

National Experience on Tools/Approaches on Disaster Risk Reduction and Climate Change Adaptation: The Philippines Experience

Dr. Jacob Tio

*UNFCCC Workshop on the identification of gaps and challenges in the implementation of
risk management approaches to the adverse effects of climate change*

Lima, Peru

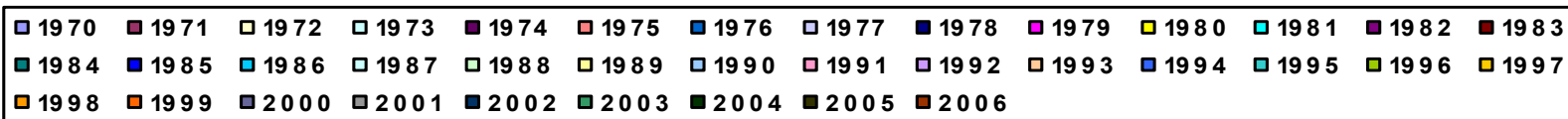
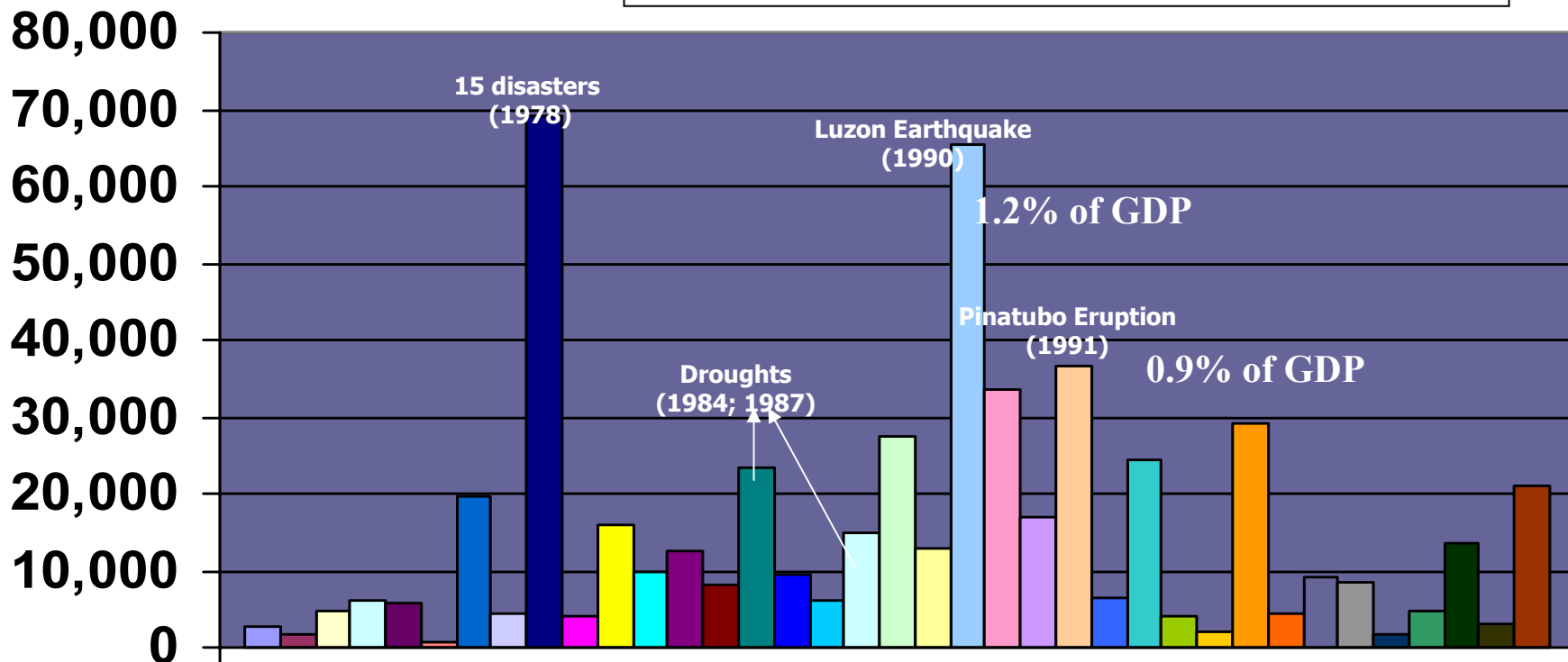
10 – 12 October 2011

Estimated Damage of Disasters

(In M PhP @ 2000 Prices)

