



Name	Bart Schultz
Year of birth	1947
Nationality	Dutch
Present position	Em. Prof. of Land and Water Development UNESCO-IHE
Years with firm	From 1990 – present with UNESCO-IHE

EDUCATION

1973	Delft University of Technology, Delft, the Netherlands, Civil Engineer Hydrology, drainage, irrigation
1992	Delft University of Technology, PhD

EMPLOYMENT RECORD

2012 - present	UNESCO-IHE, Delft, the Netherlands, Em. Prof. of Land and Water Development
2006 – 2009	Ministry of Transport, Public Works and Water Management, Rijkswaterstaat, Civil Engineering Division, Top Advisor
2003 – 2005	Ministry of Transport, Public Works and Water Management, Rijkswaterstaat, Civil Engineering Division, Senior Advisor
1994 – 2002	Ministry of Transport, Public Works and Water Management, Rijkswaterstaat, Civil Engineering Division, Head Environmental Engineering Department
1990 – 1993	IHE, Delft, the Netherlands, Head of Core Land and Water Development
1993 – 2012	UNESCO-IHE, Delft, the Netherlands, Prof. of Land and Water Development (Head of Core)
1980 – 1994	IJsselmeerpolders Development Authority which in 1989 merged with another authority into the Directorate IJsselmeer Region of Rijkswaterstaat, Lelystad, the Netherlands, Scientific Department, Head of the Water Management Division.
1973 – 1980	IJsselmeerpolders Development Authority, Scientific Department, Head of the Urban Water Management Section.

KEY QUALIFICATIONS

Prof. Schultz obtained his PhD degree on the topic ‘Water Management of the drained lakes in the Netherlands’. His career includes 35 years of research, advising and project implementation in the field of land and water development, drainage, irrigation, flood protection and environmental engineering. During his career he visited more than 30 countries to: (i) participate in implementation of international research; (ii) appraise, evaluate, or advice in projects; (iii) teach in the fields of land reclamation, drainage, irrigation and flood protection.

Initially he worked in the IJsselmeerpolders Development Authority where he was in charge of research and advisory work on water management aspects related to reclamation and development of the IJsselmeerpolders. In addition to his part time appointment at the UNESCO-IHE he was until December 2009 top advisor in Rijkswaterstaat. In this capacity he was, among others, responsible for environmental impact studies on major hydraulic works, as well as for advice, design and implementation of large scale environmental engineering projects. He is involved in the projects ‘Room for the River’ and ‘Water safety of the Netherlands in the 21st Century’.

At UNESCO-IHE, Prof. Schultz is responsible for education and research in Land and Water Development. Under his guidance about 200 overseas participants obtained their Master of Engineering degree (MEng), 190 participants their Master of Science degree (MSc) and 15 participants their PhD degree.

From September 1999 to July 2002 he was President of the International Commission on Irrigation and Drainage (ICID). He is a member of the International Water Academy, Oslo, Norway

He is author of more than 280 papers in the field of land and water development, drainage, irrigation and flood protection and editor of several proceedings of National and International Conferences. He is chairman of the Editorial Board of the ISI Science Journals Citation Index listed journal *Irrigation and Drainage*.

**MAIN DISCIPLINE / SPECIALISATION**

Land and water development, drainage, irrigation, flood protection and environmental engineering

