



4TH World Water Forum

March 21, 2006

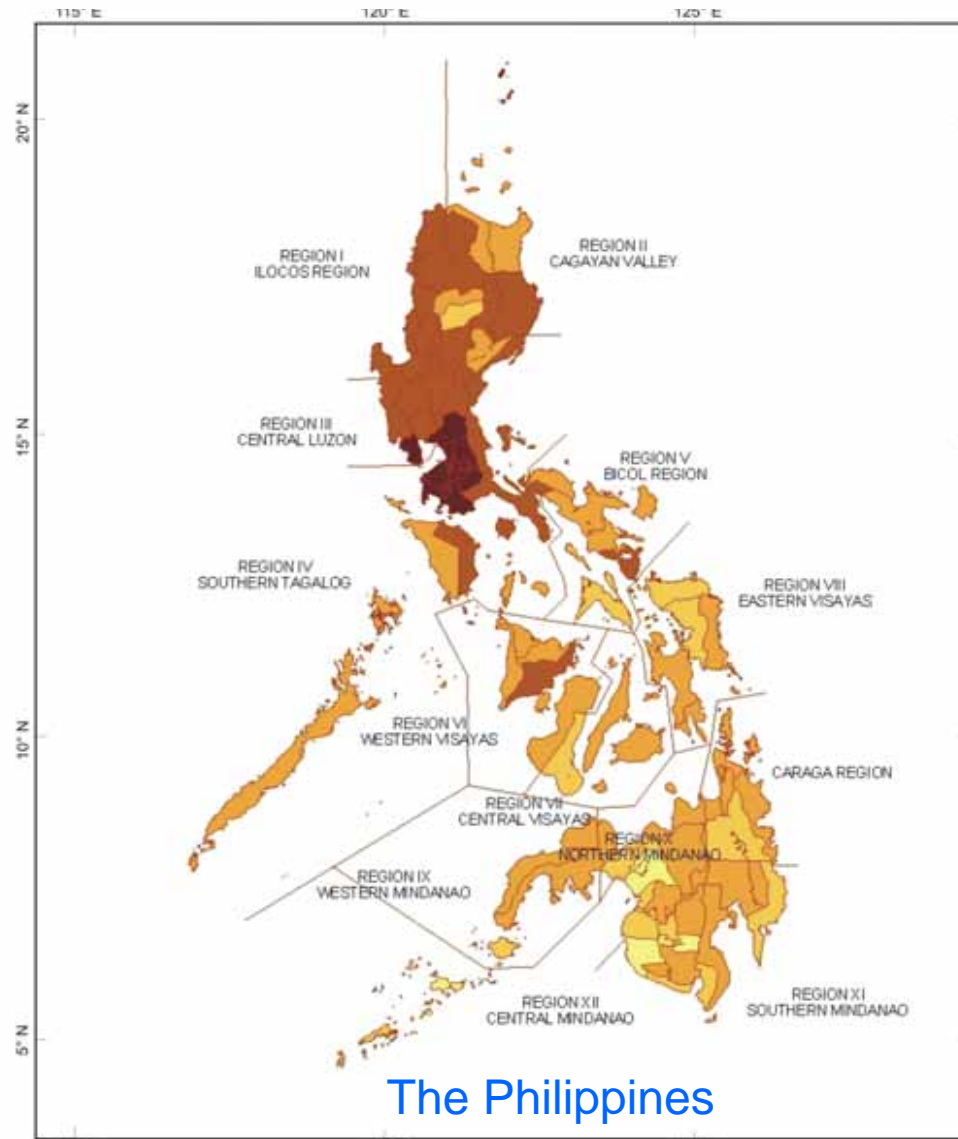
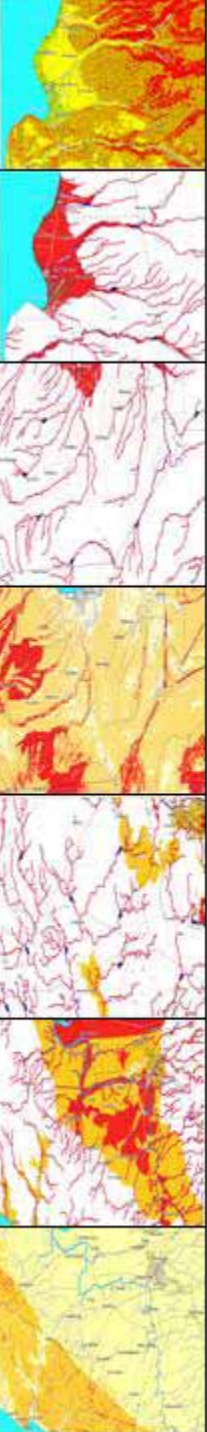
Mexico City

