CV Rien Dam

Proposed Position Senior water management expert

Name of Firm WaterLand Experts 2 Name of Expert Rien A.C. Dam

Date of Birth 25 Oktober 1961 Citizenship: Dutch 4.

Complete personal contact details

Address

Telephone Number

Waterkersweg 242, 1051 PH Amsterdam, The Netherlands

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Email Address : rien.dam@outlook.com / hollanddelta.dam@gmail.com

Education

: - PhD environmental geosciences (in Indonesia), Faculty of Earth & Life Sciences, Free University, Amsterdam, Holland, 1994.

MSc physical geography; Faculty of Earth & Life Sciences, Free

University, Amsterdam, Holland; 1988.

Practical training and execution of small projects: 1) Coastal zone studies in northwest Java. 2) Geological investigations in the Bandung area (also Java, Indonesia), as a preparation for mapping and research, 3) Tropical soils and agricultural land use planning studies (Costa Rica, with Wageningen University), 1986.

Secondary education: Atheneum High School with 7 main courses (Maths, Physics, Chemistry, Geography, History, English, Dutch),

Membership in Professional **Associations**

: - CCOP: Coordinating Committee for Geoscience Programmes in East and Southeast Asia, Representative for The Netherlands, 2008-2013; www.ccop.or.th

KNGMG Royal Netherlands Geology and Mining Society www.kngmg.nl

KIVI; The Royal Netherlands Society of Engineers; www.kivi.nl

8. Other Training

: - GIS courses, ITC Enschede, The Netherlands

Project Management; TNO - Netherlands Organisation for Applied Scientific Research

Miscellaneous short courses on geo-environmental topics

9. Countries of Work Experience

: Laos, Indonesia, Vietnam, Philippines, Bangladesh, Netherlands, India, Mozambique, Uganda, Tanzania, Saudi Arabia, Irag, Syria, Oman, Ghana, Guyana, Benin, Russia, EU-Brussels, Costa Rica

10. Languages

	speaking	reading	writing
English	fluent	fluent	fluent
French	good	good	moderate
Bahasa Indonesia	fluent	good	moderate
German	good	good	moderate
Spanish	moderate	moderate	-
Dutch	mother tongue	-	-

11. Employment Record

From 01/01/2014 : 18 months

> Independent consultant and owner of WaterLand Experts. Technical Assistance work and advisory services in The Netherlands, Vietnam,

Indonesia, Sub Sahara Africa, Russia, Laos, Bangladesh

From 2007 to 31/12/2013 : 7 years

Deltares, The Netherlands **Employer**

Team Leader / Senior Expert IWRM, regional planning and Positions held

geosciences & environmental issues; Senior Institutional development and capacity building expert (worldwide)

From 2004 to 2007 : 36 months

Employer University Groningen, The Netherlands

Positions held Project manager for international cooperation capacity building

> in higher education, environmental sciences projects (Ghana, Tanzania, Uganda, Mozambique, Eritrea, India, Indonesia)

From 2002 to 2004 : 18 months

Employer : Delft University of Technology

Positions held : Project Coordinator and subject expert, Civil Engineering and

Applied Geosciences projects (India, Philippines)

From 1995 to 2002 : 36 months

Employer : NITG-TNO, Netherlands Institute for Applied Geosciences
Positions held : Team/project manager and senior geologist, International

projects (Indonesia, Philippines, Vietnam, Mozambique, Iraq)

From 1994 to 2001 : 36 months

Employer : Utrecht University, Faculty of Earth Sciences

Positions held : Geologic expert / project management (Indonesia, Mozambique)

From 1994 to 1995 : 12 months

Employer : Utrecht University, Rector's Office

Positions held : Co-Director Environmental Studies Project (Guyana)

From 1992 to 1992 : 6 months

Employer : Bundesanstalt fur Geowissenschaften, Hanover / German Federal

Agency for Geosciences

Positions held : Senior geo-environmental expert for the Bandung area

(Indonesia)

From 1988 to 1994 : 56 months

Employer : Free University Amsterdam, Geological Research and Development

Centre, Bandung, Indonesia

Positions held : Geo-environmental researcher for the Bandung area (Indonesia)