EXPERIENCE RECORD**EXPERIENCE in CONSULTANCY, PROJECT ASSIGNMENTS and EDUCATION**

Missions abroad	<i>(Relevant and/or recent)</i>
2013, February	Ankara and Mardin, Turkey. First meeting Steering Committee and site visit 1st World Irrigation Forum.
2012, November	<ul style="list-style-type: none">• Marseille, France. Preparatory meeting 1st World Irrigation Forum.• Doha, Qatar. Presentation in International Conference on Food Security in Dry Lands.
2012, September	<ul style="list-style-type: none">• Kalimantan, Indonesia. Keynote in Workshop on Sustainable Management of Wetland for Rice Production.
2012, June	<ul style="list-style-type: none">• Jakarta, Indonesia, Field visit PhD student Wied Winaktoe and Banjarmasin,• Adelaide, Australia. 63rd International Executive Council Meeting ICID and 7th Asian Regional Conference on Irrigation and Drainage.
2012, May	<ul style="list-style-type: none">• Palembang, Indonesia. Lectures at Sriwijaya University, Double Degree Course on Integrated Lowland Development and Management Planning (DD-ILDM).
2012, April	<ul style="list-style-type: none">• Khartoum, Sudan. Meetings Spate Irrigation Project
2012, March	<ul style="list-style-type: none">• Rome, Italy. Presentation• Marseille, France. 6th World Water Forum. Co-coordinator Theme 2.2 on Contribute to food security by optimal use of water.
2011, December	Paris, France. Preparatory meeting Thematic and Regional Coordinators of the 6 th World Water Forum
2011, October	Teheran, Iran. 21st Congress of the International Commission on Irrigation and Drainage (ICID).
2011, August	Palembang, Indonesia. Course on Integrated Lowland Development and Management Planning (DD-ILDM).
2011, June	Palembang, Indonesia. Lectures at Sriwijaya University, Double Degree
2011, May	Istanbul, Turkey, Keynote speaker 2 nd International Istanbul Water Forum.
2011, March	<ul style="list-style-type: none">• Khartoum and Gezira Scheme, Sudan. Meeting Blue Nile Project and visit research area of PhD candidate Mrs. Ishraga Osman.• Nazareth and Haramaya University, Ethiopia. Visit to test field PhD candidate Yenezew Yihun and Haramaya University.
2011, January 2011	<ul style="list-style-type: none">• Paris, France, 2nd Stakeholders meeting 6th World Water Forum• Islamabad, Pakistan, International Workshop on Education for Managing Hydrological Extremes and Related Geo-Hazards, January 24-26, 2011
2010, December	<ul style="list-style-type: none">• Paris, France. Preparatory meeting on key issue Ensure Food Security of the 6th World Water Forum• Beijing, China. Programme Advisory Group for the EU-China River Basin Management Programme.
2010, October	<ul style="list-style-type: none">• Yogyakarta, Indonesia. 61st International Executive Council Meeting ICID and 6th Asian Regional Conference on Irrigation and Drainage.• Montreal, Canada. Keynote Third McGill Conference on Global Food Security, 20 – 21 October.
2010, September	Palembang, Indonesia. MSc guidance of students at Sriwijaya University, Double Degree on Integrated Lowland Development and Management Planning (DD-ILDM).



2010, June/July	Palembang, Indonesia. Lectures at Sriwijaya University, Double Degree Course on Integrated Lowland Development and Management Planning (DD-ILDM).
2010, June	Lafayette, USA. Symposium on Water/Agriculture/Climate change. Developing Partnerships for Sustainable Water management and Agriculture in the context of climate and global change. Purdue University, 11 – 12 May 2010.
2010, May	Phnom Penh, Cambodia and Vientiane, Lao PDR. Facilitator 8 th Annual Mekong Flood Forum
2009, December	New Delhi, India. 60 th International Executive Council Meeting ICID and 5 th Asian Regional Conference on Irrigation and Drainage.
2009, Sept./Oct.	<ul style="list-style-type: none">• Hanoi, Viet Nam. Project Strengthening Water Management and Irrigation Systems Rehabilitation Project. Water sector tertiary education.• Zhengzhou, China. 4th Yellow River Forum and Programme Advisory Group for the EU-China River Basin Management Programme.• Phnom Penh, Cambodia. Facilitator 8th Annual Mekong Flood Forum.
2009, July/August	<ul style="list-style-type: none">• Palembang, Indonesia. Lectures at Sriwijaya University, Double Degree Course on Integrated Lowland Development and Management Planning (DD-ILDM)
2009, May	<ul style="list-style-type: none">• Phnom Penh, Cambodia and Bangkok, Thailand. Facilitator 6th Annual Mekong Flood Forum• Khon Kaen, Thailand. Field visit area PhD study Kittiwet Kuntiyawichai• Lviv, Ukraine. 23rd ICID European Regional Conference
2009, April	Hanoi, Viet Nam. Project Strengthening Water Management and Irrigation Systems Rehabilitation Project. Water sector tertiary education
2009, March	Istanbul, Turkey. 5 th World Water Forum. Coordinator Topic 2.3. Water and food for ending poverty and hunger.
2009, February	Jakarta, Indonesia. Workshop Project Banger Pilot Polder.
2009, January	Paris, France, Keynote presentation on Agriculture and Water. Conference on the 2020 European agriculture long term challenges, new public and private policies.
2008, December	<ul style="list-style-type: none">• Jakarta, Indonesia. Workshop Project Banger Pilot Polder.
2008, October	<ul style="list-style-type: none">• Phnom Penh, Cambodia. Facilitator 7th Annual Mekong Flood Forum.• Lille, France. Lectures on Water management and flood protection in the Netherlands and in flood prone areas in the World at Université des sciences et technologies de Lille, Institut d'aménagement & urbanisme de Lille.• Jakarta and Bandung, Indonesia. Project Banger Pilot Polder.• Paris, France. IHP Publication Committee.• Lahore, Pakistan. 20th ICID Congress.• New Delhi, India, Coordinator Topic 2.3 on <i>Water and Food for Ending Poverty and Hunger</i>, second Consortium meeting
2008, September	Montpellier, France. Coordinator Topic 2.3 on <i>Water and Food for Ending Poverty and Hunger</i> , first Consortium meeting
2008, May	Phnom Penh, Cambodia. Facilitator 6 th Annual Mekong Flood Forum
2008, February, May and August	Bandung, Jakarta, Palembang and Semarang, Indonesia. Project Strengthening Tidal Lowland Development, Project Banger Pilot Polder, Double Degree Master Course on Integrated Lowland Development and Management Planning
2007, December	Lille, France. Lectures on Water management and flood protection in the Netherlands and in flood prone areas in the World at the Université des sciences et technologies de Lille, Institut d'aménagement & urbanisme de Lille.
2007, November	Phnom Penh, Cambodia. Facilitator 6 th Annual Mekong Flood Forum
2007, October	Dongying, China, 3 rd Yellow River Forum and Beijing, China, Programme Advisory Group for the EU-China River Basin Management Programme.
2007, September	Sacramento, USA. 58 th International Executive Council Meeting ICID and USCID 4 th International Conference on Irrigation and Drainage. Pavia, Italy. 22 nd European Regional Conference on Water Resources Management and Irrigation and Drainage Systems Development in Europe