Making A Difference in Managing Water-Related Disaster Through Survey and Assessment

By

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Overview:

- Philippines is highly vulnerable to natural hazards due to its geographic location (earthquake, volcanic eruption)
- Climatic variability (tropical cyclones)
- Ranked 3rd in terms of number of people exposed to natural disasters



Overview:

- As a tropical country, it receives more than 2,000 mm of rainfall annually
- Often visited by typhoons (about 20 typhoons annually)
- A considerable part of the country is subject to extreme rainfall condition that often trigger flashflood and landslide
- Perennial flooding problem
- Landslide in Panaon Island in 2003



Hazard Mapping & Assessment Study

- Carried out in 2004 -2005, the study was intended to do hazard mapping and assessment in order to produce hazard maps to help in risk and disaster management
- Covered 9 pilot areas



Objectives:

- To provide data and information on hazards to help policy makers and planners address disaster management and risk mitigation
- To help local community understand and cope with hazards (geologic and water-related)



Hazard Assessment & Mapping Study

- To help develop mitigation scheme for geologic and water related-hazards
- To generate information on the susceptibility of certain part of the country to certain hazards (flooding and landslide)
- To help develop action plans to better prepare local communities cope with water related disasters and hazards



Hazard Assessment & Mapping Study

- Mines and Geosciences Bureau (MGB) under the Department of Environment and Natural Resources (DENR)
- With funding from UNDP



The Major Components:

- Hazard survey, assessment and mapping component (technical aspect)
- Information, education and communication/advocacy component (social aspect)



The Project Approach:

For the preparation of 1:50,000 maps:

- Compilation of existing/available data (old maps and other relevant information)
- Conversion to digital format
- GIS analysis



The Project Approach:

For the preparation of 1:10,000 maps:

- Interpretation of aerial photo/images
- Conduct of detailed field survey and mapping (flood survey and landslide inventory)
- GIS analysis



