



ISLAND

Information System for Local Authorities Needs to face Disaster

5th Annual Mekong Flood Forum
17-18 May 2007 – Ho Chi Minh City



OSIRIS UE project (2000-03) First AsiaT&C « get in touch » (2002-03)



- **FP5 – IST - SOGREAH**
- **improving flood risk management tools with ICT**
- **3 pilote sites : France – Germany – Poland**
- **Field surveys → ICT tools : flood crisis preparation and management**

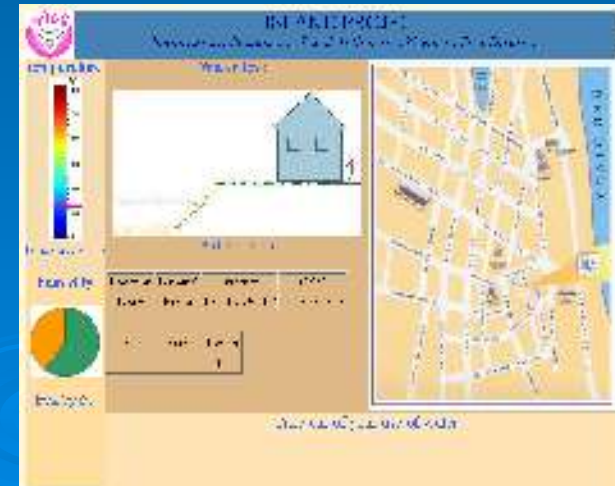
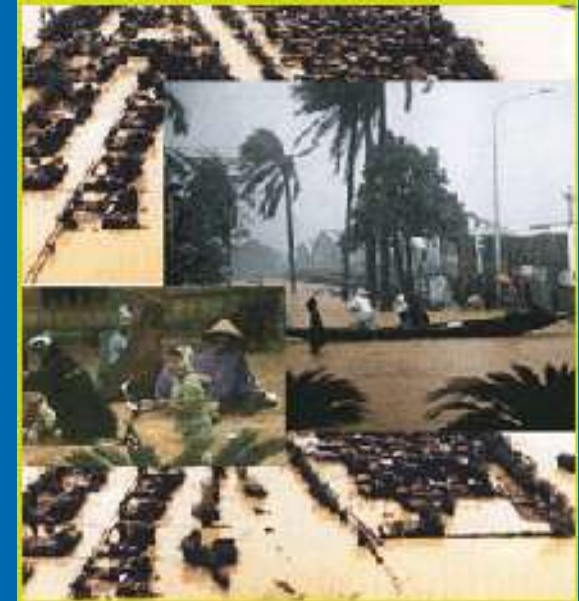
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- **Scientific exchanges between European and Asian partners on flood risks (ISTED - J. Brunot de Rouvre)**

= ISLAND

- **« Information Systems for Local Authorities Needs to face Disasters »** : a community-based disaster preparedness approach
- **Initial objective** : adapting OSIRIS methods & tools to the Mekong & Red-river contexts (South-East Asia)
 - **In Vietnam, Cambodia, Lao PDR**
- **Proposal approved by EU in 2003** :
 - Europaid – ASIA-IT&C program
 - Budget = 0,5 M euros (80% funding)
 - November 2004 – May 2007



EUROPE

- ISTED (coordinator)
Paris
- SOGREAH Grenoble
- CETMEF Compiègne
- CNR Lyon
- TNO/NITG Utrecht
- GRET Paris Hanoi
Phnom Penh

ASIA

- MRC Vientiane
- MARD Hanoi
- MOWRAM
Phnom Penh
- LNMC Vientiane
- MICA Hanoi

- **To listen to the needs of vulnerable communities**, helping them to make their own risk and vulnerability assessment
- **To develop and provide access to adapted communication and information tools** allowing their ownership by local communities
- **To convey reliable and understandable messages from national and international sources** about all relevant information needed for a sustainable development of the communities

- **Step 1 (11/04 – 03/05)** : preparation and workshops in Asia
- **Step 2 (04/05 – 11/05)** : field surveys in Asian sites and needs assessment
- **Step 3 (12/05 – 01/07)** : specification & devtpt of ICT tools
- **Step 4 (02/07 – 05/07)** : implementation, test, evaluation, final seminar, dissemination