2007, June/July and November	<ul style="list-style-type: none">• Jakarta, Palembang, Pontianak and Semarang, Indonesia. Projects: Strengthening Tidal Lowland Development (STLD) and Banger Pilot Polder Semarang, Indonesia
2007, May	<ul style="list-style-type: none">• Phnom Penh, Cambodia and Ho Chi Minh City, Viet Nam. Facilitator 5th Annual Mekong Flood Forum
2007, March	<ul style="list-style-type: none">• Wuhan, China. Examiner PhD study Jingwei Wu on Long-term soil salinity evolution in the Hetao irrigation scheme, Wuhan University
2007, February	Washington, USA. World Bank Water Week
2007, January	<ul style="list-style-type: none">• Phnom Penh, Cambodia. Facilitator Annual Mekong Flood For Mekong River Commission• Palembang, Pontianak, Sambas and Jakarta, Indonesia. Project Strengthening Tidal Lowland Development (STLD)
2002 – 2006, various missions	Palembang and Jakarta, Indonesia. Project Land and Water Management Tidal Lowlands (LWMTL).
2005, various missions	Pakistan. Panel of Experts Indus Basin Studies
September/Oct. 2004	Coordinator World Bank Review Panel Drainage Masterplan Pakistan.
October 2003	Seoul, Republic of Korea, experts witness in the court case on the Saemangeum land reclamation project.
October 2002	Islamabad, Pakistan. Coordinator World Bank mission to review the pre-feasibility study on the National Surface Drainage System.
1998 – 2002, various missions	Beijing and Ning Xia, China. EU project, Policies for water saving in the Yellow River basin
1985 – 2002, various missions	Indonesia, development and management of lowland areas
1990 - 2001	Various appraisal and evaluation missions for the Netherlands Directorate General for International Cooperation (DGIS) or other Netherlands Government Agencies to: Colombia, Indonesia, Kenya, Malaysia, Philippines and Vietnam.
1995 – 2000, various missions	Estonia. Supervisor of the Farm Drainage Rehabilitation Component of the Estonia Agriculture Project, The World Bank, and the Integrated Drainage and Land Development Pilot Project, Senter, the Netherlands
April 1995	Tehran, Iran. Joint identification mission on the Caspian basin. UNDP/UNEP/The World Bank
June 1994	Alma Ata and Caspian Sea, Kazakhstan. Mission on the various aspects of the rise of the Caspian Sea. Rijkswaterstaat, Civil Engineering Division
1982 – 1991, various missions	Yemen Arab Republic. Various appraisal and evaluation missions as member of the Water Advisory Group of the Netherlands Directorate General for International Cooperation (DGIS)
1987 – 1989, various missions	FAO/UNDP project Technical Assistance Tidal Land Reclamation in the Democratic People's Republic of Korea
1984 - 1985	Republic of Korea. Prefeasibility study Long range masterplan for seashore reclamation
1982 – 1985, various missions	Bolivar coast polders, Venezuela. Supervisor drainage master planning Bolivar coast polders.
1980 – 1986, various missions	Romania, research in relation to the development of the Danube Delta
August – November 1976	Kilombero valley, Tanzania. Hydrological research to come to modern food production in Tanzania, including the design of an irrigation, drainage and flood protection scheme for a pilot project
1979 – present	Participation or keynote speaker in International Conferences, Seminars, or Workshops in the field of Land and Water Development in: Argentina, Australia, Brazil, Bulgaria, Czech Republic, China, Denmark, Egypt, Finland, France, Great Britain, India, Indonesia, Italy, Japan, Kazakhstan, Malaysia, Mexico, Nigeria, Slovak Republic, Slovenia, South Africa, Sudan, Sweden, Taiwan, Thailand, Ukraine, USA, USSR.
1984 – present	Participation in all congresses and International Executive Council meetings of the International Commission on Irrigation and Drainage (ICID), as well as in several Regional Conferences of ICID