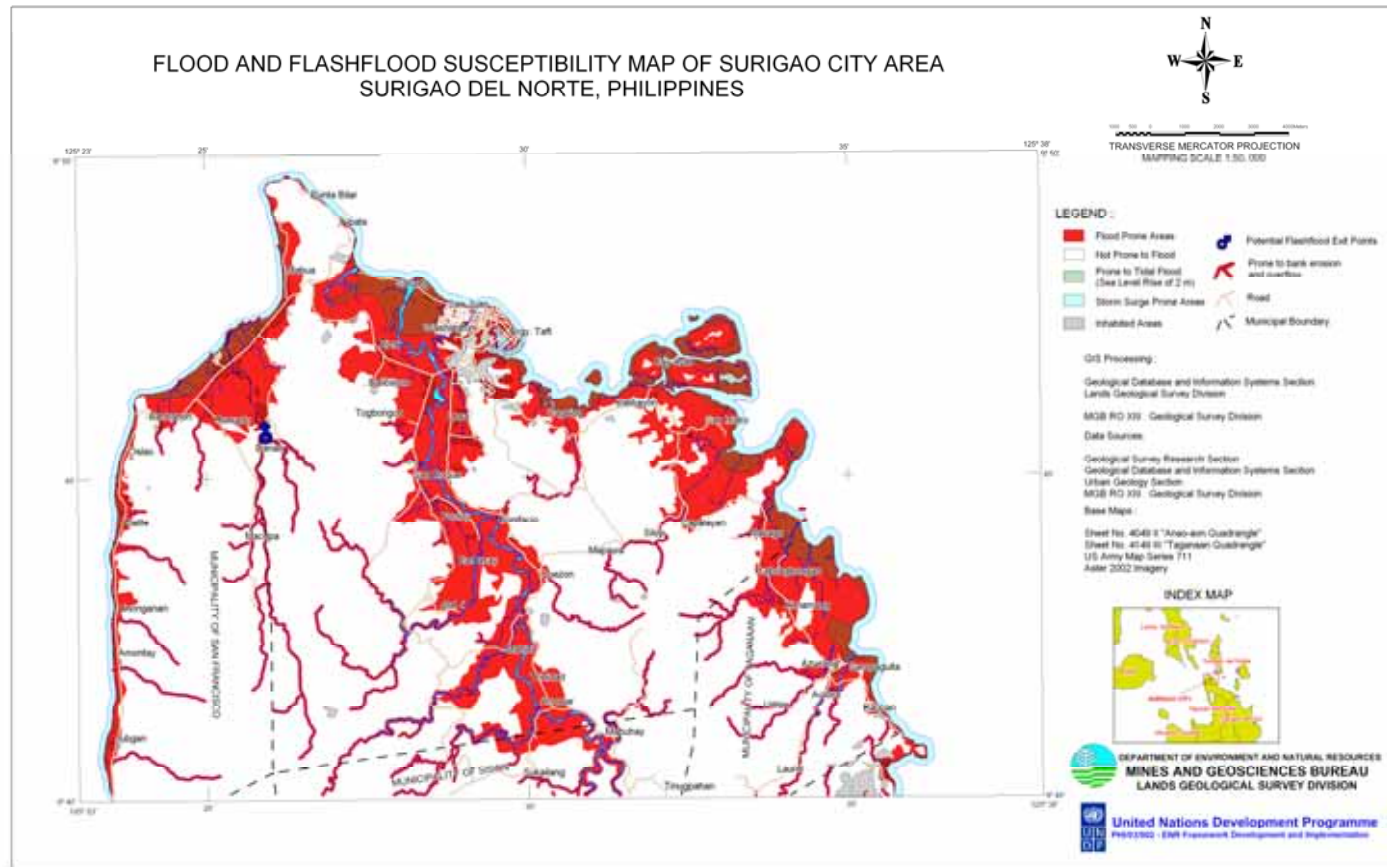
The Project Outputs:

