and Distribution	30/Jun/14	18/Jul/14	3	**1**
Advanced Water Treatment and Re-use	22/Apr/14	09/May/14	5	**1**
Anaerobic Wastewater Treatment	03/Mar/14	07/Mar/14	5	**2**
Applied Groundwater Modelling	10/Jun/14	27/Jun/14	5	**2**
Aquatic Ecosystems: Processes and Applications	10/Jun/14	27/Jun/14	2	**2**
Asset Management	10/Feb/14	28/Feb/14	2	**0**
Coastal and Port Structures	03/Mar/14	21/Mar/14	4	**1**
Coastal Systems	13/Jan/14	31/Jan/14	2	**1**
Decentralised Water Supply and Sanitation	30/Jun/14	18/Jul/14	4	**1**
Design of Hydropower Schemes	23/Jun/14	27/Jun/14	1	**0**
Environmental Monitoring and Modelling	31/Mar/14	17/Apr/14	7	**5**
Environmental Planning and Implementation	31/Mar/14	17/Apr/14	2	**1**
Faecal Sludge Management	30/Jun/14	18/Jul/14	1	**1**
Financial Management of Water Organisations	31/Mar/14	17/Apr/14	4	**3**
Flood-Based Farming Systems and Water Harvesting for Food	08/Sep/14	19/Sep/14	12	**3**
Flood Risk Management	10/Jun/14	27/Jun/14	8	**4**
GIS and Remote Sensing Applications for the Water Sector	27/Oct/14	07/Nov/14	27	**12**
Groundwater Data Collection and Interpretation	31/Mar/14	17/Apr/14	8	**4**
Groundwater Resources and Treatment	03/Mar/14	21/Mar/14	1	**1**
Hydrological Data Collection and Processing	31/Mar/14	17/Apr/14	4	**1**
Industrial Effluent Treatment and Residuals Management	10/Jun/14	27/Jun/14	5	**2**
Integrated Coastal Zone Management	22/Apr/14	02/May/14	5	**4**
Integrated Hydrological and River Modelling	22/Apr/14	09/May/14	1	**0**
International Port Seminar	22/Apr/14	09/May/14	7	**2**
Introduction to River Flood Modelling	22/Apr/14	09/May/14	2	**1**
IWRM as a Tool for Adaptation to Climate Change	30/Jun/14	18/Jul/14	5	**1**
Managing Water Organizations	03/Mar/14	21/Mar/14	6	**4**
Modelling Wastewater Treatment Processes and Plants	22/Apr/14	09/May/14	3	**1**
Morphological Modeling Using Delft3D	15/Sep/14	19/Sep/14	2	**0**
Nanotechnology for Water and Wastewater Treatment	31/Mar/14	11/Apr/14	6	**2**
Negotiation and Mediation for Water Conflict Management I	10/Feb/14	28/Feb/14	5	**2**
Negotiation and Mediation for Water Conflict Management II	03/Mar/14	21/Mar/14	3	**2**
Partnerships in the Water Sector (Public-Private Partnerships in the Water Sector)	10/Jun/14	27/Jun/14	4	**3**
Port Planning and Infrastructure Design	10/Feb/14	28/Feb/14	5	**0**
Service Oriented Management of Irrigation Systems	31/Mar/14	17/Apr/14	2	**2**
Small Hydropower Development	08/Sep/14	19/Sep/14	9	**1**
Solid Waste Management	30/Jun/14	18/Jul/14	15	**5**
Surface Water Treatment I	13/Jan/14	31/Jan/14	2	**2**
Urban Drainage and Sewerage	13/Jan/14	31/Jan/14	2	**0**
Urban Flood Management and Disaster Risk Mitigation	22/Apr/14	09/May/14	4	**1**
Urban Water Governance	30/Jun/14	18/Jul/14	1	**1**
Urban Water Systems	10/Jun/14	27/Jun/14	3	**1**

Short course	Date		Participants	Female participants
Using Open Source Software for GIS and Hydrological Modelling	27/Oct/14	11/Jul/14	**9**	1
Wastewater Treatment Plants Design and Engineering	31/Mar/14	17/Apr/14	**1**	1
Water and Environmental Law	22/Apr/14	09/May/14	**1**	0
Water and Environmental Policy Making	03/Mar/14	21/Mar/14	**2**	1
Water Economics	13/Jan/14	31/Jan/14	**4**	1
Water Quality Assessment	10/Feb/14	28/Feb/14	**12**	5
Water Resources Assessment	10/Feb/14	28/Feb/14	**1**	0
Water Resources Planning	31/Mar/14	17/Apr/14	**4**	3
Water Transport and Distribution	31/Mar/14	17/Apr/14	**4**	0
Water Treatment Processes and Plants	10/Jun/14	27/Jun/14	**6**	2
Watershed and River Basin Management	30/Jun/14	18/Jul/14	**3**	3
Where there is little data: How to estimate design variables in poorly gauged basins	17/Nov/14	28/Nov/14	**6**	3
World History of Water Management	01/Sep/14	05/Sep/14	**1**	0
Total			**258**	103
Percentage			**100**	39.92

Online course participants

Online course	Date		Participants	Female participants
Biological Wastewater Treatment: Principles, Modelling and Design	06/Jan/14	06/Jun/14	**29**	7
Constructed Wetlands for Wastewater Treatment	01/Sep/14	05/Jan/15	**24**	15
Ecological Sanitation	05/May/14	05/Sep/14	**7**	2
Environmental Flows	01/Sep/14	05/Jan/15	**19**	9
Flood Modelling for Management	03/Mar/14	10/May/14	**8**	3
Industrial Effluent Treatment	01/Sep/14	05/Jan/15	**24**	11
Industrial Resource Management and Cleaner Production (formerly called CPWC)	05/May/14	05/Sep/14	**7**	4
Integrated Coastal Zone Management	03/Mar/14	07/Jul/14	**8**	7
Integrated River Basin Management	03/Mar/14	07/Jul/14	**6**	2
IWRM as a Tool for Adaptation to Climate Change	01/Sep/14	05/Jan/15	**7**	4
Modelling Sanitation Systems	05/May/14	05/Sep/14	**8**	1
Solid Waste Management	01/Sep/14	05/Jan/15	**30**	13
Urban Drainage and Sewerage	06/Jan/14	09/May/14	**12**	2
Water and Environmental Law and Policy	03/Mar/14	23/Jun/14	**17**	9
Water Quality Assessment	01/Sep/14	05/Jan/15	**9**	4
Water Transport and Distribution	19/Sep/14	19/Feb/15	**14**	3
Total			**229**	96
Percentage			**100**	41.9

Regional refresher course participants

Regional refresher course	Country	Date		Participants	Female participants
Water Integrity	Indonesia	23/Jun/14	27/Jun/14	**20**	10
Recent Developments in Integrated Water Resources Management	Myanmar	14/Oct/14	24/Oct/14	**32**	19
Management of Faecal Sludges	South Africa	20/Oct/14	24/Oct/14	**20**	10
Total				**69**	38
Percentage				**100**	55.1

Annex 3
PhD fellows

Promotions

Name	Country	Title thesis	Promoter	Date
Mr. Kilonzo	Kenya	Assessing the Impacts of Environmental Changes on the Water Resources of the Upper Mara, Lake Victoria Basin	Lens / Bauwens	21/Jan/14
Mr. Herk, van	Netherlands	Delivering integrated flood risk management; governance for collaboration, learning and adaptation	Zevenbergen	14/Feb/14
Mr. Rijke	Netherlands	Delivering Change. Towards fit-for-purpose governance of adaption to flooding and drought	Zevenbergen	14/Feb/14
Mr. Almoradie	Philippines	Networked Environments for Stakeholder Participation in Water Resources and Flood Management	Solomatine / Jonoski	18/Mar/14
Mr. Munyaneza	Rwanda	Space-time variation of hydrological processes and water resources in Rwanda, focus on the Migina catchment	Uhlenbrook	07/May/14
Ms. Tabatabai	Islamic Republic Of Iran	Coagulation and ultrafiltration in seawater Reverse Osmosis Pretreatment	Kennedy	20/May/14
Mr. Abel	South Sudan	Soil Aquifer Treatment. Assessment and Applicability of Primary Effluent Reuse in Developing Countries	Kennedy	17/Jun/14
Ms. Hu Yurong	China	Water Tower of the Yellow River in a Changing Climate	Uhlenbrook	15/Sep/14
Mr. Nyenje	Uganda	Fate and transport of Nutrients in Groupwater and Surface Water in an Urban Slum Catchment	Uhlenbrook	15/Sep/14
Ms. Lin Yuqing	China	Unstructured Cellular Automata in Ecohydraulics modelling	Mynett	07/Oct/14
Mr. Ali	Sudan	The Impact of Soil Errorion in the Upper Blue Nile on Downstream Reservoir Sedimentation	Wright / Mynett	28/Oct/14
Mr. Kayastha	Nepal	Refining the Committee Approach and Uncertainty Prediction in Hydrological Modelling	Solomatine	30/Oct/14
Mr. Guo	China	Modeling estuarine morphodynamics under combined river and tidal forcing	Roelvink / He	08/Dec/14
Ms. Cassidy	Portugal	Anaerobic oxidation of methane by sulfate reduction	Lens	17/Dec/14
Mr. Jain	India	Biogenic production of selenium nanoparticles	Lens	19/Dec/14
Mr. Staicu	Romania	Biorecovery of selenium from inorganic wastewaters	Lens	19/Dec/14

Registered PhD fellows

Name	Country	Title thesis	Promoter
Mr. Mvulirwenande	Rwanda	Beyond Structuralism to Explain the Effectiveness of Knowledge and Capacity Development in Water Supply. Towards an Actor-Interaction Oriented Perspective	Alaerts
Mr. Salifu	Ghana	Fluoride removal from drinking water	Amy / Kennedy
Mr. Kim	South Korea	Municipal Wastewater Treatment using Algae and Bacteria at MBR process(based on MLE process	Brdjanovic
Mr. Martinez Cano	Colombia	Adaptation strategies to the pressure of global change in urban drainage modelling	Brdjanovic
Mr. Mawioo	Kenya	Novel Concepts and Technologies for Excreta and Wastewater Management in Emergency Conditions	Brdjanovic
Mr. Rubio Rincon	Mexico	Feasibility of using seawater in urban sanitation (implementation)	Brdjanovic
Mr. Skoullos	Greece	Model-based assessment of urban wastewater infrastructure development on aquatic environment	Brdjanovic
Mr. Welles	Netherlands	Impact of Salinity on the Biological Phosphorus Removal in Activated Sludge Systems	Brdjanovic

Name	Country	Title thesis	Promoter
Ms. Zakaria	Indonesia	Rethinking Fecal Sludge Management in Emergency Setting	Brdjanovic
Mr. Abebe	Ethiopia	Agent-based modelling of socio-technical systems for urban flood risk assessment	Brdjanovic / Vojinovic
Mr. Medina Pena	Colombia	Development of a Decision Support System for Flood Risk Assessment in Coastal Regions	Brdjanovic / Vojinovic
Mr. Sanchez Guillen	Panama	Cost-Effective Municipal Wastewater Treatment by Coupling of UASB and ANAMMOX Reactors	Brdjanovic/ van Lier
Mr. Aklan	Yemen	Rainwater Harvesting & Flash Food Mitigation	de Fraiture
Ms. Fadul Bashir	Sudan	Optimizing benefit streams in spate irrigated agriculture in Sudan	de Fraiture
Mr. Kaune Schmidt	Germany	Value of comprehensive datasets and information in constraining uncertainties in support of decision making	de Fraiture
Mr. Mananchie	Ethiopia	Irrigation water potential assessment, soil and water management reforms and indigenous irrigation systems in Awash river basin, Ethiopia	de Fraiture
Ms. Mersha	Ethiopia	Integrated Water Resource Management (IWRM) for Sustainable Irrigation Development: Awash River Basin, Ethiopia.	de Fraiture
Ms. Prabnakorn	Thailand	Integrated Water Management at the Tapi River Basin, Thailand	de Fraiture
Ms. Theol	Iraq	Effects of Cohesive Sedimentation in the Irrigation System - Case Study: AL-Kadhimiya irrigation system, Tigris River, Iraq	de Fraiture
Ms. Zenebe	Ethiopia	Under Construction	de Fraiture
Mr. Galvis Castano	Colombia	Development of a technology selection model for pollution prevention and control in the municipal water cycle	Gijzen
Mr. Silva Vinasco	Colombia	Greenhouse gas emissions from ecotechnologies for sustainable domestic wastewater management in tropical regions	Gijzen
Ms. Setyamukti	Indonesia	Processing organic kitchen waste in a low-tech box composting system	Gijzen / Rotter (TU Berlin)
Mr. Hayat	Pakistan	Afghanistan, Pakistan and River Kabul: Pathway for Collaboration or New Basis for Conflict	Gupta
Ms. Obani	Nigeria	Environmental Human Rights and Development, case of sanitation	Gupta
Ms. Sanz Galindo	Colombia	Micro and Small Industries, Water and Developing countries: A challenge for sustainability in Colombia	Gupta
Mr. Belachew	Ethiopia	Using catchment models and in situ measurements to estimate combined effects of diffuse and industrial effluent loads into the Borkena River, Ethiopia	Irvine
Etiegni	Kenya	A Case of Lake Victoria Fisheries (Kenya)	Irvine
Mr. Hategekimana	Rwanda	Governance of Wetlands in Africa with focus on Rwanda	Irvine
Mr. Nabuyanda	Zambia	The Fate of Cobalt, Copper and Lead in Two Wetlands in Zambia	Irvine
Ms. Namaalwa	Uganda	Water quality and hydrology regulation under the influence of agriculture in Namatala wetland, Uganda	Irvine
Mr. Onyango	Kenya	Toxicological Fate, Monitoring and Potential Climate Change Effects of Pesticide Residue in the Lake Naivasha Catchment, Kenya	Irvine
Ms. Rongoei	Kenya	Wetland Ecosystem Integrity in Relation to Exploitation for Livelihoods in Nyando Wetlands, Kenya	Irvine
Ms. Salcedo Borda	Peru	Effect of flow change, due the presence of Dam, on nutrients cycling	Irvine
Mr. Uwimana	Rwanda	Rehabilitation of Sediment and Nutrient Retention Functions in Wetland s of Migina Catchment, Rwanda	Irvine
Mr. Masese	Kenya	Spatio-temporal dynamics in trophic recources and transfers among food webs in the Mara River.	Irvine
Mr. Abushaban	Palestine	Safe induction time control of scaling formation in reverse osmosis membrane	Kennedy
Mr. Bruins	Netherlands	Improved manganese removal from groundwater	Kennedy
Mr. Dhakal	Nepal	New Generation of Pre-treatments to Eliminate Organic and Biological Fouling in SWRO Systems	Kennedy
Ms. Reyes Perez	Ecuador	Water Demand Management and Small Scale Water Supply Systems in Tropical Islands	Kennedy
Mr. Schurer	Netherlands	Under Construction	Kennedy
Mr. Sousi	Palestine	Biostability of drinking water	Kennedy
Ms. Ekowati	Indonesia	Demonstrating and promoting innovative technologies, for an optimal and safe closed water cycle in Euro-Mediterranean tourist facilities	Kennedy
Mr. Al-Washali	Yemen	Water Loss Assessment for Developing Countries; the Case of Yemeni Water Supply Systems	Kennedy / Sharma