2001 – 2009

Various missions to review the fieldwork of PhD students in: Bangladesh, Bolivia, Burkina Faso, Colombia, Ethiopia, Indonesia, Nepal and Thailand.

Professional Experience

1990 -2012

Head of the Core Land and Water Development (0.2 assignment up to 15 August 2004, since then 0.4 assignment) (since 1993 as professor)

Type of work: Post Graduate international education and research

Education:

- 1990 - 2005 IHE Meng course on Land and Water Development, 12 month, about 15 participants annually. So far about 200 graduated participants;
- MSc with thesis, 6 - 8 month after the Meng course. 5 - 8 participants annually. In total 94 graduates;
- Since 2005 MSc course. Annually 15 - 20 participants. So far 49 graduates;
- PhD programme, 4 year after MSc. At present 10 participants. So far 12 PhD graduates;
- tailor made short courses in the Netherlands and abroad: China, Malaysia, Indonesia. At present on a regular basis:
 - * remediation and handling of contaminated sediments;
 - * service oriented irrigation management (SOMIS), also as I-learning course;
 - * world history of water management;
 - * spate irrigation;
- Double Degree MSc programme on Integrated Lowland Development and Management Planning with Sriwijaya University, Palembang, Indonesia;

Projects:

- various short term appraisal and evaluation missions at request of DGIS or other bilateral or multilateral donors;
- Hanoi, Viet Nam. Project Strengthening Water Management and Irrigation Systems Rehabilitation Project. Water sector tertiary education;
- Facilitator Annual Mekong Flood Fora.
- Water saving policies for the Yellow River Basin, China. Joint research project in co-operation with University of Lisbon, Portugal, Ecole Polytechnique Lausanne, Swiss CEMAGREF, France, Karnal, India, Institute of Waterconservancy and Hydro electric Power Research, Beijing, China, and Wuhan University, China;
- Research on Irrigation Performance. Joint research project in co-operation with IWMI, Sri Lanka and ILRI, Wageningen;
- Bi-powered, Bandung Indonesia;

Research:

- optimisation of water management and flood protection in lowland areas;
- integrated development of deltaic and coastal areas;
- role of water management in global food production;
- institutional aspects of irrigation system management;
- environmental impacts of water management systems;
- drainage system management;
- design of small flow control structures.

2001 – 2009

Senior Advisor from 2001 - 2006 and Top Advisor from 2006 – 2009

Type of work: advising and supervision on environmental engineering projects

Advising:

- cleaning of polluted canal, harbour and lake bottoms;
- environmental impact analyses related to various hydraulic projects;
- water management and flood protection;
- coordinator overseas projects Civil Engineering Division (2003 – 2006)



- Netherlands Representative International Commission on Irrigation and Drainage (ICID) (1984 – 2006);

Internal Groups:

- Task Forces Great Rivers and Water Safety 21st Century;
- on ad hoc basis advisory work for various project teams;

External Groups:

- Chairman organising committee 3rd International Symposium on Flood Defence, 25 - 27 May 2005, Nijmegen, the Netherlands (2003 – 2006).

1994 – 2001

Head of the Environmental Engineering Department

Type of work: advising and supervision on environmental engineering projects

Advising:

- cleaning of polluted canal, harbour and lake bottoms;
- design of polluted sludge deposits;
- ecology in construction;
- environmental aspects in construction.
- environmental impact analyses related to various hydraulic projects;
- peoples perception analyses.