- water-groundwater, geology, regional planning

12. Detailed Tasks Assigned Tasks

International expert / Technical

assistance advisor

13. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

Name of assignment or project: TA 7780, coordinating consultant for ADB National IWRM Support Program, Laos, C3-C4 components. ADB-AUSAid funding

Year: 2015; 5 months Location: Laos

Client: ADB, Laos government (MONRE) and National University of Laos, Faculty water

Resources

Main project features: Developing IWRM based water resources management in Laos, IWRM-based higher education at National University of Laos, formulate National

Groundwater Action Plan, TA coordination multiple components

Positions held: Coordinating consultant Groundwater and IWRM components **Activities performed**: Technical support for development IWRM based water resources management in Laos, coordinating review of IWRM-based higher education at National

University of Laos, formulation of the National Groundwater Action Plan, TA coordination multiple components

Name of assignment or project: Mekong river & delta strategic development and planning

Year: 2010-2014: 4 years

Location: Vietnam. The Netherlands

Client: MONRE, MARD, Mekong Delta provinces, Government of Vietnam & Government

of The Netherlands

Main project features: Mekong Delta strategic planning and water management, climate adaptation. Consultation workshops, assessment of water main management issues, flood management, hydraulic design modelling for navigation and integration of water management regional planning.

Positions held: water management senior expert, capacity building

Activities performed: Assessment of Mekong Delta, institutional capacity and management issues, information-based policy development, design hydraulic infrastructure integration of international expertise and knowledge of local counterparts into expert system / decision support system.

Name of assignment or project: Ho Chi Minh Flood Mitigation (& urban water management), 1. MEuro project, funded by Dutch government, 15 member team

Year: 2010-2013; 13 months

Location: Vietnam

Client: Steering Centre Flood Control - People's Committee, HCMC, Vietnam

Main project features: Development of an integrated flood mitigation strategy, including structural and non-structural measures for HCM city, Vietnam. The project includes studies of urban drainage problems, effects of groundwater extraction on subsidence, foundation stability for on hydraulic infrastructure

Positions held: urban water management, geo-technical/groundwater expert

Activities performed: Project formulation; specific assessments of urban drainage problems, effects of groundwater extraction on subsidence, subsidence assessments of geo-environmental conditions and geo-technical and foundation aspects for new and existing hydraulic infrastructure.

Name of assignment or project: Deltares knowledge development programme on land subsidence and georisks. Different projects and countries

Year: 2009 - 2013; 15 months

Location: The Netherlands, Jakarta, Ho Chi Minh City, Dhaka, network

Client: partner agencies in locations

Main project features: Development of an expert system land subsidence and implications for urban water management. Relationships between groundwater extraction and land subsidence, implications of land subsidence for foundation stability of infrastructure. Economic costs subsidence and governance issues.

Positions held: Team Leader technical assistance & knowledge development (urban water management) expert

Activities performed: Project conceptualization, activity management, organising joint training sessions, technical analysis and assessment on pertinent issues. Including activities:

- Quantitative land subsidence prognosis
- Geotechnical model development
- Land Subsidence hazard and risk maps for several major cities in SE Asia

Name of assignment or project: Training programme Iraq Geological Survey

Year: 2009 – 2010; 6 months; 300 K Euro project, 8 team members

Location: The Netherlands, Damascus

Client: State Geological Survey Company of Iraq

Main project features: Development of and training in an expert system for geological data management, including groundwater resources and geological hazards (groundwater resources, land subsidence, geotechnical issues

Positions held: Team Leader, technical expert, project coordinator

Activities performed: Project formulation and development, activity management, conducting joint training sessions, analysis of technical issues. Including activities:

- Development of geological information expert system
- Geotechnical issues and model development, use of surveying equipment
- Review of critical groundwater issues in southern Iraq

Name of assignment or project: Miscellaneous short assignments related to groundwater management and river basin / water management (flooding, land subsidence and natural disasters, groundwater resource depletion).