Name	Country	Title thesis	Promoter
Mr. Andreev	Moldova	Terra preta nova production for resource oriented management of human excreta	Lens
Mr. Banik	Bangladesh	Sewer systems management and protection	Lens
Ms. Bhattarai Gautam	Nepal	Anaerobic methane oxidation with nitrate as electron acceptor	Lens
Mr. Botwe	Ghana	Historical Trends in Chemical Pollution and Sedimentation in the Tema Harbour, Ghana	Lens
Ms. Cassarini	Italy	Anaerobic oxidation of methane in the presence of different electron acceptors	Lens
Mr. Chung	Republic of Korea	Point-of-use drinking water disinfection methods for African peri-urban areas	Lens
Ms. Espinosa Ortiz	Mexico	Mycogenic production of elemental selenium nanoparticles	Lens
Mr. Isildar	Turkey	Metal recovery from electronic waste	Lens
Mr. Janyasuthiwong	Thailand	Biogenic Sulfide Production and Selective Metal Precipitation at Low pH for Semiconductor Wastewater Treatment	Lens
Mr. Mal	India	Biological removal of tellurium and selenium from electroplating wastewater	Lens
Mr. Mustapha	Nigeria	Treatment of petroleum-contaminated wastewater using constructed wetlands	Lens
Ms. Rada Ariza	Colombia	Microalgae for wastewater biotreatment and biomass recovery	Lens
Mr. Reyes Alvarado	Mexico	Under Construction	Lens
Ms. Tan	Philippines	Micro-aerobic bioreactor to selenium and tellurium contaminated wastewater	Lens
Ms. Wadgaonkar	India	Novel bioremediation process for the treatment of selenoferous soils	Lens
Mr. Waktola	Ethiopia	Invitro Investigation on the antibacterial activities of Microcystis species from Koka reservoir against some human pathogenic bacteria	Lens
Ms. Zapater Pereyra	Peru	Design and Development of a novel constructed wetland (CW) set-up: Duplex-CW	Lens
Mr. Da Motta Paca	Brazil	Large scale hydrological assessment, variability and prediction under data scarcity - case application: the Amazon river basin	McClain
Mr. Ferdous	Bangladesh	Socio-Hydrological Dynamics in Bangladesh	Mynett
Mr. Meesuk	Thailand	Merging Topographical Data From Multidimensional Views For Enhanced Urban Flood Modelling	Mynett
Ms. Minaya Maldonado	Ecuador	Development of methodologies, environmental indexes, indicators and programs for integral environmental evaluation and restoration of degraded systems	Mynett
Ms. Ouikotan	Benin	Flood modelling in Cotonou (as coastal) city: hydraulic and hydrology aspects	Mynett
Mr. Pena Castellanos	Colombia	Integrated water resources data in supporting decisions	Mynett
Mr. Simanjuntak	Indonesia	Coupled Stress-Seepage Numerical Design of Prestressed Concrete-Lined Pressure Tunnels	Mynett
Mr. Wang	China	Numerical Modelling of Ice Floods in the Ning-Meng reach of the Yellow River basin	Mynett
Ms. Lines Diaz	Spain	Under Contruction	Mynett
Ms. Alvarez Mieles	Ecuador	Ecological Modelling in Tropical Rivers and Wetlands	Mynett / Irvine
Ms. Musa	Nigeria	Living with sea level rise on a subsiding delta: using satelite based data and information as tools to develop mitigation and adaptation options for the Niger delta	Mynett / Popescu
Mr. Bin Ab Razak	Malaysia	Modeling of Headland Sediment Bypassing Process & Nearshore Evolution of Embayed Beach	Roelvink
Mr. Dam	Netherlands	Long-term process-based modelling of the morphology of estuaries	Roelvink
Ms. Minikowski Achete	Brazil	Long term Morphodynamics Modeling of San Francisco Bay	Roelvink
Mr. Nguyen	Viet Nam	Development of 3D Wave-current Interaction Formulation in Delft3D Model, Application in the Mekong Estuaries and Outflow Areas	Roelvink
Mr. Sembiring	Indonesia	Nearshore operational model for Swimmer Safety	Roelvink
Mr. Wan Yuanyang	China	Dynamics of fluid mud and its influence on the backfilling at the North Passage of Yangtze Estuary, China	Roelvink
Mr. Zuo	China	Sediment Alluvial Process in Wave-current Boundary Layer	Roelvink
Ms. Duong	Viet Nam	Climate Change Impacts on the Stability of Small Tidal Inlets (CC-STI)	Roelvink / Ranasinghe

Name	Country	Title thesis	Promoter
Mr. Mehvar	Islamic Republic of Iran	Quantifying climate change driven environmental losses on coasts	Roelvink / Ranasinghe
Ms. Akter	Bangladesh	Decade to Century Scale Geo-Morphological Development of the Bangladesh Delta	Roelvink / Popescu
Mr. Adeboye	Nigeria	Productive and Sustainable Use of Land and Water under Deficit Irrigation in Ogun-Osun River Basin, Nigeria	Schultz
Ms. Delos Reyes	Philippines	Modernization Strategy for National Irrigation Systems in the Philippines: Linking Design, Operation and Water Supply	Schultz
Ms. Elsheikh	Sudan	Crop Water Productivity of Sunflower (Helianthus annuus L) under different Irrigation Regimes for Gezira Clay Condition	Schultz
Mr. Junaidi	Indonesia	Optimisation of the Urban Drainage and Flood Protection of Padang City, Indonesia	Schultz
Mr. Keita	Mali	Subsurface drainage of valley bottom rice irrigated schemes in the Sudanian climate. Case study of Tiéfora in Burkina Faso	Schultz
Ms. Osman	Sudan	Sediment and Water Management in Large Irrigation System, Case Study: Gezira Scheme, Sudan	Schultz
Mr. Winaktoe	Indonesia	Urban polder development. Case study on the Province of Daerah Khusus Ibukota (DKI) Jakarta	Schultz
Yekti	Indonesia	Role of Reservoir Operation in Sustainable Water Supply to Subak Irrigation Systems Case Study in the South of Bali	Schultz
Yihun	Ethiopia	Agricultural Water Productivity Optimization for Irrigated Teff (Eragrostic Tef) in a Water Scarce Semi-arid Region of Ethiopia	Schultz
Mr. Dejen	Ethiopia	Hydraulic and Operational Performance of Irrigation Schemes in View of Water Saving and Sustainability. Sugar estates and Community Managed schemes in Ethiopia	Schultz
Mr. Bayissa	Ethiopia	Drought assessment and forecasting for the Upper Blue Nile Basin by assimilating remotely sensed data into a hydrological model	Solomatine
Mr. Castro	Colombia	Hydraulic Model Based Simulation and Optimization of Water Distribution Networks for Energy Consumption and Water Losses Reduction	Solomatine
Mr. Chacon Hurtado	Colombia	Dynamic multi-objective optimisation of dynamic heterogeneous networks of physical and social sensors	Solomatine
Mr. Hartanto	Indonesia	Integrating multiple sources of information and hydrological modelling to reduce uncertainty in operational water management	Solomatine
Mr. Marquez Calvo	Mexico	Multi-objective optimization applied to complex model-based water-related problems: robustness, efficiency, interactivity	Solomatine
Mr. Mazzoleni	Italy	Optimal Integration of Heterogeneous Uncertain Data into Water Models	Solomatine
Mr. Md. Ali	Malaysia	Flood Risk Mapping Under Uncertainty: Application to Sungai Johor Basin, Malaysia	Solomatine
Mr. Mukolwe	Kenya	Flood Inundation Modelling Under Uncertainty: Estimation, Visualisation and Communication	Solomatine
Mr. Yan	China	Inundation Modelling Under Uncertainty Using Global Earth Observation Data	Solomatine
Mr. Poldul	Thailand	Cost-effectiveness of Multi-Policy Implication of Groundwater management: A case study of the Lower Chao Phraya Basin in Thailand	Solomatine
Mr. Laverde Barajas	Colombia	Under Construction	Solomatine
Mr. Diaz Mercado	Mexico	Under Construction	Solomatine
Mr. Delipetrev	The Former Yugoslav Republic of Macedonia	Decision Support System for Water Resources Management in the Republic of Macedonia: Case Study of Bregalnica River Basin	Solomatine / Jonoski
Mr. Pan	China	under construction	Solomatine / Popescu
Mr. Demessie	Ethiopia	Past-present-future land use in the Blue Nile and impacts on hydrology	Uhlenbrook
Mr. Hassaballah	Sudan	The Hydrological Impacts of Land Use-Cover and Climate Changes on Dinder River Morphology and Eco-hydrology of the Dinder National Park (DNP)/Sudan	Uhlenbrook
Ms. Trambauer Arechavaleta	Uruguay	Hydrological Drought Forecasting in Africa at Different Spatial and Temporal Scales	Uhlenbrook
Mr. Yang	China	Quantitative assessment of Groundwater and Surface water interactions in Erdos plateau, China	Uhlenbrook
Ms. Calderon Palma	Nicaragua	Surface and Subsurface Runoff Generation Processes in a Poorly Gauged Tropical Coastal Catchment. A study from Nicaragua	Uhlenbrook

Name	Country	Title thesis	Promoter
Mr. Gebrekristos	Ethiopia	Impact of impoved Land management practices on hydrology in Blue Nile River Basin / Up-scaling of Hydrological model	Uhlenbrook / Savenije
Ms. Ahmed	Egypt	Climate Change and Development Impacts on Groundwater Resources in the Nile Delta, Egypt	Uhlenbrook / Solomatine
Mr. Bhatt	Nepal	An Integrated approach for adapting agriculture and water management to Global Change. Case study of a Himalayan River Basin in Nepal	Uhlenbrook / Maskey
Ms. Digna	Sudan	On Optimising the operation of the multi-reservoir system in the Eastern Nile basin considering water and sediment fluxes	Uhlenbrook / vd Zaag
Ms. Saraiva Okello	Mozambique	Bridging the gaps between Hydrology, Land use and Water Management using Tracers and Water recources Modelling in the Incomati Basin	Uhlenbrook / vd Zaag
Ms. Basco Carrera	Spain	Participatory decision making for sustainable Integrated Water Resources Management. Strenthening stakeholder ownership using a Collaborative Modeling approach	v Beek / Jonoski
Mr. Zhou	China	Decision Support System for Managing Underground Water Related Assets(Water Distribution)	Vairavamoorthy
Mr. Sanchez Ralda	Guatemala	The use of information and communication technologies, to warn poorer women and men in anticipation to more extreme weather events and floods	van Dijk
Riungu	Kenya	Biogas facilities as a sanitation for the informal urban slum settlements: Enhanced sludge valorisation	vanLier
Mr. Abdullah	Iraq	Integrated water resources management in the Shatt-al-Arab	vd Zaag
Ms. Costa De Barros	Brazil	Water Governance in São Francisco river basin - Brazil	vd Zaag
Ms. De Souza Braga	Brazil	The impact of urban image built in the Brazilian and Chilean dictatorship in managing conflicts over water use	vd Zaag
Ms. Kassa	Ethiopia	Gender, Environment and Sustainable Development-Understanding the Linkages. The case of Blue Nile river basin	vd Zaag
Mr. Kiptala	Kenya	Managing Basin Interdependencies: Understanding tradeoffs and synergies in the Pangani River Basin, Tanzania	vd Zaag
Ms. Metzker Netto	Brazil	Knowledge Creation in Networks Dynamics, in Terms of Water Resources Management	vd Zaag
Mr. Muanda	Congo	Understanding the orgarnisation of sanitation services in informal settlements of South Africa	vd Zaag
Mr. Yalew	Ethiopia	Integrated Assessment of Land Use and Water Resources Management in the Upper Blue Nile River Basin	vd Zaag / v Griensven
Ms. Mwelwa	Zambia	Flow, morphology and vegetation in the Middle Zambezi: a Study of spatial and temporal scales	Wright
Mr. Narrain	Germany	Computer modelling for the optimisation of low-head hydropower schemes	Wright
Ms. Rogelis Prada	Colombia	Operational Flood Forecasting, Warning and Response for Multi-Scale Flood Risks in Developing Cities	Wright
Mr. Worku	Ethiopia	Integrated Management of Water Reesources and Optimal Reservoir Release for Energy, Irrigation and Ecosystem Services. A case Study of the Omo-Ghibe Basin	Wright / vd Zaag
Ms. Ahmed	Bangladesh	Application of resilience to flood risk management on Dhaka	Zevenbergen
Mr. Nilubon	Thailand	Urban Flood Risk Analysis and Management using Relational Urbanism Model: A Case Study in Ayutthaya Historic City (under UNESCO), Thailand	Zevenbergen
Mr. Radhakrishnan	India	Development and application of Real-in-options (RIO) accounting tools for stormwater management and flood safety	Zevenbergen
Mr. Salinas Rodriguez	Bolivia	Adaptation Tipping Points and Opportunities for Flood Resilience and Water Sensitivity	Zevenbergen

Annex 4
Research lines

Integrated Water Systems and Governance Department	
Chair Group	**Research line**
Water Management	Biophysical and social dimensions of water systems
	Institutional and economic dimensions of water systems
	Integrative instruments and interventions
Water Governance	Water Politics
	Water Law
	Water Policy
Hydroinformatics	Data, modelling, uncertainty and risk
	Systems engineering, optimization and integration
	Collaborative decision making and Internet-based computing and learning
Knowledge and Capacity Development	Analysing the dynamics of professional knowledge dissemination and access to the global knowledge pool
	Investigating the nature, extent and boundaries of citizen observatory contributions to improved knowledge flows and their implications for water governance
	Assessing the economic and social value of knowledge and capacity development
	Understanding the determinants for the effectiveness of knowledge and capacity development, and developing measuring metrics. The focus is, for the moment, on water supply utilities and Water Operator Partnerships
	Analysing the dynamics of the learning, competence building and innovation systems for the water sector. Getting an operational grip on competence and skill building and organisational assessments, for the purpose of developing capacity development strategies

