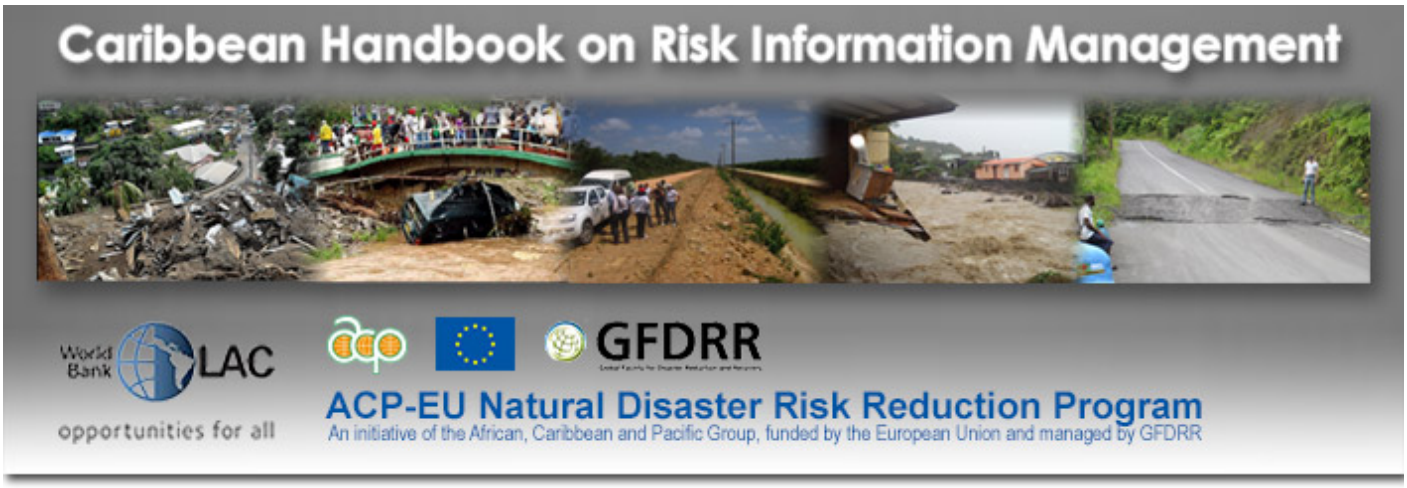

Consortium

The CHARIM project was developed by a consortium of five international institutions:

- University Twente, Faculty ITC (UT-ITC), the Netherlands;
- The University of the West Indies, Faculty of Engineering (UWI) Trinidad and Tobago;
- Asian Institute of Technology (AIT), Thailand;
- SSBN – Flood Risk Solutions, United Kingdom;
- Envirosense, The Netherlands.

All consortium partners are either directly, or indirectly, related to academic institutions and universities, and therefore have a considerable experience in knowledge transfer and capacity building.

Faculty of Geo-Information Science and Earth Observation (ITC)

ITC
UNIVERSITY OF TWENTE.

UT-ITC is is the former International Institute for Geo-Information Science and Earth Observation, which now has become a Faculty of the University of Twente. ITC has over 60 years experience in training mid-career professionals and scientists from all over the world in the collection, interpretation, management and visualisation of geo-information to support resource management and policy development. UT-ITC has a very good track record in undertaking applied research and has a long history in successfully managing more than 1100 consultancy and research projects in over 70 countries since 1958. UT-ITC has abundant expertise in disaster management, spatial hazard risk assessment, flood and landslide hazard studies, developing methodologies for Multi-Hazard Risk Assessment and the design of web-GIS and spatial data portals. UT-ITC has also experience in the organization of training, workshops and study tours in these fields worldwide. UT-ITC's mission is to provide international education and conduct high-level academic research to support capacity building and institutional development of professional and academic organisations as well as individuals, specifically in countries that are economically and/or technologically less developed.

On 4th April 2005 UT-ITC became an Associated Institute of the United Nations University, Japan (UNU) hosting the UNU-DRM Centre for Spatial Analysis and Disaster Risk Management. The long-term objective of the Disaster Risk Management component of the DRM Programme is to strengthen the capacity of institutions at national and local level in

developing countries to reduce the vulnerability to natural hazards. UT-ITC has collaborated previously with the World Bank in the review and implementing of the Comprehensive Approach for Probabilistic Risk Assessment (CAPRA) methodology. UT-ITC has extensive experience in the development of training materials on hazard and risk assessment, development of distance education courses on this topic and in capacity building activities in this field in different parts of the world, including the Central America and the Caribbean. UT-ITC carried out a UNESCO supported capacity building programme in the region about 10 years ago. UT-ITC has also been involved in a research project on multi-scale landslide hazard assessment in the Caribbean environment, which resulted in a PhD thesis and several internationally peer reviewed journal papers.