Year: 2001-present; 36 months

Location: various countries: Indonesia, Vietnam, Iraq, Jordan, Benin **Client:** Dutch Government, partner country government, Worldbank

Main project features: Formulation miscellaneous projects including: urban planning, studies for regional (ground)water management, environmental hazards such as land subsidence, coastal erosion, flooding, natural resources management

Positions held: IWRM, groundwater and geosciences technical expert

Activities performed: Project conceptualization, management, organising training sessions on technical subjects, overall project coordination, result dissemination. Included specific activities/studies on:

- Regional (ground)water studies
- Inventories for environmental hazards; land subsidence, coastal erosion, flooding

Name of assignment or project: Hanoi metropolitan spatial planning and urban water management inventory

Year: 2013; 2 months

Location: Vietnam & The Netherlands

Client: Netherlands Embassy, Hanoi, Ministry for Infrastructure and Environment

Main project features: Inventory of contextual information and priority issues related to water safety, water supply and drainage of Hanoi metropolitan area. Incl. recommendations for flood mitigation (Red river), urban drainage and sewage system improvement, governance issues.

Positions held: Mission leader, IWRM / Urban water management expert

Activities performed: Inventory of contextual information and priority issues related to water safety, water supply and drainage of Hanoi metropolitan area. Incl. recommendations for flood mitigation (Red river), urban drainage and sewage system improvement, governance issues.

Name of assignment or project: Jakarta Coastal Defense Strategy

Year: 2010-2012; 4 months

Location: Indonesia & The Netherlands

Client: DKI Jakarta. Indonesia

Main project features: Development of an integrated coastal defense strategy for Jakarta,

including structural and non-structural measures **Positions held:** Groundwater and geo-technical expert

Activities performed: The assignment covered effects of groundwater extraction on subsidence, aquifer storage and recharge, groundwater management, quantitative subsidence assessments, with effects on geotechnical stability of infrastructure and high-rise. Geotechnical aspects of coastal reclaimed land and coastal defense infrastructure. General governance issues concerning groundwater and land subsidence.

Name of assignment or project: Vietnam Facility project; the use of modelling tools & DSS for complex geo-environmental, climate change and water management.

Year: 2009-2011: 24 months

Location: Vietnam & The Netherlands

Client: EVD-Netherlands Ministry for Economic Affairs

Main project features: The project constituted a knowledge transfer and training programme, with a large number of technical workshops

Positions held: Project manager, technical expert

Activities performed: Training sessions and joint expertise development on:

- Groundwater models (GMS, MODFLOW, iMOD) and model application in Mekong Delta,
 Vietnam Southern provinces and Ho Chi Minh City
- Hydraulic modelling (SOBEK) and application in Ho Chi Minh City
- Subsidence models and geology geotechnical visualization tools
- **Decision Support Systems** using model output (as above) in decision making processes and management systems
- Project management, organising training sessions, result dissemination.

Name of assignment or project: SOWACOR programme (Soil, Water and Coastal Resources); Scientific cooperation programme with KAUST (King Abdullah University of Science and Technology, Saudi Arabia), 2 M Euro project, 10 team members

Year: 2008-2011: 24 months

Location: Saudi Arabia & The Netherlands

Client: KAUST (King Abdullah University of Science and Technology, Saudi Arabia), Utrecht University (leading partner)

Main project features: The collaborative research program focused on exploring innovative techniques for soil and (ground)water management in constrained (arid) environments.

Positions held: Project component coordinator, technical expert

Activities performed: Scientific workshops and expertise development on:

- Groundwater quantity and quality
- Soil solids water interaction (geotechnical, soil & groundwater chemistry)
- Subsurface geology geotechnical visualization tools
- Natural recharge and water quality treatment systems (infiltration)

Name of assignment or project: Integrated Risk Management and Institutional Strengthening (IRMIS), budget 5.5 M US \$, Aceh Reconstruction Trust Fund

Year: 2007-2008: 4 months Location: Aceh, Indonesia

Client: Tsunami & Disaster Mitigation & Research Centre, Syiah Kuala University, Banda Aceh. Indonesia

Main project features: The project IRMIS Aceh-Nias aims to develop and strengthen the recently formed Tsunami and Disaster Mitigation Research Centre of the Syiah Kuala.