Water Science and Engineering Department	
Chair Group	**Research line**
Land and Water Development	Water and food security
	Irrigation and ecosystems, in particular in wetlands and coastal lowlands
	Non-conventional irrigation options
	Modernization of irrigation and drainage systems
Aquatic Ecosystems	Nutrient and pollutant cycling
	Constructed wetlands
	Linking ecological processes with sustainable wetland use and livelihoods
Hydrology and Water Resources	Hydrological processes near the earth's surface
	Basin hydrology and global changes
	Ecohydrology
Coastal Systems, Engineering and Port Development	Integrated modeling of coastal processes and evolution
	Performance and reliability of breakwaters, coastal structures and flood defence systems
	Quantitative assessment of coastal risk
	Port development: traffic modelling, design of port master plans and expansion plans, adaptive port planning
	Port-related hydrodynamic and morphological modelling
River Basin Development	River processes in natural and man-made environments
	Optimal design of hydraulic structures
	Reservoir operation and management
Flood Resilience	Water Sensitive Cities
	Disaster risk reduction

Research lines

Environmental Engineering and Water Technology Department	
Chair Group	**Research line**
Water Supply Engineering	Groundwater treatment
	Surface water treatment
	Desalination and water reuse
	Water transport & distribution
Pollution Prevention and Resource Recovery	Cleaner production and pollution prevention
	Solid waste management
	Resource recovery (water, nutrients, minerals, energy, new materials)
	Ecotechnologies (anaerobic digestion, natural treatment systems, photobioreactors)
Sanitary Engineering	Advanced nutrient removal processes
	Wastewater treatment processes development and modelling
	Use of seawater in sanitation
	Resources oriented sanitation
	Sanitation provision to the urban poor
	Low cost wastewater collection and treatment
	Anaerobic treatment of wastewater and sanitary slurries
	Faecal sludge management
	Emergency sanitation
	Hybrid systems for sewage treatment in developing countries
	Asset management of urban water infrastructure Flood and disaster risk management
	Model-based multi-objective optimization of urban water systems
	Public health impacts of Urban Water Systems

Annex 5
Publications

260
Peer reviewed Journal Articles

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Agarwal A, Babel MS, Maskey S (2014) Analysis of future precipitation in the Koshi river basin, Nepal. Journal of Hydrology 513: 422-434 DOI 10.1016/j.jhydrol.2014.03.047

Ahlers R, Brandimarte L, Kleemans I, Sadat SH (2014) Ambitious development on fragile foundations: Criticalities of current large dam construction in Afghanistan. Geoforum 54: 49-58 DOI 10.1016/j.geoforum.2014.03.004

Ahlers R, Cleaver F, Rusca M, Schwartz K (2014) Informal space in the urban waterscape: Disaggregation and co-production of water services. Water Alternatives 7(1): 1-14

Ahmad MUD, Masih I, Giordano M (2014) Constraints and opportunities for water savings and increasing productivity through Resource Conservation Technologies in Pakistan. Agriculture, Ecosystems and Environment 187: 106-115 DOI 10.1016/j.agee.2013.07.003

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Arjoon D, Mohamed Y, Goor Q, Tilmant A (2014) Hydro-economic risk assessment in the eastern Nile River basin. Water Resources and Economics 8: 16-31 DOI 10.1016/j.wre.2014.10.004

Ascúntar□Ríos D, Madera□Parra CA, Peña□Varón MR, Sharma SK (2014) Organic matter removal during pilot□scale soil aquifer treatment for domestic wastewater in tropics. Water Science & Technology 70(3): 450□456 DOI 10.2166/wst.2014.222

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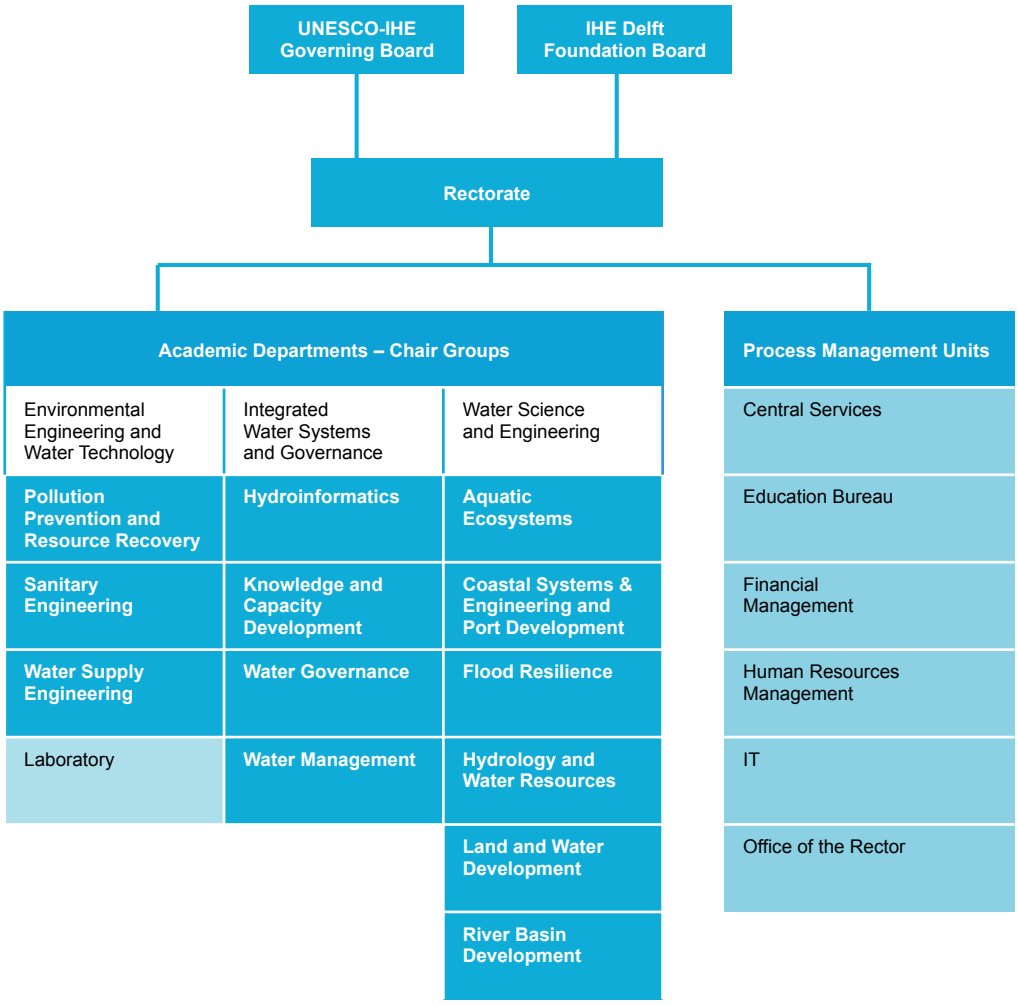
Annex 6
Organizational chart of UNESCO-IHE



As a category one institute of UNESCO, the Institute is part of the Natural Sciences Sector of UNESCO.
Further details can be found at http://www.unesco.org/orgchart/en/ORG_vis_EN_files/png_1.htm.

Annex 7
Committees

UNESCO-IHE Governing Board
Abdin Mohamed Ali Salih
Avinash C. Tyagi
Ben Braga
Blanca Jimenez Cisneros, representative of the Director General of UNESCO
Claudio Caponi, (observer)
Fritz Holzwarth, Chair
Gabriel Oteze
Iwona Wagner
John Verbakel
Louis de Quelerij
Richard L. Lino
Tineke Huizinga-Heeringa
Tomoharu Hori
Wim Kuijken, until 1 July

IHE Delft Foundation Board
Annemieke Nijhof, until 1 March
Dirk Jan van den Berg, per 1 March
Louis de Quelerij
Wim Deetman, Chair
Wim Kuijken, until 1 July

Rectorate
András Szöllösi-Nagy, Chair until 10 November
Greet Vink
Stefan Uhlenbrook, Chair per 10 November

Academic Board
András Szöllösi-Nagy, Chair until 10 November
Stefan Uhlenbrook, Chair per 10 November
Arthur Mynett
Bart Schultz
Charlotte de Fraiture
Chris Zevenbergen
Damir Brdjanovic
Dano Roelvink
Dimitri Solomatine
Gary Amy
Guy Alaerts
Han Ligteringen
Huub Gijzen
Jan Leentvaar
Jentsje van der Meer
Joyeeta Gupta
Jules van Lier
Kala Vairavamoorthy
Kenneth Irvine
Margreet Zwarteveen
Maria Kennedy
Meine-Pieter van Dijk
Michael McClain
Nigel Wright
Piet Lens
Pieter van der Zaag
Rosh Ranasinghe
Wim Bastiaansen

Operational Management Group
Ali Dastgheib, per 1 September
Angélique van Drunen, per 27 October
Arno Heins
Erik de Ruyter van Steveninck, until 1 September
Erwin Ploeger
Gaetano Casale, per 22 September
Greet Vink, Chair
Ioana Popescu
Juliëtte Terlaak
Nemanja Trifunovic, per 1 September
Robert de Bruijn
Saroj Sharma, until 1 September
Wilmar Ceton

Examination Board
Anne van Dam
Carlos Lopez Vazquez
Charlotte de Fraiture
Erwin Ploeger
Ilyas Masih, per 1 October
Maarten Blokland, until 1 August
Nynke Jo Smit (external)
Piet Lens
Susan Graas

Education Coordination Committee
Arno Heins
Edwin Hes
Erick de Jong
Erik de Ruyter, until 1 October
Erwin Ploeger, Chair
Hermen Smit
Jan Herman Koster
Jan Willem Foppen, per 1 October
Tineke Hooijmans
Wilmar Ceton

Education Development Committee
Erwin Ploeger
Jan Herman Koster
Kenneth Irvine
Maria Kennedy
Michael McClain
Margreet Zwarteveen
Stefan Uhlenbrook

Works Council
Assela Pathirana
Ed Gerritsen van der Hoop, per 1 October
Hans van der Kwast
Jolanda Boots
Maria Rusca
Nemanja Trifunovic, until 1 September
Patricia Darvis, Chair
Sylvia van Opdorp-Stijlen

Student Association Board
Abebe Legesse
Dibesh Shrestha
Olivier Tuyishimire
Sachin Tiwale

PhD Association Board
Mohanasundar Radhakrishnan, Chair
Gonzalo Peña Castellanos
Pedi Obani
Christiana Metzker Netto
Iosif Skoullos
Joel Onyango
Sang Yeob Kim
Nirajan Dhakal
Shakeel Hayat

Cultural Ambassadors
The UNESCO-IHE Cultural Ambassadorship programme builds a pact between culture and science. The Institute appoints individuals who possess widely recognized talent in the arts, sciences, literature, entertainment, sport or other fields of public life, bestowing the title of Cultural Ambassador on these talented people.

Ap Verheggen, sculptor
Gil Garcetti, photographer

Honorary Fellows
The UNESCO-IHE Honorary Fellowship award is bestowed in recognition of persons of distinction who have either made major contributions to the work of UNESCO-IHE or earned distinction for activities associated more widely with the context of the Institute's mission.

2014 Prof. B. Moss
2012 Prof. J.A. Cunge
2011 Prof. J.P. O'Kane, PhD
2010 Prof. D.P. Loucks
2004 W.J. Cosgrove
1999 Prof. M. Abu Zeid, PhD
1998 Prof. W.A. Segeren, MSc
1998 R. Moochtar, MSc
1996 Prof. J.W.M. la Rivière, PhD, MSc
1993 M.F. Strong, PhD
1992 Prof. J.C.I. Dooge
1990 Prof. L. Huisman, PhD, MSc
1985 Prof. L.J. Mostertman, MSc
1976 Prof. W.F.J.M. Krul
1968 Prof. J.Th. Thijssen, MSc

Annex 8
External memberships

Abraham Mehari Haile
Senior Lecturer in Land and Water Development
- Secretary of the ICID working group on Drought
- Secretary of the Spate Irrigation Network
- Member of ICID working group on On-farm

Alessandra Crosato
Associate Professor in River Morphology and River Engineering
- Member of Programme Committee of the Netherlands Centre for River studies (NCR)
- Member of Morphological Triangle (Dutch leading group on River Morphodynamics and related engineering)
- Member of scientific committee RCEM International Conference on River Coastal and Estuary Morphology 2015 (Iquitos, Peru)
- Member of scientific and organising committees IAHR 2015 World Congress (Den Haag, the Netherlands)
- Member of scientific committee IAHR 2016 Europe Congress (Liege, Belgium)
- Member of scientific committee IAHR 2017 World Congress (Panama)
- Member of the Europe Division Leadership Team of IAHR
- Member of European Mechanics Society
- Member of Research School SENSE (Socio-Economic and Natural Sciences of the Environment)
- Member of editorial board of the international journal Water Management
- Guest editor international journal Advances in Water Resources (Elsevier)
- Organizer workshop “Experimental Practices in River Morphodynamics” (3 July 2014, delft, the Netherlands)
- Invited speaker at Delft-Japan Seminar on “River Dynamics & Morphology” (1 Sept. 2014, Delft, the Netherlands)
- Organizer NWO-funded workshop “Games for change: Building consensus in managing the Tana Delta, Kenya” with local stakeholders (8-9-10 July 2014)
- Co-convener of session “River morphodynamics modelling” at EGU 2014 (Vienna, Austria)

Alessandro Cattapan
Lecturer/Researcher in River Engineering
- Member of the Association of Engineers of the Padova Province, Italy (Ordine degli Ingegneri della Provincia di Padova)

Andras Szöllösi-Nagy
Rector
- Member of the Board of Governors of the World Water Council
- Member of the Bureau of the Governing Board of World Water Council
- Member of the International Steering Committee of the 7th World Water Forum
- Co-Chair of the Political Processes Commission of the 7th World Water Forum
- Chair of the International Programme Committee of the Budapest Water Summit
- Chair of the Drafting Committee of the Budapest Water Summit
- Serves on the editorial boards of Water Resources Management (Reidel), Environmental Systems, the International Journal of Water Policy (IWA Publishing), Journal of Water, Sanitation and Hygiene for Development (IWA), International Journal on Landslides (Springer), and the Encyclopedia of Life Support Systems (EOLSS)
- Board member of the Stockholm Environmental Institute
- Board member of the Prince Sultan Bin Abdulaziz International Water Prize
- Honorary Member of the American Water Resources Association (AWRA)

Ann van Griensven
Associate Professor of Hydrology and Water Quality
- Served on the editorial board of the Hydrology and Earth System Sciences, HESS (since 2012)
- Served on the editorial board of the Environmental Modelling and Software (since 201).
- Guest editor of the journal wires-water
- Editor of special issues of the Journal of Water Resources Management and for Phys. Chem. Earth
- Board member of the international Environmental Modelling and Software Society (since 2012)
- Board member of Soil and Water Assessment (SWAT) foundation (since 2012)
- Board member of the Belgian committee for UNESCO-IHP (since 2013)
- Board member of the OpenMI executive committee (since 2010)
- Member of technical committee for the ASABE Water Quality Conference Planning Committee, Bari (2012)
- Chaired and convened a session at EGU
- Representative of Belgium in EurAqua (the European Network of Freshwater Research Organisations (since 2012)

