



CORFU Collaborative research on flood resilience in urban areas











Outline





- Background
- Project aim
- Time frame
- Project Initiation
- Management
- Partners
- Work packages
- Working in the Consortium
- Case studies
- Contact











Background



- Funded by the European Commission
- Framework Programme 7 Environment
- Theme: Natural Hazards
- Duration: Four years
- Budget: € 3.5m
- Target non-EU countries: China, India & Bangladesh











Aims





- Joint research between European and Asian institutions
- Scientifically sound management of the consequences of future urban flooding
- Assess flood impacts and possible responses by envisaging different scenarios of relevant drivers
- Quantify the cost-effectiveness of resilience measures











Time frame





• Start: 1 April 2010

• Finish: 31 March 2014

CORFU conference in Sep 2013











Project Initiation





- Approached by colleagues in EU countries
- Development of work packages
 - Through emails
 - Project proposal meeting at Exeter (EU project leader)
 - Attended in December 2008, submitted March 2009
 - Time between project development and submission
 - 3-4 months











Work packages





- WP0: Synergies and governance
- WP1: Drivers
- WP2: Urban flood modelling
- WP3: Impact assessment
- WP4: Flood management strategies
- WP5: Dissemination
- WP6: Coordination and management











Management





- Coordinating institution: University of Exeter
- Project coordinator: Slobodan Djordjević
- WP1 leader: TUHH (Stefan Kurzbach)
- WP2 leader: DHI (Ole Mark)
- WP0, WP3, WP5 and WP6 leader: UNEXE (Slobodan Djordjević and David Butler)
- WP4 leader: UNS (Philippe Gourbesville)
- Scientific Project Committee











Partners













































Working in the consortium





- More than 15 partners and 6 case study countries
 - Provided good collaboration opportunities for interaction and working with multi-national countries
- Reporting
 - First report in due in September (18 months) working on it
 - Review workshop in Denmark 7-9 November 2011
- Financial Aspects
 - EU organizations have dedicated staff to look after project and fund management since they have several EU projects; But here, staff are used to DST norms and they need to be made aware of EU norms as they are very much different from DST norms
 - Loss in exchange rates, amount needs to be frozen in INR











Working in the consortium



- Each city has organized a workshop
- We also organized a workshop at IIT Bombay as part of the project in February 2011.
- Attended by WP leaders and other team members
- (not all are required to attend!)
- Partners from Seoul and Taipei joined on their own without any financial commitment from EU as they found project of interest











Case study cities

















WP0: Synergies and governance



 Establishing and maintaining links with major recently completed and ongoing national and international flooding-related research projects











WP1: Drivers





- Relevant economic, societal, climatic and other natural factors which control urban growth
- Development of drivers-pressures-state-impactresponse (DPSIR) logical framework
- A computer model for spatially based urban growth
- Case studies to develop projections of climate change











WP2: Urban flood modelling





- Consistent framework for analysis of flood risks on different urban scales
- Consistent procedures for calibration of urban flood models
- Influence of the uncertainty of model inputs on urban flood modelling results
- Open GIS-based flood risk mapping tool
- Impacts of urban growth and climate change on flood probability
- Effectiveness of individual mitigation measures
- State-of-the-art real-time urban flood forecast











WP3: Impact assessment





- Damage assessment approaches and models
- Health impact assessment methodologies
- Application to estimate potential flood damage in case study cities based on drivers analyzed in WP1 and modelling results in WP2
- Efficiency of adaptive management strategies
- Better understanding of the interrelationship between risk perception, level of preparedness and actual risk











WP4: Flood management strategies



- Existing flood risk management practices established in Europe and Asia
- Possibilities of adaptation for the urban fabric, institutional and social systems
- Case studies
- Good practice guidance able to integrate the outputs from WP1, WP2 and WP3
- Experiment with new tools
- Guidance on flood risk management for urban planners











WP5: Dissemination



- Dissemination of new methodologies
- Workshops
- Engendering a 'flood resilience' culture
- Engagement of policy makers
- CORFU Conference (Sep 2013)











WP6: Coordination & management



- Co-ordination of the project within a robust organisational framework
- Supporting collaboration, overseeing science and society issues
- Ensuring the financial viability
- Ensuring good internal and external communication











Contact in India



Project website: www.corfu7.eu

Prof Kapil Gupta

Department of Civil Engineering

IIT Bombay

Mumbai 400 076

kgupta@civil.iitb.ac.in