Internal Groups:

- Advisory Committee on History;
- Communication Strategies;
- Co-ordinating Committee Meuse River Improvement;
- Platform Polluted Sludge Deposits;
- Quality Control Hydraulic Engineering Projects;
- Steering Committee Execution of Dredging and Disposal of Polluted Canal, Harbour and Lake Bottoms;
- Steering Committee Main Rivers;
- Steering Committee Polluted Sludge Deposit Ketelmeer;
- Steering Committee Sustainable Construction.
- Working group on education and publicity (chairman) and the organising committee for the international conference on ‘Sustainable Development of Densely Populated Delta’s’, 23 - 27 November, 1998, Amsterdam, the Netherlands. Both activities took place in the framework of the celebrations of the 200th anniversary of the Directorate General for Public Works and Water Management

External Groups:

Advisor of the conference secretariat for the Second World Water Forum, March 17 - 22, 2000, the Hague, the Netherlands

1978 – 1994

1973 - 1978

Head of the Water Management Division

Head of the Section Water Management of Urban and Recreation Areas

Type of work: research and advising on water management aspects of land and water development projects

Research projects:

- seepage along different types of foundation piles;
- determination of seepage in compartments of urban canals;
- groundwater movement in building sites;
- geohydrological research on the impact of the urban development on the geohydrological regime;
- development of a computer model for simulation of the non-steady flow in open channels in urban and rural areas;



- development of a computer model for the determination of the effect of different development activities on the geohydrological regime;
- development of various data bases for hydrological data and computer programmes for hydrological processes;
- Urban Water Research Lelystad;
- Field Discharge Research Eastern Flevoland;
- subsurface drainage materials;
- various research projects concerning discharge in open and subsurface drains;
- effect of the inpoldering of the Markerwaard on the hydrological regime:
 - * groundwater tables, piezometric heads, subsidence, settlement of buildings and structures;
 - * preventive measures, like infiltration wells;
 - * water quality research related to the possibility of blue algae bloom development;
 - * leaching of fertilisers and pesticides;
 - * hydrology and water management of nature reserves in reclaimed areas;
- water management of drained lakes in the Netherlands;
- model development for design of water management systems in polders;
- model development for blue algae bloom simulation;

Advising:

- drainage of building sites in urban areas;
- water levels and canal system development in the various nuclei of Almere;
- drainage of sportfields, campings and other recreational areas;
- field drainage measures during the reclamation of the polder Southern Flevoland;
- preparation of building sites, recreational areas and water management in new towns;
- water management and drainage measures required for the development and management of nature reserves in Flevoland, the Delta area and the Lauwerszee;

Internal groups:

- project groups Almere-Haven and Almere-Stad;
- various study groups, like:
 - * working group building sites;
 - * research group building sites Almere;
 - * chairman of the working group Water Management Almere
 - * chairman of the working group Geohydrological Aspects of Impoldering Markerwaard;
 - * Steering Committee Automatisatie.

External Groups:

- Steering Committee Technical Aspects Geohydrology;
- Working Group Inter Urban Area Between Amsterdam and Almere;
- Working Group Main Drainage System Polder Markerwaard;
- Project Group Ketelmeer;
- Chairman of the working group Sediment Movement Ketelmeer.

Conducted Short Courses

May 2004	Xi'an, China. Sino – Dutch Training Program Evaluation Seminar
2003 and 2004	Nairobi, Kenya, Regional Workshops on Flood Management of the Nile Basin Capacity Building Network Project.
2002 - 2004	Palembang and Jakarta, Indonesia. Several teaching seminars on the Development of Guidelines for water management in tidal lowland areas.



February 1996	Jakarta, Indonesia. Course on 'Basic concepts of polder development and management' for staff of the project developing company Pt. Mandara Permai in relation to the development of the Pantai Indah Kapuk coastal reclamation project
January 1995	Kuala Lumpur, Malaysia. Course on lowland development - Technical planning and design for staff members of the Drainage and Irrigation Department
November 1994	Kuala Lumpur, Malaysia. Specialised course on lowland development for staff members of the Drainage and Irrigation Department
May 1994	Nanjing, China. Lectures on drainage and land reclamation at the Hohai university

LANGUAGE PROFICIENCY

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
Dutch	Mother tongue	Mother tongue	Mother tongue
English	Good	Good	Good
French	Good	Moderate	Moderate

PUBLICATIONS

BOOKS (contributions to) (since 2007)

1. Schultz, Bart. Role of tidal lowlands for food production in the humid tropics. In: Water management for global food security by Chandra A. Madramootoo and Helen Fyles (eds.), McGill University, Ste. Anne de Bellevue, Canada, 2011.

