

Résumé of dr. C.J. (Cees) van Westen



Dr. Cees van Westen graduated in 1988 for his MSc (doctoraal) in Physical Geography from the University of Amsterdam. After working with the University of Amsterdam for one year on landslide related problems in Austria and Switzerland, he joined the Division of Applied Geomorphology of ITC in 1988, and specialized in the use of Remote Sensing and Geographic Information Systems for natural hazard and risk assessment. He obtained his PhD in Engineering Geology from the Technical University of Delft in 1993, with a research on "Geographic Information Systems for Landslide Hazard Zonation". During his work at ITC he has been working in various positions. Starting as an AIO (PhD student), he changed to working as lecturer, and assistant professor before being appointed as associated professor in 2000. Dr. Van Westen has worked on research projects, training courses and consulting projects related to natural hazard and risk assessment in many different countries, such as Austria, Switzerland, Italy, Spain, France, Georgia, Mexico, Guatemala, El Salvador, Honduras, Costa Rica, Colombia, Peru, Bolivia, Argentina, Sri Lanka, Indonesia, Thailand, India, Nepal, China, Vietnam and Philippines. Since 2005 he is Director of the [United Nations University - ITC School on Geoinformation for Disaster Risk Management](#).

Activities in education

In 1997 he worked as training material coordinator on preparation of the training materials for the [ILWIS](#) (Integrated Land and Water Information System) version 2.1, and made over 10 [application case studies](#) on the use of GIS for hazard assessment, dealing with floods, landslides, volcanic eruptions and earthquakes. From 1998 to 2000 he was Programme Director of the Earth Resources and Environmental Geosciences" educational programme, and he has been coordinating the specialization on Natural hazards for a number of years. He has produced several training packages, on landslides ([GISSIZ](#)), hazard and risk assessment (Nepal, [Central America](#)) and Multi-hazard risk assessment. The latter one has been developed into a distance education course using the [RiskCity](#) training package. He has been active in the development of joint educational programmes with [IIRS](#) (India), [UGM](#) (Indonesia), [ICIMOD](#) (Nepal), [ADPC](#) (Thailand), [CLAS-UMSS](#) (Bolivia) and [UNAM-CIGA](#) (Mexico), and [CDUT](#) (China). He is also a member of the [UN-SPIDER](#) Capacity Building Working Group.

Activities in research

Cees van Westen received the ITC research award in 1993 and the Richard Wolters Prize of the International Association of Engineering geology (IAEG) in 1996. He has been principal investigator in a research project called Strengthening Local Authorities in Risk Management (SLARIM) from 2000 to 2007. He is currently contributing to the research theme on [Disaster Risk Management](#) in ITC. He has been involved as co-promotor with a number of PhD researchers, on topics related with the use of spatial information for landslide hazard and risk assessment, Participatory GIS for flood risk assessment, volcanic hazard assessment, seismic hazard and risk assessment, technological risk assessment, and multi-hazard risk assessment. Most of the research is in the field of landslides, dealing with topics such as: generation of event-based landslide inventories using remote sensing (e.g. LiDAR, object oriented image classification), historical records and field mapping; combination of heuristic and statistical models for landslide susceptibility analysis; dynamic modeling of landslide initiation; landslide run out analysis, and different approaches for landslides risk assessment. PhD research has been carried out in Colombia, Cuba, Philippines, China, India, Malaysia, and Europe.

Activities in capacity development

He has been involved in many projects such as:

- [UNESCO project on Capacity Building for Natural disaster Reduction](#), regional Action Programme Central America ([RAPCA](#)) with participants from all Central American countries;
- EU research projects, such as [FP 5 RUNOUT](#); [FP6 MCITN "Mountain Risk"](#); [FP6 CASITA II](#); [FP7 SAFELAND](#);
- Bilateral research projects with India (NRSC and GSI) and China (CDUT);
- Post-disaster damage assessment projects in Colombia (Armenia), Indonesia (Yogyakarta), Pakistan (Muzzafarabad) and China (Wenchuan);
- Institutional strengthening projects in India (with the [Indian Institute of Remote Sensing](#)), Mexico, Peru and Bolivia;
- Capacity building projects in SE-ASIA with [ADPC](#) and [AIT](#), such as [CASITA](#), [SCRATCH](#), GHITRA;
- World Bank [CAPRA project](#) on the development of Probabilistic Risk Assessment methods for Central America;
- NL Government funded MATRA project in Georgia;
- University Networks in Central America, Asia and Africa.