Anne van Dam
Associate Professor of Environmental Systems Analysis
- Member of Editorial Board of Aquaculture
- Volume Editor, Wetlands Encyclopedia (Springer)
- Guest Editor Special Issue in papyrus wetlands for Wetland Ecology and Management
- Refereed ten peer reviewed articles
- Observer on the Ramsar Scientific and Technical Review Panel
- Executive Editor, Aquaculture Reports (Elsevier)

Ali Dastgheib
Senior Lecturer Port Development
- Member of the International Organisation on Waterborne Transport (PIANC)
- Member of the International Cooperation commission of PIACN
- Member of the Centrum voor Kustonderzoek (NCK)

Arthur Mynett
Professor of Hydraulic Engineering
- IAHR Vice President and Council Member, International Association for Hydro-environment Engineering and Research
- Chair Local Organizing Committee, IAHR2015 World Congress Delft-The Hague
- Adjunct Professor, Chinese Academy of Science Research Centre on Eco-environmental Studies, Beijing, China
- Visiting Professor, Sichuan University, Chengdu, China
- Visiting Scientist, Nanjing Hydraulic Research Institute, Nanjing, China
- Member of the Governing Board, Netherlands Centre for River Research (NCR)
- Member of the Governing Board, Netherlands Centre for Coastal Research (NCK)
- Member of the Royal Netherlands Institute of Engineers (KIVI)
- Member of the International Association of Hydrological Sciences (IAHS)
- Member of the International Water Association (IWA)
- Member of the UK Institute of Civil Engineers (ICE)
- Member of the American Society of Civil Engineers (ASCE-EWRI)
- Member of Editorial Boards: ENMO (Environmental Modeling and Assessment), HYP (Hydrological Processes), JHI (Hydroinformatics), ISP (Ship Building Progress), Journal of Hydraulic Research (IAHR), Journal of Hydraulic Engineering (ASCE), Journal of Water Management (ICE)

Assela Pathirana
Senior Lecturer in Urban Drainage and Sewerage
- Editor of Hydrological Research Letters, Journal of Japan Society of Hydrology and Water Resources
- Member of International Working Group of the IWA/IAHR Joint Committee on Urban Drainage
- Member of International Scientific committee of 13th international conference on Urban Drainage

Erik de Ruyter van Steveninck
Senior Lecturer Aquatic and Marine Ecology
- Board member of CapNet
- Member of AcroporaNet
- User Group Caribbean Netherlands Science Institute

Berta Fernández Álvarez
Quality Manager
- NVAO Certified Accreditation Secretary/ Coordinator

Branislav Petruševski
Associate Professor of Water Supply Engineering
- Member of the scientific committee of the 5th International Congress of Arsenic in the Environment (11-16 May 2014)
- Chairman of the Work Group Water of the

Dutch - Serbian Business Council

Carel Keuls
Advisor Knowledge Management
- Editor UNESCO-IHE project experiences and results for book IWRM in Central Asia (to be published in 2013, in English and Russian)

Carlos Lopez-Vazquez
Senior Lecturer in Wastewater Treatment Technology
- Associated Editor of Water Science and Technology (since 2011)
- Member of the International Water Association
- Member of the Water Environment Federation

Charlotte de Fraiture
Professor of Hydraulic Engineering for Land and Water Development
- Member of Steering Committee of the Water Land & Ecosystems (WLE) research program under the CGIAR umbrella
- Member international jury Stockholm Junior Water Prize
- Member of the Science Program Committee of the Stockholm Water Week
- Chair of the Netherlands Commission on Irrigation and Drainage (NethCID)
- Editor of the Water Resources and Rural Development (new Elsevier journal)
- Guest editor of special issue of the journal Agricultural Water Management

Chris Zevenbergen
Professor of Flood Resilience of Urban Systems
- Member Advisory Board Universiteitsfonds Delft
- Member of the Board Netherlands Water Partnership (NWP)(2004-2009)
- Member of the Board Co-operative Program on Water and Climate (CPWC) (2010)
- Member of the Board of Clean Tech Delta (CTD)
- Member Advisory Body Environmental Science Group / Wageningen University and Research Centre
- Member Advisory Committee Rotterdam Climate Proof (RCP)
- Member of the Review Board of the Dutch Delta Program (2013)
- Member of the editorial board of Journal of Flood Risk Management
- Member of the editorial board of the Journal of Water Conservancy and Hydroelectric Engineering (JWCHE)
- Member Advisory Board iBuild
- Member of the Review Committee Future Mega Cities
- Member of the Scientific Committee of ICFM6
- Member of the Advisory Committee Deltas of Times of Climate Change II
- Chairman COST (European Knowledge Network) Urban Flood Management C22 (2005-2009)
- Chairman of the Dutch WODC Advisory Committee on “Meetbaarheid van Veerkracht”
- Chairman ICAADE 2015 International Conference on Amphibious Architecture, Design and Construction

Damir Brdjanovic
Professor of Sanitary Engineering
- Chairman of the IWA SG Environmental Engineering Education
- Member of the International Editorial Board of IWA Journal of Water, Sanitation and Hygiene for Development
- Chairman of the Program Committee of IWA YWP conference in Kiev, Ukraine

Dano Roelvink
Professor of Coastal Engineering and Port Development
- Member of Deltares Science Council
- Chairman of organizing committee of NCK Summerschool, Texel

Dimitri Solomatine
Professor of Hydroinformatics
- Associate editor of Journal of Hydroinformatics
- Editor of the Hydrology and Earth System Sciences (HESS) Journal
- Co-editor of the Springer Book Series “Earth Systems Data & Models”
- Chairman of the European Geosciences Union (EGU) Subdivision on Hydroinformatics
- Convener of the Session on Hydroinformatics at EGU Assembly
- Member of the Scientific Advisory Committee of the Int. Conference on Hydroinformatics
- Member of the International Association of Hydrological Sciences
- Member of the International Association of Hydraulic Research
- Member of the European Geosciences Union

Erwin Ploeger
Head of the Education Bureau
- Co-Chair of the Platform for International Education (PIE)
- Member of the OCIB board, the ‘Stichting Opleiding Civiel Ingenieurs voor werk in het Buitenland’
- Member of the Editorial Board of Transfer Magazine

Ewoud Kok
Marketing Officer
- Member of Dutch Higher Education Network for International Marketing (Dhenim)

Frank van der Meulen
Associate Professor of Integrated Coastal Zone Management
- Member of the advisory committee of two large Management Authorities that manage the dunes of South- and North Holland Provinces.

Gaetano Casale
Liaison Office Manager
- Member of the Water Supply and Sanitation Technology Platform and Chair of the Working Group “Water Beyond Europe”

Giuliana Ferrero
Lecturer in Water Supply Engineering
- Member of International Ultraviolet Association (IUVA)
- Member of International Water Association (IWA)
- Member of SENSE research school
- Co-organizer of the Symposium on UV disinfection in developing countries, held on November 6, 2014 at UNESCO-IHE

Giuliano Di Baldassarre
Senior Lecturer in Hydroinformatics Systems
- Editor of Hydrology and Earth System Science journal
- Member of the Editorial Board of the International Journal of Hydr. Science and Technology
- Member of the International Scientific Organizing Committee of the International Conference on Flood Management (ICFM6)
- Member of the Scientific Organizing Committee of the EGU Leonardo Conference
- Convened and chaired sessions of sessions at EGU General Assembly
- Reviewed papers for many international journals, including Water Resources Research, Journal of Hydrology, and Water Policy

Greet Vink
Business Director
- Stichting Institutes for Postgraduate International Education in the Netherlands
- Technologische Innovatie Campus Delft
- Delft Blue Technology
- Delft International Advisory Board
- Stuurgroep Valorisatieprogramma Deltatechnologie en Water (VPdelta)
- Stichting Onderwijs Civiel-Ingenieur voor Bedrijfsleven en Overheid
- International Community Platform (ICP)
- Klankbordgroep-Horizon 2020 Climate Action, Resource Efficiency and Raw Materials
- Klankbordgroep-Horizon 2020 Bioeconomy
- Klankbordgroep-Horizon 2020 People
- Acting member European Innovation Platform Water
- UNESCO focal point gender

Guy Alaerts
Professor of Capacity Building
- Member of the organizing committee of the 5th Delft Symposium on Water Sector Capacity Development (29-31 May 2013).
- Guest Editor of Water Policy, Special Issue on Leadership in Knowledge and Capacity Development (2013) 15 (Suppl.2)

Han Ligteringen
Professor of Ports and Waterways:
- Member of the Dutch Committee of EIA
- Member of the International Organisation on Waterborne Transport (PIANC)
- Member of the Board of the Dutch Section of PIANC
- Member of the Board of Sohar Industrial Port Complex, Oman
- Visiting Professor at the University of Stellenbosch, South Africa
- Visiting Professor at Wuhan University of Technology, Wuhan, China

Hans van der Kwast
Lecturer in Ecohydrological Modeling
- Member of Koninklijk Nederlands Aardrijkskundig Genootschap (KNAG, Royal Dutch Geographical Society)
- Member of Vakvereniging Fysische Geografie (VVFG)
- Member of OSGeo.nl
- Member of scientific committee of the Open Water Symposium
- Member of scientific Committee GMES and Africa Long Term Management of Natural Resources Workshop, Sharm el-Sheikh, Egypt

Hendrike Clouting
Lecturer in Environmental Planning and Management
- Member of the German Association for Environmental Impact Assessment

Leonardo Alfonso
Lecturer in Hydroinformatics
- Member of the European Geosciences Union (EGU)
- Member of Latinaqua (Latin-American network of Water Researchers)
- Member of the International Association of Hydraulic Research

Ioana Popescu
Associate Professor of Hydroinformatics
- Member of IAHR (International Association of Hydro-Environment)
- Member of EGU (European Geoscience Union)
- Member of RWA (Romanian Water Association)
- Chair of the Education and Professional Development Sectiaon of IAHR (2009-2014)
- Technical Committee Member of 10th Hydroinformatics Conference, 2012, Hamburg, Germany
- Technical Committee Member of the IAHR 2013 Congress, Chengdu, China
- Scientific Committee Member of the Conference WATER 2012, Constanta, Romania
- Scientific Committee Member of the Conference EcoImpulse 2012, Timisoara, Romania
- Organiser of Theme E. Education in Hydraulic Engineering, at IAHR Congress 2009, Vancouver
- Organiser of the Special workshop on Young professionals at IAHR Congress 2011, Brisbane
- Organiser of the Special workshop on Young professionals at IAHR Congress 2013, Chengdu
- Co-organiser of the International workshop on Planning and design of Observatories in Amana, US, 2007
- Co-Convener of the session on Integrated Catchment Science and Management, of British Hydrological Society Meeting, 2010, BHS International Symposium, Newcastle
- Co-organiser of the Special workshop on Decision Support Systems, at BALWOIS 2012. Ohrid, Macedonia
- Editor of Special Issue in Journal of Environmental Engineering and Management, Volume 11, Issue 5, 2012, “Localized environmental services for all”
- Editor of Special Issue in Journal of Environmental Engineering and Management, Volume 12, Issue 5, 2013, “Environmental research and technology”
- Editor of IWA Water wiki, the on-line platform for the global water community to interact and share knowledge online
- Associate Editor to Journal of River Basin and Management

Jack van de Vossenberg
Senior Lecturer in Microbiology
- Member of Koninklijke Nederlandse Vereniging voor Microbiologie (KNVM, Royal Dutch Society for Microbiology)
- Member of American Society for Microbiology (ASM)

Jan Luijendijk
Programme Manager Capacity Development / Knowledge Manager
- Member of the organizing committee of the 5th Delft Symposium on Water Sector Capacity Development (29-31 May 2013)

Jentsje van der Meer
Professor Coastal Structures and Ports
- Diplomate in Coastal Engineering (ACOPNE)
- Member or the American Society of Civil Engineers (ASCE)
- Member of the Royal Netherlands Institute of Engineers (KIVI)
- Member of COPRI
- Member of ENW-T (Expertise Network Water safety - working group Technical items)
- Member of Scientific Committee of ICOPMAS (International Conference on Ports and Maritime Structures, Iran)
- Keynote speaker at ICOPMAS (International Conference on Ports and Maritime Structures, Iran)

Jochen Wenninger
Senior Lecturer in Hydrology
- Member of the American Geophysical Union (AGU)
- Member of the International Association of Hydrological Sciences (IAHS)
- Member of the European Geosciences Union (EGU)

Joop de Schutter
Programme Manager
- Chairman of the Board of the IGRAC Foundation; Member of the UNESCO-IGRAC Governing Board
- Chairman of the Supervisory Council of the Water Footprint Network

Joyeeta Gupta
Professor of Law and Policy in Water Resources and Environment
- Member of Climate Change Committee, International Law Association
- Member of IHDP Earth System Governance Project
- Member of the Global Water Systems Project
- Member of Adviesraad Internationale Vraagstukken (AIV)
- Member of Raad van Toezicht, OXFAM NOVIB
- Vice-president, Commissie Ontwikkelingssamenwerking (COS)
- Editor in Chief (since 2004) and Associate Editor (since 1999) of International Environmental Agreements: Politics, Law and Economics (IF 2.0), Kluwer Academic Publishers (since 2004), Springer
- Member of Editorial Board of Review of European Community and International Environmental Law (RECIEL)
- Member of Editorial Board of International Journal of Water Governance, Baltzer Science Publishers
- Member of Editorial Board of Catalan Environmental Law Journal, Revista Catalana de Dret Ambiental
- Member of Editorial Board of Current Opinion in Environmental Sustainability (IF 3.168), Elsevier
- Member of Editorial Board of Carbon and Climate Law Review, Lexxion
- Member of Editorial Board of Environmental Science and Policy, (IF 2.978) Elsevier Science
- Member of Editorial Board of International Journal of Sustainable Development, Inderscience Enterprise Ltd

Jules van Lier
Professor of Environmental Waste Water Engineering
- Associated Editor of Water Science and Technology (since 2008)
- Member of International Advisory Committee IWA Journal of Water, Sanitation and Hygiene for Development (since 2011)
- Support development and establishment of Delft Urban Water

Juliette Terlaak
Manager Human Resources
- Member of the International Community Platform (ICP)
- Member of Coordinatiegroep Universitaire Rechtspositie (CUR)
- Member of Economische Agenda Delft (EAD) Expat Project Team

Ken Irvine
Professor of Aquatic Ecosystems
- Member of Editorial Board of Aquatic Conservation: Marine and Freshwater Sciences
- Volume Editor, Wetlands Encyclopedia (Springer)
- Guest Editor Special Issue in papyrus wetlands for Wetland Ecology and Management
- Advice to River Basin Shannon to Dublin transfer scheme, Ireland
- Advice to the Sustainable Water Network (SWAN) on changes to the EU Common Agricultural Policy

László Hayde
Senior Lecturer in Irrigation Engineering
- Vice President Honorary, International Commission on Irrigation and Drainage (ICID)
- Chairman of the European Regional Working Group of ICID
- Member of the Working Group on History of Irrigation, Drainage and Flood Control of ICID
- Member of the International Water History Association (IWHA)
- Member of the Deutsche Wasserhistorische Gesellschaft (DWhG)

Luana Mattos de Oliveira Cruz
Visiting Reseacher
- Post-doctoral brazilian research fellowship (CNPq / Hidroex).