REFEREED JOURNAL PAPERS (since 2008)

1. Paudel, Krishna P., Bart Schultz and Herman Depeweg, 2013. Management of an irrigation scheme with sediment laden water. Case study of Sunsari Morang Irrigation Scheme, Nepal. *Irrigation and Drainage* 62.2.
2. Yenesew Mengiste Yihun, Abraham Mehari Haile, Bart Schultz and Teklu Erkossa, 2013. Crop water productivity of irrigated Teff in a water stressed region. *Water Resources Management*, Vol. 27.
3. Chukalla, Abebe Demissie, Abraham Mehari Haile and Bart Schultz, 2012. Optimum irrigation and pond operation to move away from exclusively rainfed agriculture. The Boru Dodota Spate Irrigation Scheme, Ethiopia, *Irrigation Science*, September.
4. Zeleke Agide Dejen, Bart Schultz and Laszlo Hayde, 2012. Comparative irrigation performance assessment in community-managed schemes in Ethiopia. *African Journal for Agricultural Research (AJAR)*, Vol. 7, Issue 13.
5. Kuntiyawichai, Kittiwet, Bart Schultz, Stefan Uhlenbrook, F.X. Suryadi and A. van Griensven, 2011. Comparison of flood management options for the Yang River Basin, Thailand. *Irrigation and Drainage* 60.4.
6. K.C., Birendra, Bart Schultz and Krishna Prasad, 2011. Water management and global food production. *Irrigation and Drainage* 60.3.
7. Ritzema, Henk and Bart Schultz, 2011. Optimizing subsurface drainage practices in irrigated agriculture in the semi-arid and arid regions. Experiences from Egypt, India and Pakistan. *Irrigation and Drainage* 60.3.
8. Wrachien, Daniele de, Stefano Mambretti and Bart Schultz, 2011. Flood Management and Risk Assessment in Flood-prone Areas: Measures and Solutions. *Irrigation and Drainage* 60.2.
9. Mehari Haile, Abraham, Bart Schultz and Frank van Steenberg, 2011. Modernization of spate irrigated agriculture. A new approach. *Irrigation and Drainage* 60.2.



10. Hartoyo Suprianto, Erwin Ravaie, Sumarjo Gatot Irianto, Robiyanto H. Susanto, Bart Schultz, F.X. Suryadi and Ad van den Eelaart, 2010. Land and water management tidal lowlands. Experiences in Telang and Saleh, South Sumatra, *Irrigation and Drainage*. 59.3.
11. Ararso G.S., Bart Schultz and P.H.J. Hollanders, 2009. Contribution of water management measures to food production in the Sub-Saharan Africa Region. *Irrigation and Drainage*. 58.5.
12. Schultz, Bart, Henri Tardieu, Alain Vidal, 2009. Role of water management for global food production and poverty alleviation. *Irrigation and Drainage*. 58.S1. Supplement: Special Issue on Water for Food and Poverty Alleviation.
13. Mehari Haile, Abraham, Bart Schultz and Herman Depeweg, 2008. Modelling soil moisture and assessing its impacts on water sharing and crop yield for the Wadi Laba spate irrigation system, Eritrea. *Irrigation and Drainage*. 57.1.

OTHER PUBLICATIONS

Publications (peer reviewed)

Publications in English since 2008

1. Schultz, Bart, 2012. Visions and action plans for optimal use of water for food security. Investments by public and private sectors in agricultural water management projects. In: Proceedings International Conference on Food Security in Dry Lands. 14 - 15 November, Doha, Qatar.
2. Schultz, Bart, 2012. Opportunities and uniqueness of suitable lowland bio-physics for sustainable rice production. In: Proceedings International Workshop on Sustainable Management of Lowland for Rice Production. 27 - 28 September 2012, Banjarmasin, Indonesia.
3. Keïta, Amadou, Bart Schultz, Hama Yacouba and Laszlo Hayde, 2012. Characterisation of the profile and water circulation in the valley bottom rice irrigated soils. Case of Tiefora in Burkina Faso. In proceedings 11th ICID International Drainage Workshop on Agricultural Drainage Needs and Future Priorities, 23-27 September 2012, Cairo, Egypt.
4. Schultz, Bart, 2012. The Beemster, a drained lake since 400 years. In: Proceedings International Seminar on Historical Water Sustainability: Lessons to learn, 24 June 2012, Adelaide, Australia.
5. Yekti, M.I., Bart Schultz and Laszlo Hayde, 2012. Challenge of runoff regulation to supply paddy terraces in *Subak* irrigation schemes. In: Proceedings 7th Asian Regional Conference of International Commission on Irrigation and Drainage (ICID), 24-28 June 2012, Adelaide, Australia.
6. Delos Reyes, Mona Liza F., Bart Schultz, Wilfredo P. David and Krishna Prasad 2012. Assessment of the process and impact of rehabilitation for improved National Irrigation System modernization strategy in the Philippines. In: Proceedings 7th Asian Regional Conference of International Commission on Irrigation and Drainage (ICID), 24-28 June 2012, Adelaide, Australia.
7. Zeleke A. Dejen, Bart Schultz and Laszlo Hayde, 2012. Improving the Operation of Irrigation Networks through Understanding the Hydrodynamic Behaviour: *Metahara Sugar Estate Irrigation Scheme, Ethiopia*. In: Proceedings 7th Asian Regional Conference of International Commission on Irrigation and Drainage (ICID), 24-28 June 2012, Adelaide, Australia.
8. Schultz, Bart, 2011. Are we really concerned? Climate and land use changes in flood prone areas. In: Proceedings of 25th European Regional ICID Conference on Deltas in Europe. Integrated water management for multiple land use in flat coastal areas, 16 – 20 May 2011, Groningen, the Netherlands.
9. Boetzelaer, Machteld van and Bart Schultz, 2011. What needs to be our major concern? Drainage and protection of Dutch polders. In: Proceedings of 25th European Regional ICID Conference on Deltas in Europe. Integrated water management for multiple land use in flat coastal areas, 16 – 20 May 2011, Groningen, the Netherlands.