On the average, annual **direct damage** is **P15 B**

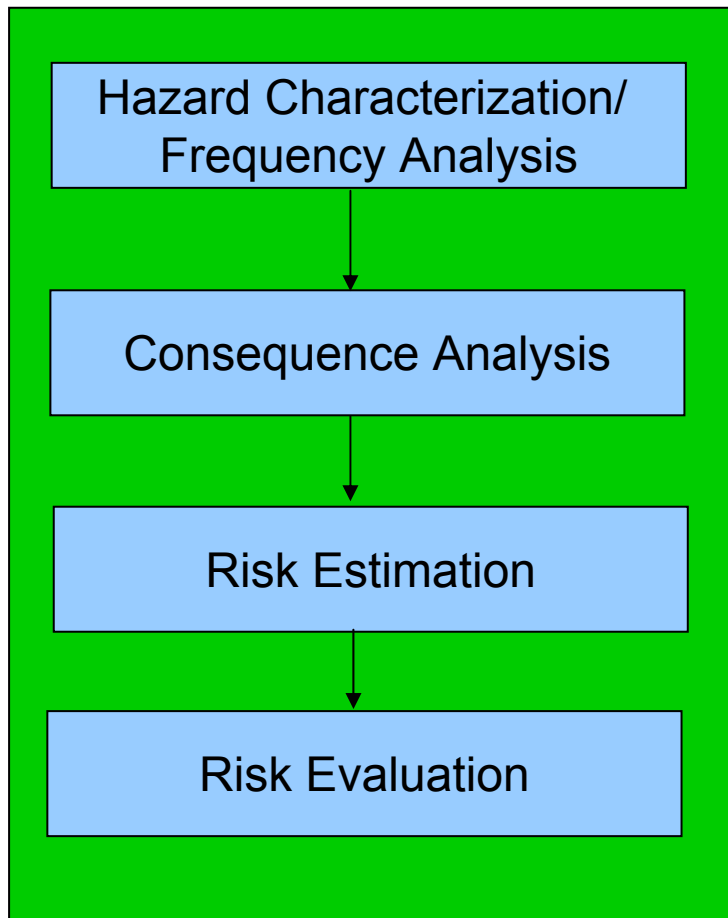
For typhoons, average of **0.5% of GDP every year**



Source:

NEDA

Disaster Risk Assessment Process (DRA)



involves identifying and characterizing the hazard(s) that threaten an area.



involves determining the consequences of these potential hazard(s) to exposed population and land uses



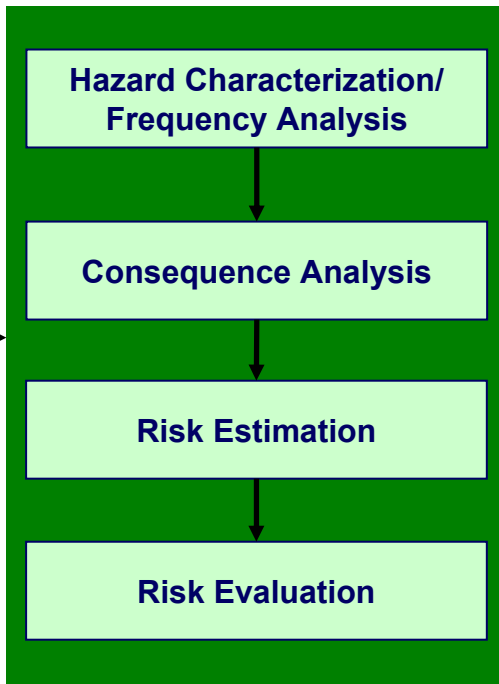
involves estimating the risk (annual basis) expressed as the expected annual number of lives lost, damage to property