Positions held: project manager, technical expert DRR and institutional strengthening **Activities performed**: Development of the project, including detailed definition of its scope and activities, preparation of funding proposal and negotiations with funding agency and with UNDP on start up of the project

- Assessment of regional critical (ground)water and other natural resources
- Assessment of regional (provincial) geological and geotechnical hazards for natural disasters and development of built environment

Name of assignment or project: WaterPlus, 1 M Euro project, 8 team members

Year: 2001-2004: 36 months Location: Cebu City, Philippines

Client: Water Resources Centre, San Carlos University, Philippines

Main project features: Capacity development of University San Carlos Water Resources

Centre, cooperation between USC-WRC and TU Delft, Netherlands

Positions held: project manager, technical expert water resources management

Activities performed: project management, expert consultations, seminars, staff guidance
 Studies and integrated assessment for regional water resources, including groundwater, producing regional groundwater potential maps

- Studies on regional geologic and geotechnical hazards, including seismicity, landslides, coastal abrasion, soil erosion
- Transfer of expertise and skills in training programmes

Name of assignment or project: Laguna Lake Development Plan

Year: 1996-1997: 6 months

Location: LLDA, Pasig, Metro Manila, Philippines **Client**: Laguna Lake Development Authority

Main project features: Assessment of subsurface geological conditions that play a role in flooding; subsidence, coastal erosion, groundwater management, extraction of groundwater leading to subsidence, sedimentation/siltation and upland erosion in catchments

Positions held: senior advisor geo-environmental issues, geohazards

Activities performed: Study and assessment of Laguna lake regional geo-hazards, including

- over-abstraction of groundwater and regional groundwater potential
- subsidence, and settlement of Laguna lake deposits
- flooding ((typhoon induced and Laguna lake related)
- lake shore and upland erosion
- sedimentation and clogging of drainage channels
- issues with poor foundation on reclaimed lake shore lands

Name of assignment or project: Bandung area and Citarum river basin environmental geology

Year: 1994: 8 months

Location: Bandung region, West Java, Indonesia

Client: Bundesanstalt fur Geowissenschaften, Hanover / German Federal Agency for Geosciences, and Indonesian-Bandung regional government & Geological Agency

Main project features: Contribution to a 4-year regional study on geo-environmental issues (geology, seismic / volcanics, groundwater, subsidence, landslide hazards, natural resources management, spatial planning, environmental guidelines) for the greater Bandung city region.

Positions held: geotechnical/hydro-geologic expert

Activities performed: A variety of field studies on various geotechnical, groundwater and subsurface geology, water related issues, map & report compilation, coaching a team of Indonesian counterpart staff.

Name of assignment or project: Eduardo Mondlane University, Dept of Earth Sciences Cooperation, Utrecht University

Year: 1995-2001: 18 months

Location: Southern Mozambique, greater Maputo region

Client: Eduardo Mondlane University, Dept of Earth Sciences & Geological Institute of Mozambique

Main project features: A 6-year cooperation in higher education for Earth sciences, including: regional geo-environmental issues, geology, groundwater, coastal erosion hazards, natural resources management, spatial planning, environmental guidelines) for southern Mozambique.

Positions held: Geologic expert, project coordinator, instructor

Activities performed: A variety of field studies on various geotechnical, groundwater, natural resources and geology, surface water related issues, course development and teaching.

Name of assignment or project: Geological development of the greater Bandung area, Indonesia (PhD thesis research).

Year: 1988-1994: 56 months

Location: Bandung region, West Java, Indonesia

Client: Geological Research and Development Centre, Bandung, (now Badan Geologi, Indonesia)

Main project features: 4-year regional study on geological an geotechnical issues (geology, seismic, volcanics, groundwater, subsidence, landslide hazards), for the greater Bandung city region.

Positions held: geological, geotechnical, hydrogeological expert

Activities performed: A variety of field studies on various geotechnical, groundwater and subsurface geology, water related issues, map & report compilation, coaching a team of Indonesian counterpart staff. Output and results:

- geological maps for the greater Bandung Basin area
 Basin sedimentary geological map (subsurface geology, hydrogeology) for the Bandung plain area
- . Volcanic/geological development scenarios for the Bandung-Lembang Tangkuban Perahu area (scientific reports)
- Geochemical assessment of Ciwidej river system and Gn. Patuha Volcano

13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Rien A.C. Dam		
Rien A.C. Dou	Date:	15 th of June, 2015
[Signature of staff member		Day/Month/Year