Luigia Brandimarte
Senior Lecturer in Hydraulic Engineering & River Basin Development
- Member of the IAHR
- Member of the IAHS
- Member of EGU
- Convened and chaired session at EGU General Assembly

Maarten Blokland
Associate Professor, Water Services Management
- Member GWOPA Steering Committee (elected to represent the Alliance Partners). GWOPA = Global Water Operators’ Partnership Alliance

Maarten Siebel
Associate Professor of Environmental Biotechnology
- Member International Association of Solid Waste

Maria Kennedy
Professor of Water Treatment Technology
- Member of the Editorial board of Desalination and Water treatment
- Member of the editorial board of Desalination
- Member of the editorial board of Applied Water Science
- Member of the organization/scientific committee for three international conferences
- member of the Board of Directors of the European Desalination Society (EDS)
- member of the Science and Technology Board of the EU-Joint Programming Initiative (JPI) on Water
- member of the USAID Desalination Innovation Committee (2013/2014)
- member of the Aquatech Technology Innovation Committee at Aquatech Amsterdam (2011 - 20 15)
- member of International Desalination Association (IDA)
- member of International Water Association (IWA)

Mariska Ronteltap
Senior Lecturer in Sanitary Engineering
- Secretary of the IWA Specialist Group on Resource Oriented Sanitation
- Representative in the Dutch Nutrient Platform meetings

Martin Mulenga
Senior Lecturer in Sanitary Engineering
- Member of Board of Trustees of the Water and Sanitation for Africa (WSA) Research and Competence Centre
- Technical advisor to Build IT International, a UK based NGO, promoting sustainable building technologies and environmental sanitation in rural and peri-urban areas in Africa
- Member of the Rural Water Supply Network (RWSN) Self-Supply Global Working Group
- Member of the International Conference on Faecal Sludge Management organising committee

Masoom Hamdard
Lecturer in Environmental Policy
- International member of Society for Freshwater Science
- Presented at the conference Conserving Biodiversity across Multiple-Use Landscapes, Through Strategic Governance and Land Use Planning

Meine Pieter van Dijk
Professor of Water Services Management
- Associate member National Advisory Council for the Environment & Infrastructure
- member of the Advisory Committee of the Small & medium enterprise Impact Fund in Arusha, Tanzania for three years till 2016
- Member of the research school CERES (since 1994)
- Member of the research school SENSE (since 2007)
- Member of the Academic Advisory Board Postgraduate program on Env. & Urban studies Semarang, Indonesia
- Member of the board of Academisch China Overleg (ACO)
- Member of the board of CEPT Master Programme at University Ahmedabad, India
- Member of the Board of the Foundation for the Institute for Development Planning, Yaounde
- Member of Netherland Association of Economists (since 1980)
- Member of Dutch Association of Compliance Officers (since 2002)
- Member of Erasmus University Knowledge Club (since 2008)
- Member of the Erasmus Graduate School (EGS)
- Member of the Commissie bezinning en toerusting PKN Heemstede, April 2014
- Member Society for a Democratic Europe VDE (since 2007)
- Member of the European Institute for Comparative Urban Research, Euricur, Rotterdam (since 1994)
- Coordinator of the working group European Association of Development and Training Institutes
- Member of Nederlandse Vereniging voor Afrika Studies (since 2000)
- Member of International Institute for Asian Studies in Leiden (since 2002)
- Member on the Editorial Board of the "International Journal of CSR and Sustainability" and The journal of Pro-poor growth, an international perspective (an open access journal)
- Member Advisory council NWO Innovate governance models in drinking water supply and waste water treatment (KUB)
- Member Think tank NCICD project in Jakarta Indonesia
- Regional editor of the International Journal of Water (since 2007)
- Reviewed journals including the Journal for Civil Engineering, Small Business Economics, etc.
- Guest Professor Environmental Management Institute in Qinhuangdao, China (since 2011)
- Curatorium Dutch Chapter Society for International Development Board (since 1983)
- Visiting professor at the Beijing university of Civil engineering and architecture, appointed in 2014

Micha Werner
Associate Professor of Hydraulic Engineering
- Member of EGU & AGU
- Member of the WMO External Panel of Experts (OPACHE) on forecasting
- Member of Editorial board of the Hydrology and Earth System Science Journal
- Served on editorial panel of ICE Journal of Water Management
- Convened and chaired session at EGU General Assembly
- Member of Scientific committee of Annual Waternet Symposium
- Member of the thematic advisory group on the Joint R&D programme of the Environment Agency & DEFRA, UK

Michael McClain
Professor of Ecohydrology
- Served on the editorial board of the journal Ecohydrology and Hydrobiology
- Served on the steering committee of the Freshwater Program of Diversitas
- Served on the steering committee of the Global Environmental Flows Network

Mick van der Wegen
Senior Lecturer in Hydraulic Engineering
- Member AGU
- Member of the Centrum voor Kustonderzoek (NCK)

Miroslav Marence
Associate Professor of Storage and Hydropower
- Member of Editorial Board of the international journal ICE- Water Management
- Member of International Society of Rock Mechanics
- Member of Croatian Geotechnical Society
- Member of Hydropower Sustainability Assessment Protocol Chamber
- Member of Editorial Board of the Nile Water Science & Engineering Journal

Nemanja Trifunovic
Associate Professor of Water Supply Engineering
- Member of the International Water Association (IWA), American Waterworks Association (AWWA), Serbian Association for Water Technology and Sanitary Engineering

Paolo Paron
Senior Lecturer in Hydraulic Engineering and River Basin Development
- Editor and contributor of a book on "Geomorphological mapping methods and applications" for Elsevier
- Editor of two Atlases of Somalia for the UN Food and Agriculture Organization, and a digital Atlas of Afghanistan for the NGOs iMMAP
- Initiator and leader of an international working group on Applied Geomorphological Mapping (www.appgema.net), under the auspices of the International Association of Geomorphologists (www.geomorph.org)
- Chair of thematic sessions at international conferences (regularly at IAG, EGU)

Peter Kelderman, Senior Lecturer in Environmental Chemistry:
- Member of IWA Specialist Group on Watershed and River Basin Management
- Member of the Management Committee of IWA Specialist Group on Watershed and River Basin Management
- Member Scientific Committee of four IWA Conferences of the Specialist Group on Watershed and River Basin Management

Peter van der Steen
Senior Lecturer in Environmental Engineering
- Member of International Advisory Board of SANIPATH project, Emory University, Atlanta, USA.

Pieter van der Zaag
Professor of Integrated Water Resources Management
- Member of the Scientific Advisory Board of the African Studies Centre, Leiden
- Chairperson Netherlands National Committee IHP-HWRP
- Associate Editor of the international journal Water Policy
- Member research school SENSE (Socio-economic and natural sciences of the environment)
- Scientific Advisor of the International Foundation for Science (IFS)
- Member of the scientific advisory commission of the SOW-VU Centre for World Food Studies – Vrije Universiteit Amsterdam
- Member of the Editorial Board of the international journal Hydrology and Earth System Sciences
- Member of the Governing Board of WaterNet in Southern Africa

Poolad Karimi
Senior Lecturer/Researcher in Irrigation Management
- Member research school SENSE (Socio-economic and natural sciences of the environment)
- Member of European Geosciences Union (EGU)
- Invited lecture on “Remote sensing application in water resources and irrigation management”, University of Tehran, Iran
- Invited lecture on “Water Accounting”, Ferdowsi University of Mashhad, Iran

Raquel dos Santos - de Quaij
Researcher/Lecturer in Water Management
- Member of the IWA (International Water Association) specialist group on Sanitation & Water in Developing Countries
- Member of the IWA specialist group on Benchmarking and Performance Assessment
- Member of the IWA specialist group on Watershed and River Basin Management
- Representative in the Brazilian-Dutch Dialogue on Urban Water Management coordinated by NWP (Netherlands Water Partnership)

Raymond Venneker
Senior Lecturer in Hydrology
- Member of the IAHS Working Group on Education in the Hydrological Sciences

Robert de Bruin
Manager Finance
- Member of Dutch association of Financials for Financials (FFF)

Roshanka Ranasinghe
Professor of Climate Change Impacts and Coastal Risk
- Member of National Committee of Coastal and Ocean Engineering Australia
- Visiting Professor at The Australian National University, Canberra, Australia
- Member SENSE research schools
- Advisor, Strategic modelling, Deltares
- Invited presentation: Modelling climate change driven recession on inlet-interrupted coasts. 2014. World Wildlife Fund meeting on Theories of Change: Connectivity for better water management, UNESCO-IHE, Delft, The Netherlands
- Invited presentation: Quantifying climate change impacts on coasts with numerical models. 2014. Pre-conference workshop on Climate change and Coastal processes, 5th Conference on Harbour and Ocean engineering, National Institute of Oceanography, Goa, India.
- Invited presentation: Assessment of Climate change impacts on coasts in the Asia-Pacific. 2014. Asian Development Bank, Manila, Philippines.

Saroj Sharma
Associate Professor of Water Supply Engineering
- Editor of the Journal of Water Supply: Research and Technology - AQUA (IWA journal)
- Member, International Water Association (IWA)

Shreedhar Maskey
Associate Professor of Hydrology and Water Resources
- Member of IAHS Panta Rhei Working Groups on Mountain Hydrology.
- Member of IAHS Panta Rhei Working Groups on Drought in the Anthropocene.
- Member of European Geosciences Union (EGU).
- Member of International Association of Hydrological Sciences (IAHS).
- Guest Editor, Hydrology and Earth System Sciences, Special Issue on Drought Forecasting and Warning.
- Member of the Editorial Board of Nile Basin Water Science and Engineering Journal.
- Member of the Editorial Board of Frontiers in Hydrosphere.

Stefan Uhlenbrook
Vice Rector Academic and Student Affairs
- Member of the editorial board Hydrology and Earth System Sciences (since 2004)
- Member of the editorial board Hydrological Sciences Journal (since 2006)
- Member of the editorial board Hydrologie und Wasserbewirtschaftung (Hydrology and Water Management, in German (since 2008)
- Alternate Governor World Water Council
- Member of center-commissioned review team of the IWMI (CGIAR) research programme
- Chair of the Boussinesq Center for Hydrology, annual meeting at Royal Netherlands Academy of Sciences, Amsterdam, The Netherlands
- Task force member of the European Innovation Platform on Water, Brussels, Belgium
- Panel member of review committee of Swedish Research Council-SIDA, Stockholm, Sweden
- Member of World Economic Forum’s Global Agenda Council on Water 2014-2016

Thom Bogaard
Assistant Professor of Hillslope and Land Degradation Hydrology
- Guest editor of a HP special issue (published 2012)
- Guest editor of Engineering Geology special issue (published 2012)
- Guest editor of HESS special issue started in 2012 (expected publication 2013)
- Treasurer of the Treub Maatschappij (Organization for supporting research in the tropical regions)
- Member of the board of the CERG (Centre European des Risques Geomorphologique - Specialized Centre of Council of Europe EUR-OPA Major Hazard Agreement)

Tibor Stigter
Senior Lecturer in Hydrogeology and Groundwater Resources
- Member of International Association of Hydrogeologists (IAH)
- Member of Commission on Groundwater and Climate Change of IAH
- Member of Commission for English-Portuguese translation of abstracts of papers published in Hydrogeology Journal
- Guest Editor of Regional Environmental Change Special Issue
- Second editor of the book “Groundwater and Ecosystems” published by Taylor and Francis
- Reviewer for ISI-indexed journals (Journal of Hydrology, Agricultural Water Management, Journal of Environmental Management, Agriculture, Ecosystems & Environment, Environmental Sciences)
- Member of the scientific committee for the workshop “Governar a água: uma parceria Estado – Sociedade” held in Lisbon

Tineke Hooijmans
Associate Professor of Sanitary Engineering
- Representative in the Dutch Nutrient Platform meetings

Uta Wehn
Senior Lecturer / Researcher in Capacity Development and Innovation
- Member of the Programme Committee IWA (International Water Association) Water and Development Congress & Exhibition 2015, Jordan
- Member of the Programme Committee ICT4S (ICT for Sustainability) Conference 2015, Denmark
- Member of the Programme Committee for the Global Cleaner Production and Sustainable Consumption Conference: Accelerating Transitions to Equitable and Sustainable Societies”, and Global Exhibition “Sustainable Futures in Practice’, 1-4 November 2015, Barcelona, Spain.
- Member of the IWA (International Water professionals Association) Sustainability Specialist Group WG on Workforce Sustainability
- UNESCO-IHE representative at the OECD Water Governance Initiative
- Member of the SENSE Research School (Socio-Economic and Natural Sciences of the Environment)
- Invited Lecture: Effective knowledge and capacity development for enhancing the post-2015 development goals, International Development Studies Lecture Series 2014-2015, University of Amsterdam, 2 October 201
- Panel member: Challenges of Citizen Science, Round Table Plenary Discussion, Citizen Observatories: Empowering European Society Conference, European Commission, Brussels, Belgium, 4 December 2014.
- Panel member: Stakeholder Engagement for Effective Water Governance, IWA World Water Congress, OECD/Suez Environment Side-Event, 24 September 2014, Lisbon, Portugal.
- Invited presentation: Integrating knowledge and innovation for strengthening institutional capacity: Water sector lessons for the Nexus, International Conference on Sustainability in the Water-Energy-Food Nexus, 19-20 May 2014.
- Wehn, U. and McCarthy, S. (2014) Realising the social innovation potential of citizen observatories, 2nd Citizen Observatories Coordination Workshop, European Commission, Brussels, Belgium, 3 December
- Co-Organiser: Workshop on Cooperation for WASH sector capacity development, IWA World Water Congress, 21-25 September 2014, Lisbon, Portugal.
- Co-Organiser: Workshop on ‘Knowledge and Capacity: Strengthen it. Retain it. Gain from it.’, IWA World Water Congress, 21-25 September 2014, Lisbon, Portugal.
- Co-Organiser: Technical Workshop on Colombia’s National Water and Environment Sector Capacity Development Strategy, 18-19 September 2014, Bogota, Colombia.
- Co-Organiser: Round Table Meeting on Colombia’s National Water and Environment