Staff involved:

- Dr. Cees van Westen
- Dr. Dinand Alkema
- ?Mr. Wim Feringa
- Prof. Dr. Victor Jetten
- Dr. Rober Hack
- Dr. Mark Brussel
- Dr. Richard Sliuzas

University of the West-Indies

The University of the West Indies is a public university system serving 18 English-speaking countries and territories in the Caribbean: Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, Bermuda, the British Virgin Islands, the Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, and Turks and Caicos. Each of these countries is either a member of the Commonwealth of Nations or a British Overseas Territory. The aim of the university is to help "unlock the potential for economic and cultural growth" in the West Indies, thus allowing for improved regional autonomy. mission of The UWI is: Its mission is to advance education and create knowledge through excellence in teaching, research, innovation, public service, intellectual leadership and outreach in order to support the inclusive (social, economic, political, cultural, environmental) development of the Caribbean region and beyond.

The Engineering Institute of the Faculty of Engineering of the University of the West Indies, St. Augustine has as its mission to act as a direct and unified interface between The University of the West Indies and organizations in Industry as well as other sectors including Regional and International Development Agencies, so as to improve the effectiveness of the University and the Faculty in contributing to regional and national development in the Caribbean.

During recent years quite a number of UWI staff have followed (part of) their education at UT-ITC under the EU Earsmus Mundis ACP grant.

The Institute Office is essentially to act as a facilitator. The Office will administer research, consulting and testing service requests to the Faculty.

Staff involved:

- Charisse Charles-Griffiths
- Tarick Hosein

Asian Institute of Technology

Asian Institute of Technology (AIT) is an autonomous, international institute established in 1959 to meet the growing need for advanced engineering education in Asia. AIT has become an active partner in the promotion of technological change and development in the region. AIT promotes technological change and sustainable development through higher education, research and outreach. Established in Bangkok in 1959, AIT has become a leading regional postgraduate institution and is actively working with public and private sector partners throughout the region and with some of the top universities in the world. AIT is positioning itself under a new research umbrella called 'Sustainable Development in the Context of Climate Change' which consists of five thematic research areas; 1) Disaster Risk Management, 2) Sustainable Land and Water Recourses Management, 3) Business and Innovation Models for Green Economy, 4) Urban and Rural Quality of Life and Sustainability and 5) Lower Carbon, and Sustainable Production and Consumption Technologies and Management.

AIT has implemented a large number of projects and training programs several countries in multi-hazard risk assessment and disaster risk reduction. For multi-hazard risk assessment, AIT is collaborating with the World Bank for implementing the Comprehensive Approach for Probabilistic Risk Assessment (CAPRA) in the region. AIT is also actively involved in technology transfer and capacity development in disaster management in the region through training, workshops and innovative academic programs. AIT has implemented a capacity building project on "Satellite Data Utilization for Disaster Risk Reduction and Response" under which, three handbooks on Remote Sensing, GIS and GPS were prepared for distribution among the participants. AIT and UT-ITC has also implemented a Asian Development Bank funded project called "Geo-Information Technology for Hazard Risk Assessment (GITHRA)" in Vietnam and prepared 1) two text books (Spatial Modeling of Natural Hazard Processes and GITHRA guidebook); 2) Fully worked out GITHRA exercises for hands-on training for multi-hazard risk assessment and disaster management; and 3) An e-learning package to facilitate off location internet-based training. AIT is also partnering with Technical University Delft, UT-ITC, UNESCO-IHE for developing a DM-MSc program at the Water Resources University (WRU) in Hanoi, Vietnam with funding from the Netherlands Government (NUFFIC).

AIT is also hosting and organizing a training programme annually in collaborations with the Institute of Geo-information Science and Earth Observation (ITC), Asian Disaster Preparedness Center (ADPC) and United Nations Institute for Training and Research (UNITAR) on "GIS for Disaster Risk Management" and since 2007, nearly 150 participants have been trained from 30 countries. Training materials and hands-on exercises have been developed jointly by all the partners.