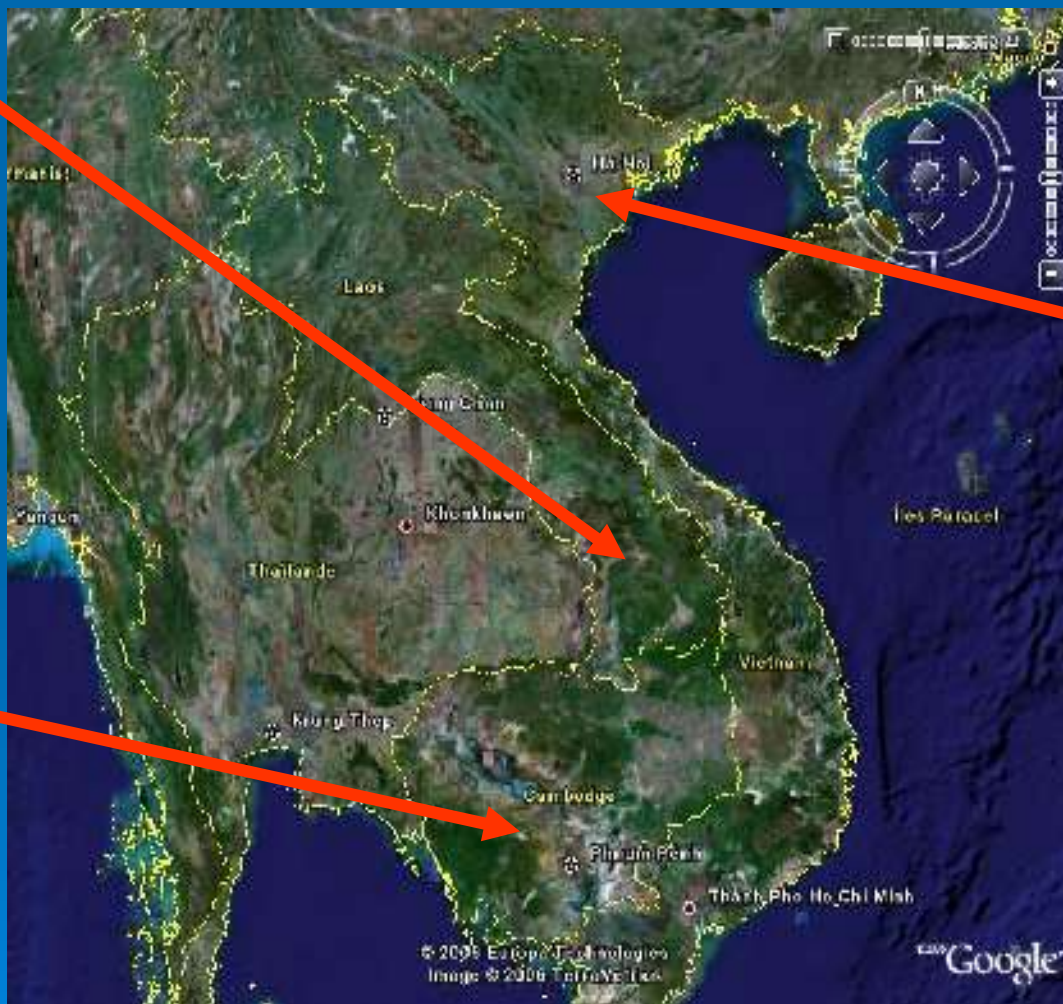
ISLAND pilote sites



Lao PDR
Mekong
Champassak
district
LNMC



Cambodia
Mekong
Prey Veng pr.
Peam Ro dist.
MOWRM

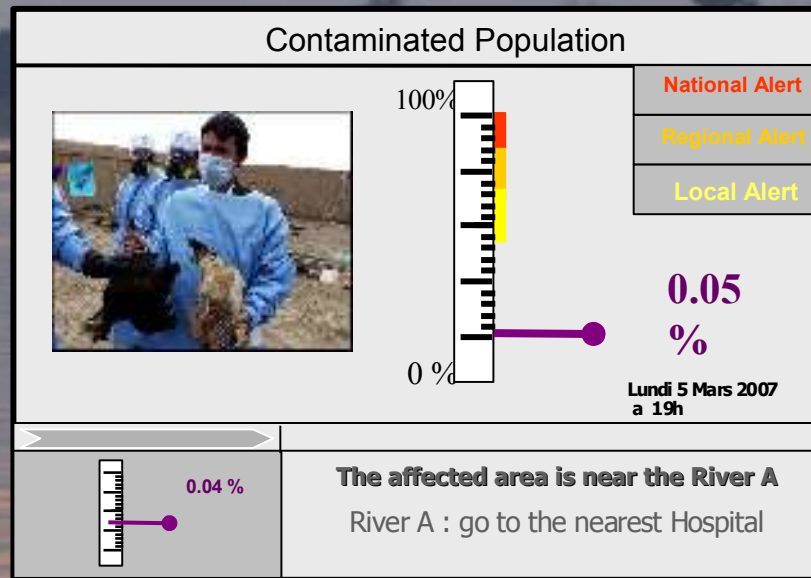


Vietnam
Red River
Delta
Hai Dong pr.
Tu Ky dist.
MARD

Flood issue is common to the three pilot countries but the same **information system** can convey different sorts of information and the rural communities are not only concerned by flood early warning

Urgent information can be also needed about:

- Fast floods and landslides causing roads to be blocked
- Pollution outbreak due to industrial leakage or hazard
- Risk of epidemic outbreak such as bird flu or s.a.r.s. cases
- Uncontrolled forest fire needing evacuation, etc



Local visits and surveys in districts and villages (2005)



Conclusions of surveys Orientation of ICT tools

- **The future system should :**
 - improve « top-down » transmission of information (ex : water levels forecast, climatic indices, alert levels ...), using Internet or/and GSM
 - enhance this general data with local knowledge (ex : maps of inundated sectors, impact on local activities, advice ..)
 - Enable “bottom-up” communication : monitoring and reporting local situation to upper levels for intervention
- **A communication system must be used daily by the community to be viable : other messages than alert are needed**
- **A multi-risk management system must be based on a range of sources of information**
- **The system must deliver messages in an easily accessible format for the population (visual, audio ...)**

Presentation of the ISLAND demonstrator

Sébastien Després

MICA (research center of the Hanoi University
of Technology)

Implementation and tests in pilot sites



VIETNAM

Prototype set up and test in
HaiDuong province and TuKy district

LAO PDR
Training of local staff with ICT
In Champassak district



Conclusions & perspectives

- An innovative ICT framework for communication on risks to local actors has been developed, adapted to the regional needs and constraints and experimented in pilot sites
- **ISLAND system presents a great potential but needs further developments :**
 - 1 – to better adapt to each local needs and take into account local feedback : bottom-up communication, SMS messages ...
 - 2 – to integrate various information useful for local actors and population : pollution, healthcare, crops ...
 - 3 – to become fully operational and sustainable, involving local actors with training and integrating existing programs (MRC, Red Cross, ADPC ...)
- **... open to proposals and partnership ...**