Sector Capacity Development Strategy, 16 September 2014, Bogota, Colombia [Presentation, Workshop Co-Organiser].
- Workshop Co-Organiser: Evaluating Capacity Development in water supply: Theory and Practice, full day workshop at the 37th WEDC Conference, 15–19 September 2014, Hanoi, Vietnam.
- Workshop Co-Organiser: Knowledge management in water utilities: from challenges to priorities, full day workshop at the 37th WEDC Conference, 15–19 September 2014, Hanoi, Vietnam.
- Wehn, U. and Evers, J. (2014) Citizen observatories of water: Social innovation via eParticipation?. presentation at the ICT4 Sustainability Conference (ICT4S), Stockholm, 24-27 August, nominated for best paper award.
- Workshop Organiser: Realising the potential: Citizen observatories for social innovation and sustainability, ICT4 Sustainability Conference (ICT4S), Stockholm, 24-27 August.
- Co-Organiser: Round Table Meeting on Uganda's National Water and Environment Sector Capacity Development Strategy, 16-17 July 2014, Kampala, Uganda.
- Guest Editor of Special Volume on The Dynamics of Water Innovation for the Journal of Cleaner Production

Wim Glas
Application Manager
- Member of the Association for Learning Technology (ALT)
- Member of the European Society for Engineering Education (SEFI)
- Member of the Nederlandstalige Moodle Vereniging (Ned-Moove)

Yasir A. Mohamed
Associate Professor of Water Resources Management:
- Guest editor of special issue of the Journal of Phys. Chem. Earth
- Guest editor of the Spatial Hydrology journal
- Chair of the Sudan committee on the assessment of the impacts of the Ethiopian Grand Renissance dam on Nile
- Chair of the international conference on "New Nile perspectives", Khartoum, 2013
- Member of the regional steering committee of the Joint Multi-Purpose Project of the Eastern Nile Technical Regional Office, ENTRO, Addis Ababa Ethiopia

Zoran Vojinovic
Associate Professor of Urban Water Systems:
- Associate Editor of the Journal of Hydroinformatics

Annex 9
Projects

Tailor made training

Country	Contract title	Funding	Partners	Start	End
Armenia	ToT and Curricula Dev on IWRM	Stichting Nuffic		27/Jan/14	30/Nov/14
Bangladesh	Third Regional Workshop on 'International challenges and approaches in delta planning and management'	Ministerie van Infrastructuur en Milieu		06/Jun/14	31/Dec/14
	Training Program Government of Bangladesh on River Systems Management 2	Bangladesh Water Development Board	MTI Holland /TID	11/Aug/14	15/Aug/14
Benin	TMT Wetlands and Food security	Stichting Nuffic	Beninese Environmental Agency.	04/Mar/14	31/Dec/14
China	Beijing municipality 12 days groundwater short course	W&W Holding B.V. - WmE		13/Jan/13	28/Jan/14
Colombia	Strengthening capacity on modelling tools for water resources management	Stichting Nuffic		28/Feb/14	31/Mar/15
Ecuador	capacity building cooperation in the field of Solid Waste Management and Sanitation	Ministry of Environment of Ecuador		17/Mar/14	31/Mar/18
Egypt	Adaptation of the Libra Simulation game for the Egyptian Situation	Min. van Buitenlandse Zaken DGIS/DML		01/Sep/11	18/Feb/15
Georgia	Environmental Protection in the light of GLobal Warming	Stichting Nuffic		01/Feb/14	15/Dec/14
Ghana	Tailor Made Training Water Quality Monitoring	Vitens/Evides International B.V.		01/May/14	21/Aug/14
Honduras	Building Capacity in the Sanitation Sector in Honduras	Stichting Nuffic		28/Feb/13	17/Nov/14
India	Tailor Made Training Course on River Basin Planning	International Bank for Reconstruction and Development		11/Nov/13	31/Mar/15
Indonesia	SC on Urban and Rural Polder Development Indonesia	Ministerie van Infrastructuur en Milieu	Municipality of DKI Jakarta, Palembang and Sriwijaya University	05/Oct/13	05/Oct/15
	RC-2014 Water Integrity	Stichting Nuffic	Universitas Gadjah Mada	01/Jan/14	31/Dec/14
Iraq	TMT training software	UNDP		01/Mar/12	15/Jan/14
Italy	TMT for the University of Sannio	Universita degli Studi del Sannio		27/Nov/14	15/Jan/15
Myanmar	Delta Planning training workshop 2013 for alumni Asian Deltas in Myanmar / Burma	Ministerie van Infrastructuur en Milieu	WU, Delta Alliance	20/Jun/13	01/Feb/14
	RC-2014 Recent Developments in IWRM	Stichting Nuffic	Irrigation Technology Centre	01/Jan/14	31/Dec/14
Namibia	NamWater Workshop	Stockholm International Water Institute		28/Jan/14	14/Aug/14
Nepal	Training on Improving the Functionality of Water Supply and Sanitation Facilities (NUFFIC/87/NPL)	Stichting Nuffic		01/Jun/13	29/Oct/14
	Nepal Zero Waste	Stichting Nuffic	Encludesolutions Zeist (part of Triodos)	22/Oct/13	18/Aug/14
Netherlands	Development of the Solid Waste Management course	Min. van Buitenlandse Zaken DGIS/DML		01/Jun/13	31/May/16
	KULTURisk Summer School- Flood Risk Reduction: peception, communication, governance	European Commission - Research Executive Agency		01/Sep/13	30/Jan/14

Country	Contract title	Funding	Partners	Start	End
Netherlands	Development of Open Course Ware at UNESCO-IHE	Min. van Buitenlandse Zaken DGIS/DML		8/May/14	31/Dec/14
	SmallHydropower development: from planning to design	Stichting Nuffic		01/Sep/14	30/Sep/14
	BuZa Online Course Water	Min. van Buitenlandse Zaken DGIS/DML		3/Nov/14	31/Dec/14
Rwanda	Nuffic Refresher Course - WASH Service Delivery in Conflict Affected and Fragile States	Stichting Nuffic		01/Jan/13	30/Dec/14
South Africa	RC-2014 Faecal Sludge Management	Stichting Nuffic	University of Kwazulu Natal	01/Jan/14	31/Dec/14
Suriname	Drinking water monitoring and surveillance training	Inter-American Development Bank		01/Mar/14	16/Dec/14
Thailand	Capacity Building Asean Water Management Training & Research Center	Stichting Nuffic	Dhuraji Pundit University, Compuplan Knowledge Institute of Applied geo-Informatics (CKI)	01/Jun/14	31/Dec/14
Various Countries	Erasmus Mundus Masters Course in Ecohydrology	European Commission	Univ. Lodz (Poland), Univ. Kiel (Germany), Univ. La Plata (Argentina)	01/Sep/10	31/Aug/17
	ADB Coral Reefs	Asian Development Bank		01/Nov/12	01/Aug/14
	International Water Leadership Program	Stichting IHE	IWC, Nyenrode	20/May/13	01/Mar/14
	Training and Capacity Development in Water Conflict management, Central Asia	The Rotary Foundation		31/Oct/13	31/Dec/14
	ONLINE COURSE on Natural Treatment Systems	European Commission		01/Jun/14	28/Feb/15
	Erasmus+ Programme - JMD Groundwater and Global Change - Impacts and Adaptation	European Commission	Instituto Superior Tecnico Portugal, Technische Universitaet Dresden	15/Oct/14	14/Oct/19

Research & development

Country	Contract title	Funding	Partners	Start	End
Argentina	Hydrogeochemistry characterization of the presence of arsenic of the Phreatic aquifer of Mataderos area-Buenos Aires City	Min. van Buitenlandse Zaken DGIS/DML		01/Feb/13	01/Jul/14
Australia	Climate Change Adaptation Research Grants Program	National Government		01/May/11	31/May/15
	Assessing and enhancing the resilience of Australian beaches to sea level rise	Australian Research Council	Univ of Queensland (lead), Univ of New South Wales	01/Jan/13	31/Dec/16
	Storm Surge Forecast Model	Australian Research Council	Universiy Queensland (lead), University of New South Wales	01/Apr/13	31/Dec/17
	Socio Technical Flood Resilience in Water Sensitive Cities	National Government		01/Jul/13	01/Jul/17
Austria	Coupled Stress-Seepage Numerical Design of Concrete Lined Pressure Tunnels	Verbund		15/Nov/10	15/Nov/14
Bangladesh	Communities & institutions for flood resilience in Bangladeshi &Dutch Deltas	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)	IWFM, BUET, UCLA, NEAA	01/Mar/12	01/Mar/16
	Managing Saltwater Intrusion impacts in Bangladesh, An Integrated approach based on salinity monitoring, modeling and stakeholder participation to improve water safety plans	IRC International Water and Sanitation Centre	CEGIS	01/May/13	30/Jul/14
	Understanding the dynamics of flood risk to enhance resilience in urbanizing deltas	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)	WUR, Deltares, BCAS, FHRC	06/May/14	31/Dec/18
	Integrating the dynamics of social and biophysical processes to support delta management	Min. van Buitenlandse Zaken DGIS/DML	FHRCB, WUR, BUET	01/Sep/13	31/Dec/14
Bonaire, Sint Eustatius and Saba	Envrionment and Health characterization	Ministerie van Infrastructuur en Milieu		01/Aug/11	31/Jul/14
China	Sediment Alluvial Process in Wave-current Boundary Layer	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)		01/Dec/11	01/Dec/15
	A pilot conjunctive water supply system for Deyong City	Rijksdienst voor Ondernemend Nederland (RVO)		01/Feb/14	31/Dec/15
	Ensemble flow forecasting research with visiting PhD student from HoHai University	Ministerie van Infrastructuur en Milieu	Deltares	03/Jul/14	30/Dec/15
	PhD support for DSS on lake Taihu	Ministerie van Infrastructuur en Milieu		18/Jul/14	30/Sep/17
Colombia	Operational Flood Forecasting Warning and Response for Multi Scale Flood Risks	Min. van Buitenlandse Zaken DGIS/DML	DPAE, Cinara, Univalle, Deltares, NOAA	01/Oct/09	30/Sep/14
	Piloting Colombia's New IWRM Policy in Key Catchments (ColCuencas)	Min. van Buitenlandse Zaken DGIS/DML	Universidad Nacional de Colombia, Universidad del Valle, Colombian Ministry of the Environment and Sustainable Development, Association of Regional Autonomous Corporations (ASOCARS)	15/May/11	30/Jun/15
Côte d'Ivoire	Implementation of the Feasibility Study of the Comoe Riverin Grand Bassam	Ministry of Environment, Ivory Coast	Royal Haskoning(lead), Deltares	13/Mar/14	01/Sep/15
Cuba	Adapting to CC and Mitigating Water Scarcity by Innovative UWM in Cuba	EuropeAid	CUJAE, INRH, IIIA	01/Sep/13	31/Dec/16
	Strengthening the Cuban Food Production and Aquaculture Sector.	EuropeAid	ACPA, IIIA, CPAM, Univ. Zagreb	01/Mar/12	31/Dec/15

Country	Contract title	Funding	Partners	Start	End
Egypt	Climate Change and Development Impacts on Nile Aquifer Salinzation - Comparative Modeling Study	Ministerie van Infrastructuur en Milieu		01/Oct/13	30/Jun/15
Fiji	Changing Waves and Coasts in the Pacific	EuropeAid		01/May/14	20/Sep/14
Georgia	Integrated Natural Resources Management in Watersheds of Georgia	United States Agency for International Development (USAID)	Florida International University, Ministry of Environment, United Water Company of Georgia	01/Dec/10	30/Sep/14
India	Enhancement of natural water systems and treatment methods for safe and sustainable water supply in India	European Commission - Research Executive Agency	UJS, NIH, IITR, AU, AJD, KWB, BRGM, CEMDS, HTWD, CSIRO, IWMI ,	10/Nov/11	30/Sep/14
Mozambique	Drinking Water in Greater Maputo and in secondary towns, Mozambique	Ministerie van Infrastructuur en Milieu	Eduardo Mondlane University	05/May/13	22/Dec/14
	Feasibility study to reconnect the Salone River to the main Zambezi: A Hydro-Geomorphological approach	WWF Eastern Kenya Country Off.		23/Sep/13	22/Jun/14
	PvW III Mobile Water Measure Mozambique	Rijksdienst voor Ondernemend Nederland (RVO)	Mobile Canal Control (lead), Hydrologic, Wetterskip Fryslan	01/Mar/14	30/Nov/15
	Monitoring saltwater intrusion to safeguard drinking water supply in Maputo, Mozambique	Ministerie van Infrastructuur en Milieu		10/Mar/14	31/Dec/14
	Sustainable freshwater supply in urbanizing Maputo	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)		01/May/14	31/Dec/18
	Water Supply and Sanitation in Secondary Towns in Mozambique	Ministerie van Infrastructuur en Milieu		30/Jun/14	31/Dec/15
Netherlands	Climate Proof Cities	Kennis voor Klimaat	TUD, Deltares, WUR, KWR	04/Nov/10	31/Dec/14
	Building UNESCO-IHE Spatial Data Infrastructure	Min. van Buitenlandse Zaken DGIS/DML		01/Mar/12	31/Oct/14
	Anticipatory Management as part of a regulatory package for water management	Hoogheemraadschap de Stichtse Rijnlanden	Hydrologic,	01/Mar/13	31/Mar/14
	Organization NCR Days 2013	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)	Netherlands Centre for River Studies partners	01/Apr/13	08/Oct/14
	Sulfate Reduction Dependant Anaerobic Methane Oxidation	European Commission - Research Executive Agency		31/May/13	31/May/15
	Zambezi-Tana Workshop	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)		24/Jun/13	31/Jan/14
	Experienced Water Postdoc Fellowship Programme	European Commission - Research Executive Agency		01/Jul/13	30/Sep/15
	Co-designing Coasts using natural Channel-shoal dynamics	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)	Twente University, TU Delft, Deltares	12/Aug/13	11/Aug/17
	New generation of pre-treatments to eliminate organic and biological fouling in SWRO systems	WETSUS		01/Sep/13	31/Aug/17
	Role of biofilm-matrix components in the extracellular reduction and recovery of chalcogens	European Commission - Research Executive Agency		01/Sep/13	30/Jun/15
	AXA Endowed Visiting Chair program in the field of Climate Change (CC) impacts and Coastal Risk	AXA Research Fund		01/Jan/14	31/Dec/39
	WU PhD Supervision by Margreet Zwarteveen	Wageningen University		07/Mar/14	30/Jun/15
	OVIVO-Oxygen Uptake Rate -MBR	OVIVO		11/Jul/14	30/Apr/15