Staff:

- Manzul Hazarika
- Naveed Anwar
- Ramesh Da Silva

SSBN – Flood Risk Solutions

SSBN was formed out of the University of Bristol Hydrology Research Group. The research group forms a world leading authority in the field of modelling flood risk, and SSBN was started by four of its members. We aim to utilize the unique skills of our team to provide cost effective flood risk analytics based on cutting edge research methods. We aim to transfer this knowledge to deliver truly innovative and cost effective products, enabling our customers to make confident decisions based on robust estimates of risk.

Providing a better understanding of flood risk is our business

We are a hazard modelling team providing analytics from the scientific forefront of flood risk research. Our products and expertise are targeted to meet the needs of clients across the insurance, engineering, resource development and aid sectors.

We are currently collaborating with clients across a wide range of industries. Each of our clients have specific problems that need addressing from large insurers looking to analyse their risk across a large territory, to an NGO or government looking to assess flood risk from the national to local scale.

All of our methods have been developed in-house providing us with a unique level of flexibility to meet these demands. As a result, we are currently engaged in numerous projects, from national scale flood risk assessment for insurers and NGOs, to local scale engineering solutions.

Our team was formed out of a world leading university research department in the field of modelling flood risk. We aim to utilize the unique skill set of our team to provide cost effective flood risk tools. Our extensive background in developing and testing hydraulic models has enabled us to build robust and transparent flood risk products. Our products are based on methods that have been critically tested and refined through academic peer review over the last decade. It is our goal to make our tools as accessible as possible, allowing our data to applied by a wide range of users.

Staff involved:

- Dr. Mark Trigg
- Dr. Christopher Sampson
- Dr Andrew Smith
- Dr Jeffery Neal

Envirosense

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The main objective of EnviroSense is to facilitate responsible management and sustainable use of natural resources. Its main functions are Project Management, Natural Resources Management, Socio-environmental Research and Education and Remote Sensing and Geographical Information Analysis. The services offered can be applied to many different fields requiring sustainable solutions. These fields can range from forest management, environmental monitoring, cadastral boundaries and land administration, to nature vs. business developments. Services are based on geographical and remote sensing data acquisition and/or development, management, and analysis. For instance: Environmental Impact Assessment (EIA), natural resources degradation analysis, land use mapping and planning, updating of land administration GIS systems, creation of maps, map layouts and map catalogues, and validation and quality assessment of related products.

EnviroSense in its role as Science and Methodology Coordinator has worked on the program Environmental Security for Poverty Alleviation by the Institute for Environmental Security, The Hague, The Netherlands. One of the main objectives of the program was to develop a methodology to identify environmental security hot spots around the world and prevent potential conflict by applying the integrated approach. (For more information refer to http://www.envirosecurity.org). Another activity is building in house capacity for GIS/Remote Sensing usage and natural resource management by developing and teaching exercise material. For instance, co-developing GIS exercises for the educational package “GIS for poverty mapping and poverty alleviation” for the in EU Asia-Link Program. The exercises were made for four higher education institutions in Europe and Asia. EnviroSense has participated in a first of its kind backstopping project with the ITC to develop a long term Strategy and Action Plan for the national remote sensing and geographical information system (GIS) center, LIC, Land and Surveys Department, Ministry of Natural Resources and the Environment, Belize. This work entailed organizing and carrying out stakeholder workshop and interviews; institutional profiling and adaptation of best practices to local situation; development of a communication strategy to facilitate transparency and improve trust among stakeholders; and the actual long term strategy and action plans.

Staff:

- Jeanna Hyde-Hecker

Further support was given by:

GeoMapa

GeoMapa is a company, with long standing professional experiences in the International Cartographic world. Geomapa provides custom mapmaking services for print and electronic publishing. It is specialized in custom map design and production capabilities to create maps and information graphics for tourist maps, travel guides, textbooks, atlases, magazines, CD-ROMs, web sites, and other media.

- Dr. Ing. Koert Sijmons is the owner of the company. He is an international award winning cartographer, educated in Switzerland and Germany, with more than 40 years of Cartographic experiences in a great number of countries. The last 30 years, he worked as an Associative Professor in Cartography at the ITC (International Institute for Geo-Information Science and Earth Observation) in Enschede, The Netherlands.

Diana Chavarro-Rincon

Diana Chavarro-Rincon is an independent consultant in Water Management and RS/GIS. In the CHARIM project she contributed to the development of the super use case In St. Lucia.

Diana Chavarro-Rincon

Link to:

- **The Charim results and downloads**
- **Data and maps of Belize**
- **Data and maps of Dominica**
- **Data and maps of Saint Lucia**
- **Data and maps of Saint Vincent and the Grenadines**
- **Data and maps of Grenada**

Source URL: http://charim.net/consortium