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NATURAL DISASTER REDUCTION: ECONOMIC ASPECTS OF DISASTER REDUCTION FOR SUSTAINABLE DEVELOPMENT

## Technical session

### Programme

The technical session on the economic aspects of disaster reduction for sustainable development has been organized by the World Bank and the National Academy of Sciences, United States of America.

#### Summary

Natural disasters threaten sustainable economic development worldwide throughout the world and represent a considerable challenge for the global community. Developing countries suffer the most in terms of human lives lost, critical human resources diminished, and economic losses as percentage of gross national product. Economic losses have increased at least five-fold since the 1960s, owing largely to the increasing concentration of populations and investments in vulnerable locations and inadequate investment in measures to reduce risk. Losses in the industrialized countries are also on the rise. In the United States of America, for example, insurance payouts from natural disasters since 1990 have already more than quadruplied those accumulated for all of the 1980s, which quadruplied those of the previous decade.

Sustainable economic development is impossible to achieve if the international community in general, and each country in particular, cannot protect development gains and invest in the future. Before a disaster, societies cope with potential economic losses in two principal ways: through (a) taking into account disaster risk in investment decisions, and (b) sharing the risks and costs through insurance arrangements.

<sup>\*</sup> A/CONF.172/1.

This technical session will bring together experts to provide an overview of the economics of disaster reduction for sustainable development, discuss the primary issues and state of knowledge and experience in those two areas (decision-making for investments and insurance arrangements), and identify opportunities and recommend directions for the remainder of the International Decade for Natural Disaster Reduction to decision-makers in the private and public sectors.

### Output

A publication will be produced from the session, which will include the resource papers and case studies, summary of the panel presentations and general discussion held in Yokohama, as well as recommendations for decision-makers for the remainder of the Decade.

### Format of the session

Each of the three panels described below will be convened for approximately one hour. Resource papers will have been prepared for each panel and discussion and comment will be emphasized.

<u>Panel I: Overview introduction</u>. The implications for sustainable development of natural disaster losses, with emphasis on the economic aspects, will introduce the session.

Impact of natural disasters on national economies and the implications for the international development and disaster communities

Presentation by Mr. Romula Caballeros and Mr. Ricardo Zapata-Marti of the Economic Commission for Latin America and the Caribbean, Mexico.

Context of disasters and sustainable development: the case of a growing city  $\underline{\text{in a developing country}}$   $\underline{1}/$ 

Presentation by Mr. Atiq Rahman, Bangladesh Centre for Advanced Studies, Bangladesh.

Presentation by Mr. Thomas Odhiambo, International Centre of Insect Physiology and Ecology, Kenya

# Panel comment and general discussion

<u>Panel II: Decision-making to reduce the potential losses in development investments</u>. For investment decisions to take into account disasters, risk considerations have to be included in economic analyses. Techniques and models available for evaluating disaster vulnerability, and for determining the benefits, costs and effectiveness of migration options, will be discussed.

<u>Disaster vulnerability and sustainable development: a general framework for assessing vulnerability 1</u>/

Presentation by Ms. Mary Anderson, Collaborative for Development Action, United States of America  $\underline{2}/$ 

Advantages and limitations of benefit-cost analysis for evaluating investments in mitigation 1/

Presentation by Mr. Randall A. Kramer, Duke University, United States of America

<u>Diaster-related activities of the Asian Development Bank: an economic perspective</u>

Presentation by Mr. Gunter Hecker, Asian Development Bank, Philippines

Panel comment and general discussion

<u>Panel III: Sharing the risks and costs through insurance arrangements</u>. Societies are facing increasing financial losses due to natural disasters and have responded by adopting different approaches to underwriting of risks. Some of the central issues that the insurance industry and national Governments face will be discussed. Different national experience in insurance will be discussed and recommendations for the future offered.

Role of insurance in reducing losses from natural disasters 1/

Presentation by Mr. Howard Kunreuther, University of Pennsylvania, United States of America  $\underline{2}/$ 

#### Country experiences

Italy Mr. Fabio Fegitz, Unione Italiana de

Riassicurazione

Japan To be announced

United States of America Mr. Frank Nutter, Reinsurance Association

of America 2/

Caribbean To be announced South West Pacific To be announced

Panel comment and general discussion

<u>Notes</u>

- 1/ Resource paper.
- 2/ Not attending the session; a paper will be presented.

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