A. Hazard Maps focusing on landslide and flooding susceptibility

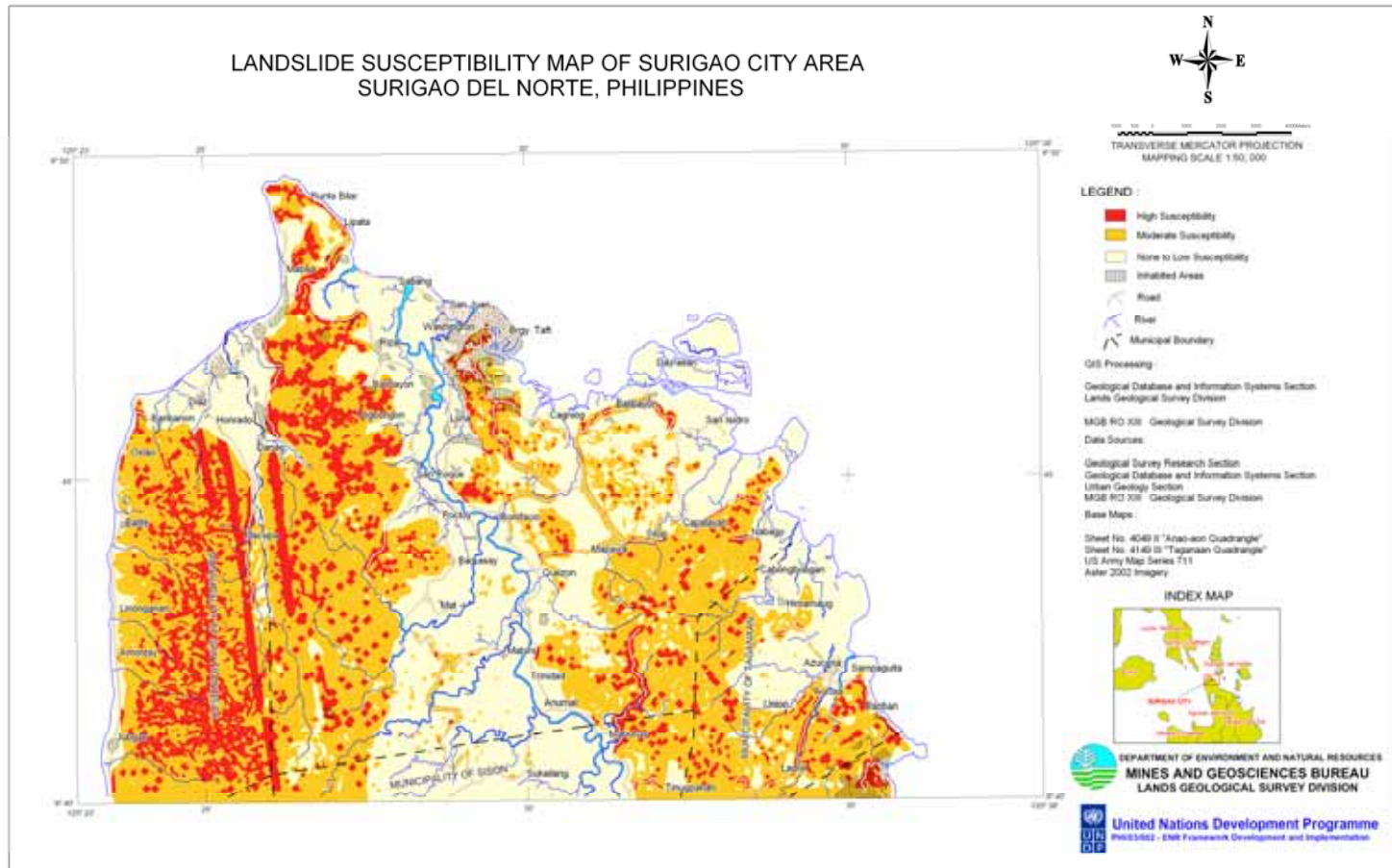
- 1:50,000 scale
- 1:10,000 scale

B. Information/advocacy materials and training of local community members

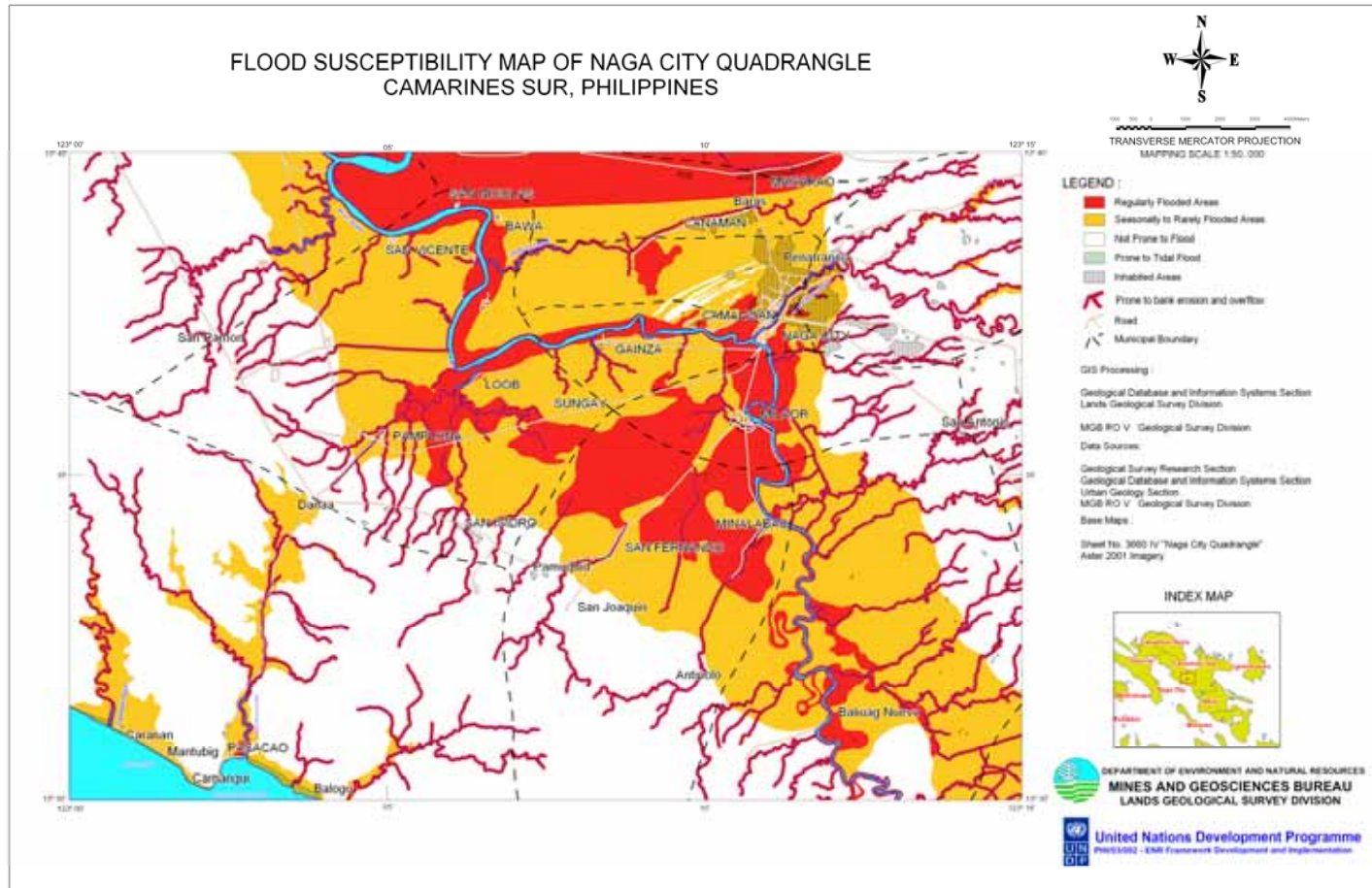
Examples of maps produced



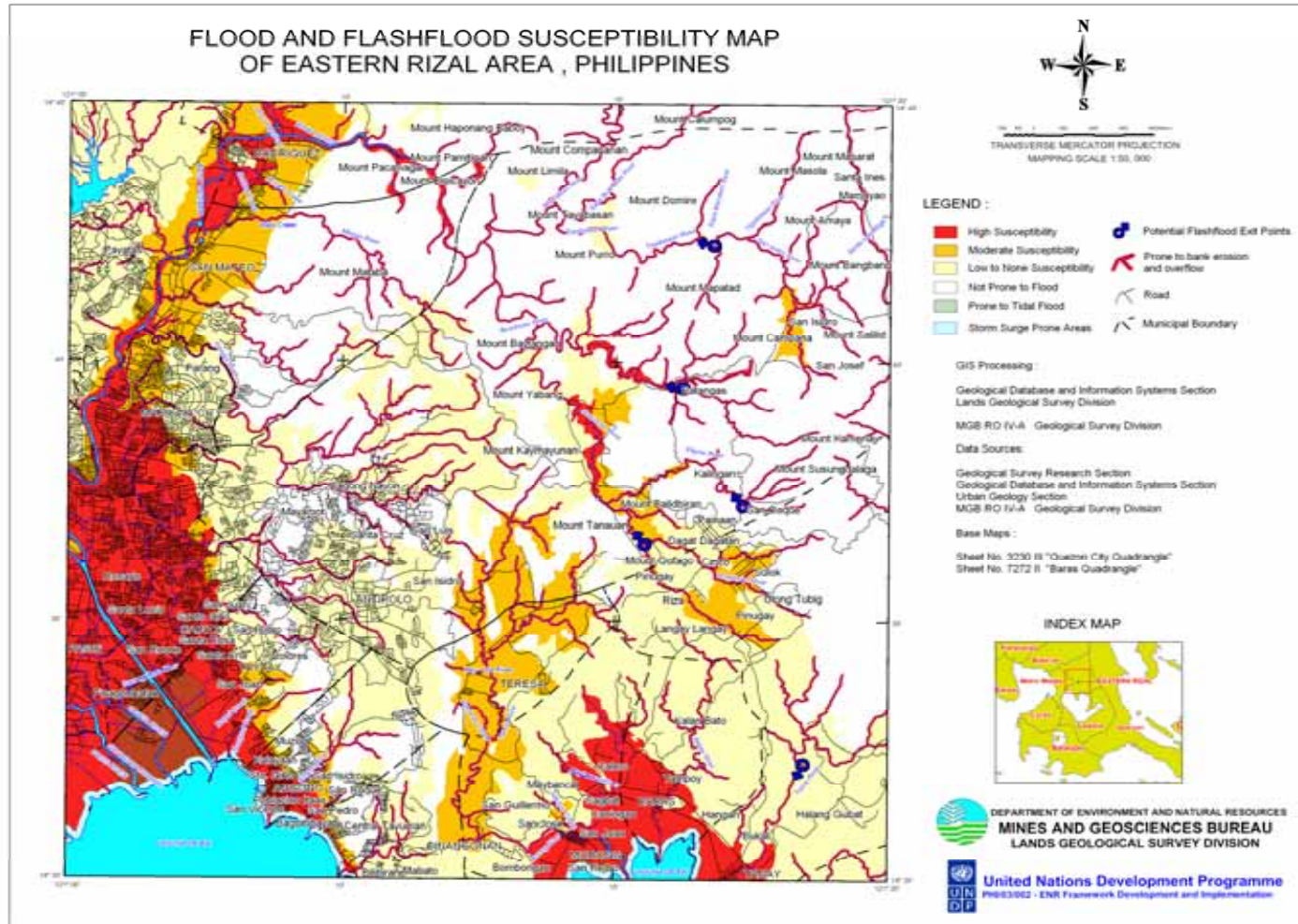