Country	Contract title	Funding	Partners	Start	End
Netherlands	Adding sediment transport and morphology in Delft3D Flexible Mesh	Stichting Deltares		01/Oct/14	31/Dec/16
	Water-Related Disaster Risk: towards a new research and capacity building program at UNESCO-IHE	Ministerie van Infrastructuur en Milieu		10/Dec/14	31/May/15
	Contribution to Westerschelde morphodynamics model	Ministerie van Infrastructuur en Milieu		16/Dec/14	31/Dec/14
Palestine, State of	Dutch-Palestinian Academic Cooperation Program in Water	Netherlands Representative Office in Ramallah	Palestinian and Dutch Aademic Institutions including Birzeit and Maastricht School of Management	01/May/14	30/Dec/15
Serbia	G2G Vojvodina Main Project	Rijksdienst voor Ondernemend Nederland (RVO)		01/Jan/10	01/Jun/14
Sudan	Atbara dams Sedimentation and Operation Study	Min. of Water Resources and Electricity, Sudan	Deltares (lead)	09/Jan/14	30/Jun/14
Tanzania, United republic of	Rufiji Basin Environmental Flow Assessment	United States Agency for International Development (USAID)		01/May/14	30/Oct/14
Uganda	Grey water management in slums in sub-saharan Africa	Min. van Buitenlandse Zaken DGIS/DML		15/Jul/13	30/Jun/15
	Potentials for Peace building: Examining linkages between WASH services and conglict in UNICEF Uganda programmes	United Nations Children's Fund		04/Dec/14	30/May/15
United States	Modeling hydrodynamics, sediments and ecology in San Francisco Bay	USGS Pasific Science Drive		01/Oct/11	01/Oct/14
	SWAN Sustainable Water Action, Building research links between EU and US	European Commission - Research Executive Agency	Centre National de Researche Scientifique, Univ of Arizona, Univ of the West of England, Universidad de Sevilla, Bulgarian Acad of Sciences BAS-NIGG,	01/Mar/12	29/Feb/16
	Electrosynthesis of biofuels from gaseous carbon dioxide catalyzed by Microbes	European Commission - Research Executive Agency	University of Massachusetts, Amherst, USA	01/Jun/12	01/May/15
	Modeling mud dynamics in South San Francisco Bay	USGS Pasific Science Drive		01/Oct/13	31/Dec/15
Various Countries	Managing Adaptive Responses to changing floodrisk in the North Sea Region	Interreg	Watershcap Hollandse Delta, Rijkswaterstaat, DG-Water, WL-Delft, Dura Vermeer, University of Sheffield, etc.	01/Jan/08	30/Oct/14
	Risk-Based Operational Water Management for the Incomati River Basin	Min. van Buitenlandse Zaken DGIS/DML	Mondlane University, KOBWA	01/Jan/09	28/Feb/15
	Gridded Management System on Environmental Sustainability and Vulnerability	European Commission - Research Executive Agency	WMO, C3I, SWAT, EAWAG, JRC, IISD, UN-IIST, CERN, CRS4, Univ. of Geneva	01/Apr/09	16/Jan/15
	Hydrogeochemical Characterization of Arsenic in Argentina, Ghana and Palestine	Min. van Buitenlandse Zaken DGIS/DML	Inst of Environmental and Water Studies, Birzeit University	01/Aug/09	01/Jun/14
	Environmental Flows for People and Ecosystems in the Mara River Basin (MaraFlows)	Min. van Buitenlandse Zaken DGIS/DML	Egerton University, Kenya; University of Dar es Salaam, Tanzania; Florida International University, USA: WWF Kenya	01/Jan/10	3 1/Dec/14
	Impact of Untreated Wastewater on natural Water Bodies: Risk Assessment	Min. van Buitenlandse Zaken DGIS/DML	An-Najah University, Palestine; Birzeit University, Palestine ; Palestinian Water Authority	01/May/10	30/Nov/14

Country	Contract title	Funding	Partners	Start	End
Various Countries	Knowledge-based approach to develop a prevention culture of water Risk	European Commission - Research Executive Agency	UniBs, ECMWF, UniLj, WSL, CORILA, KCL, JRC, AAWA, UniBris, Willis	01/Jan/11	301/Dec/14
	Adaptive and integrative tools and strategies on natural resources management.	European Commission - Research Executive Agency		01/Mar/11	301/May/14
	DUPC PF KCD KSPD	Min. van Buitenlandse Zaken DGIS/DML		01/Sep/11	30/Jun/15
	Advanced Biological Waste-to-Energy Technologies	European Commission - Research Executive Agency		01/Jan/12	301/Dec/15
	Community Based Earth Observatory of Water	European Commission - Research Executive Agency	Sensor scope, disdrometics, advanticsys, AAWA, EPFL, Hydroresearch Delft, Middlesex Univ. Sheffield Civil Protection	01/Oct/12	4/Jun/16
	ICT Solutions for Efficient Water Resources Management	European Commission - Research Executive Agency	SIEMENS, TOSHIBA, CMR, ITALDATA, METROPOLITANA MILANESE, AQUATIM, ICCS, K&S	01/Oct/12	30/Sep/15
	Post-Graduate Research Programme on Adaptation to Climate Change in the Mekong - Phase 2	Min. van Buitenlandse Zaken DGIS/DML		01/Nov/12	301/Dec/14
	Evaluation of Two Technologies for Heavy Metals Removal under Tropical Conditions	Min. van Buitenlandse Zaken DGIS/DML		01/Feb/13	301/Oct/14
	DUPC Irrigation and Wetlands	Min. van Buitenlandse Zaken DGIS/DML		05/Feb/13	30/Jun/15
	Water Metabolism approach for the Sugarcane Ethanol context: comparative analysis for São Paulo, Brazil and Valle del Cauca, Colombia	Min. van Buitenlandse Zaken DGIS/DML		18/Mar/13	01/Oct/14
	DANube macroregion: Capacity building and Excellence in River Systems	European Commission - Research Executive Agency		01/Jun/13	301/May/15
	Risk based operational management for the Incomati River Basin Groundwater assessment	Min. van Buitenlandse Zaken DGIS/DML	KOBWA, UKZN, EMU	01/Jul/13	31/Dec/14
	NWO UDW Stakeholder workshop to develop full proposal	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)		03/Jul/13	18/Aug/14
	Uncovering Hidden Dynamics of Water Service Provision in Slum Environments	Min. van Buitenlandse Zaken DGIS/DML	University of Amsterdam, University Eduardo Mondlane (Mozambique), Chancellor College (Malawi).	22/Jul/13	31/Dec/14
	Environmental Flows for People and Ecosystems in the Mara River Basin	Min. van Buitenlandse Zaken DGIS/DML		25/Jul/13	31/Dec/14
	Spate irrigation for rural economic growth and poverty alleviation II	Min. van Buitenlandse Zaken DGIS/DML	Meta Meta, Mekele, HRC	25/Jul/13	31/Dec/14
	International Water Quality Guidelines for Ecosystems	United Nations University (UNU)		01/Aug/13	30/May/15
	NWO UDW Strengthening Strategic Delta Planning Processes in Bangladesh, NL and beyond	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)	TUD, WUR, BUET, CEGIS, VNU-WACC, PBL, Deltares, IUCN	15/Aug/13	31/Jul/18
	Benchmarking for Pro-poor Water Services Provision II	Min. van Buitenlandse Zaken DGIS/DML		01/Sep/13	31/Dec/14
	Transboundary data and rainfall prediction	Min. van Buitenlandse Zaken DGIS/DML	IWMI, CEGIS, IWFM, IITG, ECMWF	01/Sep/13	30/Jun/15
	Resilience-Increasing Strategies for Coasts	European Commission - Research Executive Agency		01/Nov/13	30/Apr/17

Country	Contract title	Funding	Partners	Start	End
Various Countries	Preparation JPI Water Helsinki project	Ministerie van Infrastructuur en Milieu	ICRA, UFZ, University of Ferrara	05/Dec/13	30/Jun/15
	Investing in Land and Water: turning climate finance mechanisms into tools for cooperation	Nederlandse Organisatie voor Wetenschappenlijk Onderzoek (NWO)	Hoarec, WUR, Both Ends, Aksi, Coffee Forest Forum	01/Jan/14	31/Dec/16
	Global Earth Observation for integrated water resource assessment	European Commission - Research Executive Agency	Deltares (Lead)	01/Jan/14	31/Dec/17
	Demonstrating integrated innovative technologies for an optimal and safe closed water cycle in Mediterranean tourist facilities	European Commission - Research Executive Agency		01/Jan/14	30/Jun/17
	Preparing for Extreme and Rare Events in Coastal Regions	European Commission - Research Executive Agency	around 15 partners including SINTEF, TUHH, Max Planck Inst, DHI etc	01/Jan/14	31/Dec/17
	ICT for Water Resource Efficiency	European Commission - Research Executive Agency		01/Feb/14	01/Feb/17
	Analysis of water accounts for major river basins located in DGIS water countries	Min. van Buitenlandse Zaken DGIS/DML	IWMI, FAO	28/Feb/14	30/Jun/15
	Delta Alliance Comparative Assessment 2.0	Programmabureau Kennis voor Klimaat	Deltares (lead), WUR-Alterra, TUD	01/Apr/14	31/Aug/14
	Development of a Global Research and Innovation Agenda	Min. van Buitenlandse Zaken DGIS/DML		15/May/14	31/Mar/15
	Crablock - Flume Investigation	AM Marine Works		12/Aug/14	31/May/15
Viet Nam	Mekong Modeling Phase 2	Office of Naval Research		18/Sep/14	31/Dec/15
	Assessment of Climate Change driven variations in storm wave conditions in VietNam	Ministerie van Infrastructuur en Milieu		29/Sep/14	31/Dec/15
	Assessment of Climate Change driven variations on future longshore sediment transport rates along the coast of VietNam	Ministerie van Infrastructuur en Milieu		29/Sep/14	31/Dec/15
Zimbabwe	Nature and Outcomes of Decentralisation of the Urban Domestic Water Sector in Zimbabwe and South Africa	Min. van Buitenlandse Zaken DGIS/DML	University of Zimbabwe, University of the Western Cape	01/Jan/13	31/Jul/14

Policy development

Country	Contract title	Funding	Partners	Start	End
Netherlands	DUPC WWDR4 Water Allocation Subject	Min. van Buitenlandse Zaken DGIS/DML		01/Apr/10	18/Feb/15
	Water related climate change adaptation: a south-north dialogue on knowledge	Min. van Buitenlandse Zaken DGIS/DML		01/Jan/11	18/Feb/15
	International Water Security and Peace Conference Peace Palace The Hague	Min. van Buitenlandse Zaken DGIS/DML	The Hague Institute for Global Justice, Water Gov Centre, UPeace, Clingendael	06/Aug/13	28/Feb/14
	ADB 3rd Water Learning Week	Asian Development Bank		17/Mar/14	31/Dec/14

Institutional strengthening

Country	Contract title	Funding	Partners	Start	End
Algeria	Support to Water Sector Algeria	Rijksdienst voor Ondernemend Nederland (RVO)	NABC (Lead), TUD, Leaf, WU, Deltares	30/Jan/12	30/Dec/14
Australia	Strengthening Educational Program to foster future water sensitive cities leaders	National Government		01/Oct/13	09/Jul/17
Bangladesh	CD of Higher Education of Integrated Water Resources Management at CUET	Stichting Nuffic	WU, AIT	15/Aug/11	31/Dec/15
	Scenario Development in Integrated Water Resources Management: coping with future challenges in Bangladesh	Stichting Nuffic	WU, Deltares	01/Mar/13	28/Feb/17
	Sanitation Technical for Enterprises	IRC International Water and Sanitation Centre		01/Sep/13	01/Mar/15
Benin	Capacity development and the establishment of a water institute in Benin	Stichting Nuffic	Deltares, TUD	07/Jan/13	31/Dec/16
Brazil	RC-2013-Brazil	Stichting Nuffic	SABESP, IHE Alumni Brazil	04/Feb/13	29/Sep/14
	Brazilian Science without Boarders Fellowship Programme	HIDROEX	HidroEx, CNPq	20/Mar/14	30/Sep/15
China	Research fund for sustainability of water resources and environment in China, P.R.	Honor Power Foundation		08/Jun/07	31/Dec/16
	Support on the development of national strategy for the control of heavy metal emissions and its demonstration in key polluted areas	European Commission	CAEP	01/Nov/14	01/Nov/16
Colombia	Climate Adaptation Colombia - a tipping point analysis	Rijksdienst voor Ondernemend Nederland (RVO)	Deltares (lead)	01/Jun/13	01/Aug/14
Egypt	Technology Management & Integrated Modeling in Natural Resources	European Commission	"Ain Shams University, Assiut University, Sohag University, Martin-Luther-University, University of Exeter"	15/Jan/09	04/Sep/14
	NICHE - TSWRI	Stichting Nuffic		01/Oct/11	01/Oct/16
Ethiopia	Capacity Development of HEIs in Small-scale Irrigation (and Micro Irrigation) at Arba Minch university	Stichting Nuffic		11/Sep/13	31/Dec/17
Ghana	Joint Masters Programme In Water Supply And Environmental Sanitation Knust-IHE	Min. van Buitenlandse Zaken DGIS/DML	DCE, Kwame Nkrumah University	01/Oct/09	30/Jun/15
Indonesia	NICHE IDN 142	Stichting Nuffic	PT IHE, Gender and Water Alliance, CKNet-INA	01/Jul/12	30/Jun/16
	Double degree integrated lowland development group 4	Min. van Buitenlandse Zaken DGIS/DML		04/Sep/12	28/Feb/14
	Short Course on Integrated Lowland Urban Drainage Development in Indonesia	Ministerie van Infrastructuur en Milieu		05/Jan/13	31/Dec/14
	ADB MARE Asia Indonesia: Towards Greener Asian Cities	Asian Development Bank		30/May/13	31/Jul/15
	Capacity Building for High Standard Education and Training Programmes for the Water Supply Sector in Indonesia	Stichting Nuffic	Vitens Evides International, ITB, ITS	01/Jun/13	31/May/17
	Improving Water Sector Planning, Management and Development	Asian Development Bank	Deltares (lead), Pt Wiratman, HaskoningDHV	13/Sep/13	05/Dec/14
Kenya	Strengthening polytechnics to enhance delivery of quality edu programs in IWRM	Stichting Nuffic		01/Jan/12	31/Dec/15
	Capacity Buildin in IWRM at Graduate Level in Cooperation with KEWI	Stichting Nuffic		01/Jul/12	30/Jun/16