10. Nasrul, Febrinasti Alia, Bart Schultz, Robiyanto H. Susanto and F.X. Suryadi. Impacts of changes on flood protection systems. Case study of Indonesia and the Netherlands in comparative perspective. In: Proceedings of 25th European Regional ICID Conference on Deltas in Europe. Integrated water management for multiple land use in flat coastal areas, 16 – 20 May 2011, Groningen, the Netherlands.
11. Rahmadi, F.X. Suryadi, Robiyanto H. Susanto and Bart Schultz, 2010. Effects of Climate Change and Land Subsidence on Hydro-topographical Conditions in Tidal Lowlands. Case Study Telang I, South Sumatra. In: Proceedings International Seminar-workshop on Integrated Lowland Development and Management, 18-20 March, 2010, Palembang Indonesia, 2011.
12. Gustini, Eka, Eddy Santana Putra, F.X. Suryadi and Bart Schultz, 2010. Palembang Urban Drainage and Flood Protection Systems. Case Study Jakabaring Urban Area. In: Proceedings International Seminar-workshop on Integrated Lowland Development and Management, 18-20 March, 2010, Palembang Indonesia, 2011.
13. Fadilan, Ahmad, F.X. Suryadi, Robiyanto H. Susanto and Bart Schultz. Regeneration Options for Peatland Forests. Case Study in Merang Kepayang, South Sumatra, Indonesia. In: Proceedings International Seminar-workshop on Integrated Lowland Development and Management, 18-20 March, 2010, Palembang Indonesia, 2011.
14. Sylvia, Raden Ayu Marlina, F.X. Suryadi, Robiyanto H. Susanto and Bart Schultz. Water Management and Flood Protection of Agropolitan Gandus for Agricultural Development. In: Proceedings International Seminar-workshop on Integrated Lowland Development and Management, 18-20 March, 2010, Palembang Indonesia, 2011.
15. Suprianto, Hartoyo, Erwin Ravaie, Sumarjo Gatot Irianto, Robiyanto H. Susanto, Bart Schultz, Martijn Elzinga, F.X. Suryadi and Ad van den Eelaart. Agricultural Development in the Lowlands: Dynamics, Perspective and Time Frame – Lesson Learnt from Strengthening Tidal Lowland Development (STLD) and the Way Forward. In: Proceedings International Seminar-workshop on Integrated Lowland Development and Management, 18-20 March, 2010, Palembang Indonesia, 2011.
16. Kaini, Santosh, L.G. Hayde, Bart Schultz, Miroslav Marenc, 2011. Seepage analysis underneath the headwork of Chanda Mohana Irrigation Scheme, Sunsari, Nepal. In: Proceedings National Irrigation Seminar, Department of Irrigation/Nepal, International Network for Participatory Irrigation Management (INPIM)/Nepal and IWMI/Nepal.
17. Kuntiyawichai, Kittiwet, Bart Schultz, Stefan Uhlenbrook, F.X. Suryadi and G.A. Corzo. Comprehensive flood mitigation and management in the Chi River Basin, Thailand. Lowland Technology International, Volume 13, Number 1, June 2011.
18. Schultz, Bart. Agriculture and Water, 2010. In: Economic policy paper series 2010, GEM Sciences Po, Paris, France.
19. Schultz, Bart. Summary of proceedings and recommendations for follow-up of the 8th Annual Mekong Flood Forum (AMFF-8) In: Proceedings of the 8th Annual Mekong Flood Forum, 26 - 27 May, Vientiane, Lao PDR. MRC Regional Flood Management and Mitigation Centre, Phnom Penh, Cambodia, 2010.
20. Sartika, D., Robiyanto H. Susanto, Bart Schultz and Krishna Prasad, 2010. Water management service fee for optimal operation and maintenance of canal systems in tidal lowlands. Case study Telang I, South Sumatra. Proceedings of the 6th Asian Regional Conference of the International Commission on Irrigation and Drainage (ICID), 10 – 16 October 2010, Yogyakarta, Indonesia.
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Eight publications in other languages than English or Dutch