Examples of maps produced



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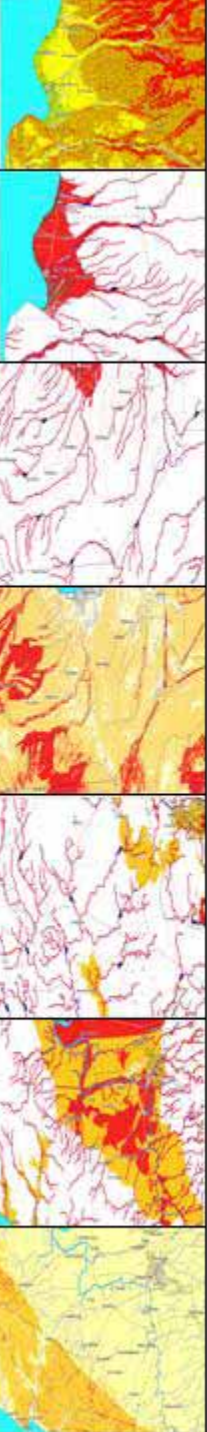
Uses of the Maps Produced:

- For development planning, in particular, land use planning and zoning (basis for zoning areas)
- Input to the preparation of a national and local disaster management plan
- To educate and train local communities on coping with water-related disaster and risk



Current Initiatives of the Government:

- Continuation of assessment and mapping of other areas in the country (Eastern sea board portion)
- Preparation of hazard maps
- Intensive advocacy campaign at the local government and community levels



THANK YOU