Country	Contract title	Funding	Partners	Start	End
Kenya	Mau Mara Serengeti (MaMaSe) Sustainable Water Initiative	Royal Netherlands Embassy	WWF Kenya, Kenya Water Resource Management Authority, Egerton University, Masai Mara University, Alterra, ITC, SNV, GIZ, Deltares	01/Jan/14	31/Dec/17
	TMT Groundwater Resources Assessment	Stichting Nuffic	Rural Focus Ltd. (local partner)	04/Jun/14	01/Mar/15
Mozambique	Set up of FIPAG Academy for Professional Development	Stichting Nuffic	TU Delft, IRC, Hidroex, Rand Water, EMU	01/Oct/12	01/Oct/16
	Low Cost Monitoring and Capacity Building for the Lower Zambezi	Ministerie van Infrastructuur en Milieu		01/Dec/12	28/Feb/14
	Water Planning Tools to Support Water Governance	Rijksdienst voor Ondernemend Nederland (RVO)	Future Water (Lead)	01/Mar/13	30/Jun/14
	Towards a sustainable academic African sanitation network	Stichting Nuffic	WASTE, SEI, LSHTM	01/Sep/13	28/Feb/15
Myanmar	Myanmar high-level dialogue meeting and workshop on IWRM	Ministerie van Infrastructuur en Milieu		01/Jan/14	30/May/14
Netherlands	Partnership on Integrated Water Management and Water Engineering	Ministerie van Infrastructuur en Milieu		01/Jun/11	31/Dec/14
	Secretariat VIA Water	Min. van Buitenlandse Zaken DGIS/DML		01/Jul/13	31/Dec/17
Rwanda	Rwanda Integrated Water Security Program (RIWSP)	United States Agency for International Development (USAID)	Florida International University, Winrock International, Care, World Vision and Water Aid	01/Jun/11	30/Jun/16
	Consolidation & Upgrading of Education & Research within Water Resources at NUR	Stichting Nuffic	Univ of Zimbabwe, Dept of Civil Engineering	01/Jul/11	31/Aug/15
	PPP for increased access to Sustainable Water Services in Rwanda	Rijksdienst voor Ondernemend Nederland (RVO)	EWSA, FEPEAR, Aquanet	01/Apr/13	31/Mar/17
South Africa	Enhancing Institutional Capacity in Water and Wastewater Treatment	Stichting Nuffic		01/Jan/10	31/Aug/14
	Capacity Building for Integrated Water Resources Management in South Africa	Stichting Nuffic		15/Sep/10	15/Nov/14
South Sudan	NICHE South Sudan	Stichting Nuffic	CINOP (lead), Alterra-WUR	01/Jan/13	301/Dec/16
Thailand	AIT and IHE Joint Marketing Activities for DD MSc	Min. van Buitenlandse Zaken DGIS/DML	AIT	22/Aug/14	31/Dec/14
Uganda	The Economics for Ecosystem Diversity Workshop	UNEP		04/Oct/13	30/Jun/14
Uruguay	Collaborative Agreement ANII 2 - UNESCO-IHE 2	National Government, Uruguay		17/Jun/14	30/Dec/20
Various Countries	DUPC KNNB Main Project	Min. van Buitenlandse Zaken DGIS/DML		01/Jan/08	30/Jun/15
	DUPC EXACT Main Project 2008	Min. van Buitenlandse Zaken DGIS/DML		01/Jan/08	31/Mar/15
	Spate Irrigation for Climate Proofing, Rural Growth And Poverty Alleviation	Min. van Buitenlandse Zaken DGIS/DML	MetaMeta, Haramaya University, Sana'a University, HRS Min Irr and WR Sudan	01/Jan/11	31/Jan/15
	Stimulating Local Innovation On Sanitation Urban Poor In SS Africa & SE Asia	Bill & Melinda Gates Foundation		11/Jun/11	31/May/15
	EU Mundus Ecohydrology Admin	European Commission		01/Sep/11	01/Oct/14
	West Africa Water Supply, Sanitation and Hygiene Initiative	United States Agency for International Development (USAID)	FIU (Lead)	01/Nov/11	01/Nov/15

Country	Contract title	Funding	Partners	Start	End
Various Countries	ADB - UNESCO-IHE Knowledge Partnership Agreement	Asian Development Bank		01/Dec/11	30/Sep/14
	GWOPA/UN-Habitat vand UNESCO-IHE in support of Water Operator Partnerships	Min. van Buitenlandse Zaken DGIS/DML		01/Jul/13	30/Jun/18
	Climate Adaptation Mainstreaming through Innovation	Interreg		02/Sep/13	31/Mar/15
Viet Nam	Improvement of Higher Education in Water Management in view of Climate Change in Vietnam	Stichting Nuffic		01/Jan/12	31/Dec/15
	Institutional capacity building for the Centre of Water Management and Climate Change (CWMCC)	Stichting Nuffic		01/Jan/12	31/Dec/15
	Assessment of Climate Change Driven Variations in the Wave Climate along the Coast of Vietnam	Ministerie van Infrastructuur en Milieu	CSIRO, Hanoi University	01/Jan/13	31/Dec/14
	Climate Change and Drinking Water Supply in the Mekong Delta, Vietnam	Rijksdienst voor Ondernemend Nederland (RVO)		01/Jul/13	31/Dec/15
Zimbabwe	Management and Scientific Backstopping support Waternet 2013	WaterNet Trust		01/Jan/13	31/Dec/16

Advisory services

Country	Contract title	Funding	Partners	Start	End
Bangladesh	Food security Impact evaluation - Case study Bangladesh	Min. van Buitenlandse Zaken DGIS/DML	APE (Lead), MDF, Aid Environment, BRAC IGS, BRAC DI	30/Oct/13	16/Dec/14
Bangladesh	Formulation of the Bangladesh Delta Plan 2100	Min. van Buitenlandse Zaken	Twynstra Gudde, Witteveen Bos, Deltares, Ecorys, Mottmac, Wageningen University, Alterra, D.EFAC.TO	12/Mar/14	12/Sep/16
Benin	Netwerkplaats	STICHTING NWP		01/Jan/12	31/Dec/14
	2nd Phase of the Benin WASH Programme	Royal Netherlands Embassy	COWI (lead)	10/Jan/14	29/Sep/14
China	Shandong Groundwater Allocation and Protection	Asian Development Bank		04/Oct/13	04/Dec/14
	Contribution to China Europe Water Platform Conference in Paris	Ministerie van Infrastructuur en Milieu		06/Dec/13	31/Jan/14
Colombia	Pilot Project Developing Forecasting Capabilities as a part of Integrated Risk Management in Colombia	Royal Netherlands Embassy	IDEAM	02/Jan/12	31/Dec/14
	Evaluating Scarcity and Abundance in groundwater resources due to Climatic EXtremes	Rijksdienst voor Ondernemend Nederland	Deltares, Eikelkamp, FUGRO	15/Sep/14	15/Mar/16
Ethiopia	Flood based farming for food security in arid zone of Africa_Case: Ethiopia	Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH		01/Oct/12	30/Apr/14
India	ADB Tamil Nadu CC	Asian Development Bank		01/Jun/12	31/Dec/14
Indonesia	Advisory Services to the PMU of Jakarta Coastal Defence Strategy	Min. van Buitenlandse Zaken DGIS/DML	RHDHV, REBEL Group, UIHE	01/Jan/13	30/Sep/14
	NWP Netwerk Agreement Heun for Indonesia	STICHTING NWP		16/Feb/13	31/Aug/14
	Wastepickers Study on Municipal Solid Waste Management Systems in Central Java	Danish International Development Agency (DANIDA)		16/Dec/14	30/Jun/15
Mozambique	Socio-economic study and impact assessment on private water vendors in greater Maputo	Vitens-Evides International		18/Jul/13	30/Jul/14
Myanmar	Strategic study on IWRM in Myanmar	Ministerie v Economische Zaken		01/Jan/14	18/Dec/14
	Integrated Water Resources Management Workshop Myanmar - Future Perspectives	Rijksdienst voor Ondernemend Nederland (RVO)		20/Apr/14	30/Jun/14
	Study Phan Hlaing Sluice in Yangon Delta	Rijksdienst voor Ondernemend Nederland (RVO)		17/Nov/14	31/Mar/15
Nepal	ADB Groundwater Study Nepal	Asian Development Bank		29/Oct/12	31/Dec/14
Netherlands	Establishment of the Secretariat of the National Committee of UNESCO-IHP-HWRP	Ministerie van Infrastructuur en Milieu		15/Oct/12	31/Aug/16
	Development of time series analysis software modules for the online world monitoring system	Stichting IGRAC		01/Feb/14	28/Feb/15
	Experience Centre Meerlaagsveiligheid Dordrecht	Programmabureau Kennis voor Klimaat	Bax & Willems, Gemeente Dordrecht, VU	101/Apr/14	30/Nov/14
	Editor agreement between IHE Delft and ELSEVIER	ELSEVIER		17/Sep/14	31/Dec/15
Niger	Satellite Based Water Monitoring and Flow Forecasting System in the Niger Basin	Rijksdienst voor Ondernemend Nederland (RVO)		01/May/12	01/Mar/14

Country	Contract title	Funding	Partners	Start	End
	Support to Niger Basin Authority to improve the Flood Forecasting and Early Warning System	Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH	Deltares, Office International de l'Eau (OIEau) / International Office for Water (IOWater).	01/Mar/14	31/Jan/16
	Implementation of Satellite Based Water Monitoring and Flow Forecasting System in the Niger Basin	Rijksdienst voor Ondernemend Nederland (RVO)	EARS (lead)	01/May/14	31/Dec/17
Oman	Threat of Algal blooms on Seawater Desalinisation Plants	Pentair X-Flow		09/Jan/14	14/Aug/14
Rwanda	Development of National Water Resources Masterplan	National Government		01/May/12	01/Dec/14
South Sudan	South Sudan Network Advisor	STICHTING NWP		02/Jan/12	29/Oct/14
Thailand	ADB-FRAAYU	Asian Development Bank	UNESCO Bangkok, HAII, AIT	01/Mar/13	31/Dec/14
United States	Workshop on Multi-layer Flood Risk Management comparing NL-USA approaches	Ministerie van Infrastructuur en Milieu	Univ. Berkley	01/Mar/13	31/Jan/14
Various Countries	Development of a Decision Support System for Selection of Sanitation Options- 2nd Phase	Asian Development Bank		01/Sep/11	31/Dec/14
	Capacity development for Performance Improvement of Water Utilities	EuropeAid	Waternet, IWA	01/Oct/11	31/Dec/16
	ADB Groundwater Research	Asian Development Bank	Inst. Global Env. Strategies, AIT, Coord Comm Geoscience Progr in East and SE Asia	06/Sep/12	31/Dec/14
	Supporting the National Water Legislation in South Asia and South East Asia	Asian Development Bank		01/Mar/13	30/Jun/14
	An unstructured wave propagation model	SPC - Secretariat of the Pacific Community		04/Oct/13	04/Dec/14
	Capacity Building on Climate Change Adaptation Planning and Impact and Vulnerability Assessment	Mekong River Commission (OSV)		18/Jul/14	31/Oct/14
Viet Nam	Modeling the Mekong Delta at three different scales	Office of Naval Research (ONR)		01/Jan/12	30/Jun/15
	Knowledge Inventory / Problem analysis Red River – Hanoi	Ministerie van Infrastructuur en Milieu	Deltares	18/Sep/13	31/Jan/14
Yemen	Water Conflict Analysys Yemen	The Hague Institute for Global Justice		01/Nov/13	30/Oct/14

Annex 10
Partners

Cooperation agreement, joint education & joint research partners
Abbaspour (Power and Water) University of Technology, Iran
Addis Ababa University, Ethiopia
Agencia Nacional de Investigación e Innovación (ANII), Uruguay
Ain Shams University, Faculty of Engineering, Egypt
Algarve University, Portugal
American University of Technology (AUT), Lebanon
An-Najah University, Palestine
ASEM Water Resources Research and Development Center, China
Asian Institute of Technology (AIT), Thailand
Birzeit University, Palestine
Palestinian Water Authority, Palestine
Cap-Net
China University of Geosciences (CUG), China
Danish Hydraulic Institute (DHI), Denmark
Delft University of Technology (TUD), The Netherlands
Deltares, The Netherlands
Deutsche Wasserhistorische Gesellschaft, Germany
Drainage Services Department of the Government of Hong Kong
Dura Vermeer, The Netherlands
Eastern Nile Technical Regional Office (ENTRO), Ethiopia
Egerton University, Kenya
Egyptian Ministry of Water Resources and Irrigation
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Florida Earth Foundation, U.S.A
Food and Agriculture Organisation (FAO)
Ghent University, Belgium
Global Development Learning Network
Global Water Partnership (GWP)
Hanoi Water Resources University, Hanoi, Vietnam
Haramaya University, Alemaya, Ethiopia
HidroEX Foundation, Brazil
Hohai University, China
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Hoogheemraadschap De Stichtse Rijnlanden, The Netherlands
Huaihe River Commission, China
Hydro and Agro Informatics Institute (HAII), Thailand
Institute for Hydrology, Meteorology and Environmental Studies (IDEAM), Colombia
Institute of Chemical Technology, Czech Republic
Institute Superior Politécnico José A. Eccheveria (CUJAE), Cuba
Instituto Mexicano de Tecnologia del Agua (IMTA), Mexico
International Association of Dredging Contractors, the Netherlands
International Atomic Energy Agency (IAEA)
International Centre for Water Hazard and Risk Management (ICHARM)
International Hydropower Association
International Spate Irrigation Network
International Water Management Institute (IWMI)
Iran Ministry of Energy / Regional Centre on Urban Water Management, Iran
King's College London, University of London, United Kingdom
Kwame Nkrumah University of Science and Technology (KNUST), Ghana
K-Water, Korea
Maastricht School of Management, The Netherlands
Makerere University, Institute for Environment and Natural Resources, Uganda
Mekong River Commission (MRC)
Middle East Desalination Research Center, Oman
Ministry of Education, Ethiopia
Ministry of Water Resources, Iraq
National Central University of Taiwan
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Palestinian Water Authority, Palestine
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Ramsar Convention of Wetlands and Charles Sturt University
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Sejong University, Korea
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The International Institute for Water and Sanitation (ONEP), Morocco
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UN Office for Disaster Risk Reduction (UNISDR)
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University of Amsterdam (UvA), The Netherlands
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University of Dar-es-Salaam, Tanzania
University of Khartoum, Sudan
University of Kiel, Germany
University of Kuala Lumpur, Malaysia
University of Kwazulu Natal, South Africa
University of Ljubljana, Slovenia
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University of Natural Resources and Applied Life Sciences (BOKU), Austria
University of Nebraska-Lincoln, U.S.A
University of Peace

Cooperation agreement, joint education & joint research partners
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University of Zagreb, Croatia
US Army Corps of Engineers (USACE), U.S.A
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Water and Environmental Studies Institute, Palestine
Water Research Institute of Mozambique
Water Resources University Vietnam, Vietnam
WaterNet Trust
Women for Water Partnership
World Meteorological Organization (WMO)
World Resources Institute
World Wide Fund for Nature (WWF)

Annex 11

UNESCO-IHE & Netherlands Alumni Associations

UNESCO-IHE alumni perform a vital role as 'ambassadors' to the world. The establishment and strengthening of the UNESCO-IHE Alumni Network is essential to promoting and facilitating knowledge dissemination, including the exchange of professional expertise and personal experience between alumni and the alma mater as well as amongst Alumni. These independent Associations organize various activities in their country.

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