56 publications in Dutch

Research studies

1. Schultz, Bart. Land and water development. Finding a balance between planning, implementation, management and sustainability. Valedictory address delivered on the occasion of the retirement from the Chair of Land and Water Development at UNESCO-IHE Institute for Water Education. Delft, the Netherlands, May 8, 2012.
2. Schultz, Bart. Land and Water Development. Finding a balance between implementation, management and sustainability. Inaugural address delivered on the occasion of the public acceptance of the Chair of Land and Water Development at the International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE), Delft, the Netherlands, 18 March 1993
3. Schultz, Bart. Waterbeheersing van de Nederlandse droogmakerijen. PhD thesis Delft University of Technology, 1992, Delft (in Dutch)

**Lecture notes**

1. Land use and water in flood prone areas. Lecture note UNESCO-IHE. Delft, the Netherlands, 2009 – 2010 (two editions)
2. Schultz, Bart. Land and water development. Lecture note International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE). Delft, the Netherlands, 1997 – 2010 (various editions)
3. Schultz, Bart. Land Reclamation. Lecture note International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE). Delft, the Netherlands, 1998
4. Schultz, Bart. I. History of water management and land reclamation in the Netherlands, II. Maintenance and management of reclaimed land, III. Integrated developments in the Netherlands main rivers. Lectures seminar on land reclamation. Hualien, Taiwan, 22 and 23 June, 1998
5. Schultz, Bart, and F.C. Hamer. New land reclamation options for the Netherlands. Lecture seminar on land reclamation. Hualien, Taiwan, 22 and 23 June, 1998
6. Schultz, Bart. Lowland development. Lecture note International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE). Delft, the Netherlands, 1997
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8. Schultz, Bart. Lecture notes on basic concepts of polder development and management. Lectures given for staff members of the project developing company Pt. Mandara Permai in relation to the development of the Pantai Indah Kapuk coastal reclamation project. International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE). Delft, the Netherlands, 1996
9. Schultz, Bart. Lecture notes on various aspects of lowland development. Lectures given for staff members of the Department of Irrigation and Drainage, Kuala Lumpur and Khota Baru, Malaysia. International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE). Delft, the Netherlands, 1994 and 1995
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11. Schultz, E. General Hydrology. Lecture notes IHE. Delft, the Netherlands, 1985

**Technical reports
(published)**

Numerous



PROFESSIONAL AFFILIATIONS

Member since 2008

- 2012 - present Chairman of the International Technical Advisory Committee of the First World Irrigation Forum, Mardin, Turkey, 29 September - 3 October 2013.
Member ICID Task Force on the 7th World Water Forum, March 2015, Daegu, Republic of Korea.
- 2010 - 2012 Co-coordinator for the key priority area Contribute to Food Security by Optimal Use of Water of the 6th World Water Forum, March 2012, Marseille France.
Chairman ICID Task Force on the 6th World Water Forum, March 2012, Marseille France.
- 2010 - 2011 Chairman Scientific Committee 25th ICID European Regional Conference, 16 – 20 May, Groningen, the Netherlands
Member Preparation Committee for the key priority area Contribute to Food Security by Optimal Use of Water of the 6th World Water Forum, March 2012, Marseille France.
- 2008 - 2009 Member of the International Hydrologic Programme (IHP) Publication Committee of UNESCO
- 2007 - 2009 Coordinator of Topic2.3 on Water and Food for ending poverty and hunger of the 5th World Water Forum, Istanbul, Turkey, 15 - 22 March 2009
- 2006 - present Chairman of the ICID Task Force on Inter Basin Water Transfers
- 2005 - present Member of the International Water Academy, Oslo, Norway
2002 - present President Honoraire of ICID
2002 - present Chairman of the editorial board of Irrigation and Drainage
1999 - present Member of the editorial board of Lowland Technology International
1973 – present Member of the Royal Institution of Engineers in the Netherlands (KIVI)
- 2007 - 2009 Coordinator of Topic2.3 Water and Food for ending poverty and hunger of the 5th World Water Forum, Istanbul, Turkey, 15 - 22 March 2009
- 1994 - 2009 Chairman of the board of the International Land Drainage Course at the Alterra-ILRI

ACADEMIC AWARDS

- 22 March 2007 Institutes medal of the Royal Institution of Engineers in the Netherlands
17 October 2008 As chairman of the Editorial Board of *Irrigation and Drainage* the award of best performing Work Body of the International Commission on Irrigation and Drainage (ICID)