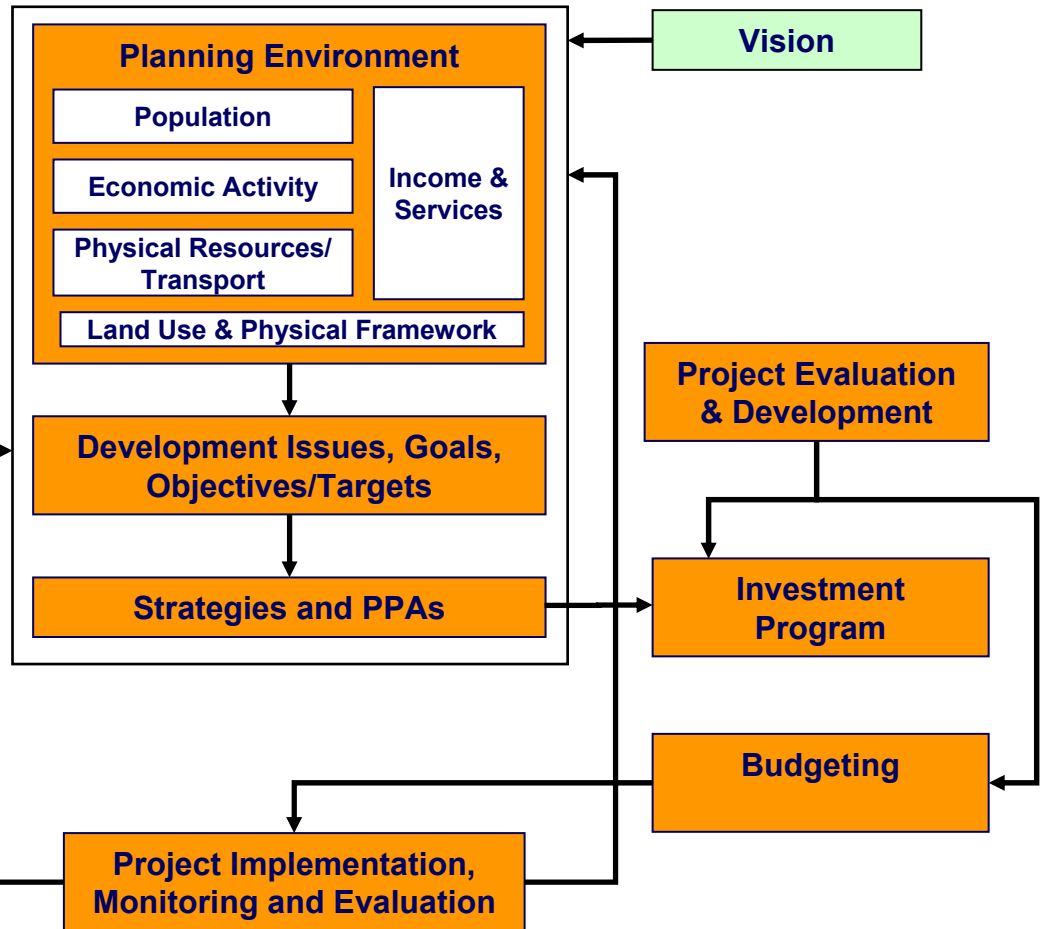
involves prioritizing areas by comparing the risk estimates to the acceptability criteria and assigned scores.

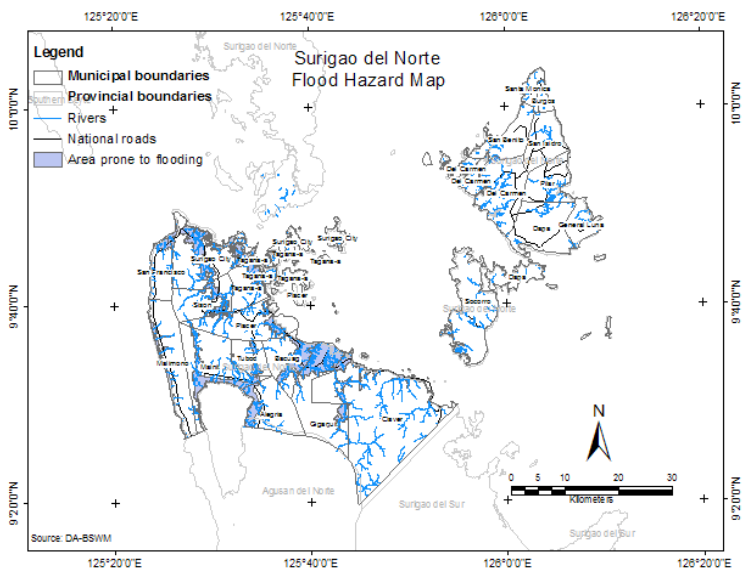
Mainstreaming Framework

Disaster Risk Assessment

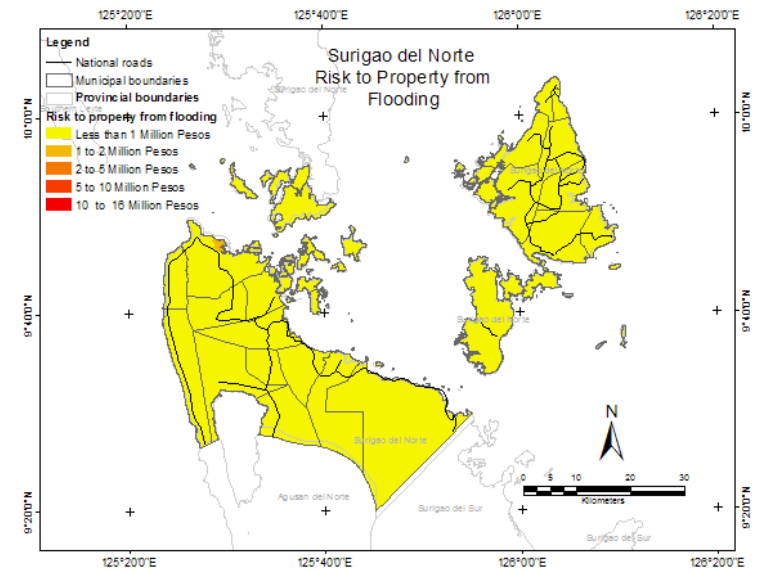
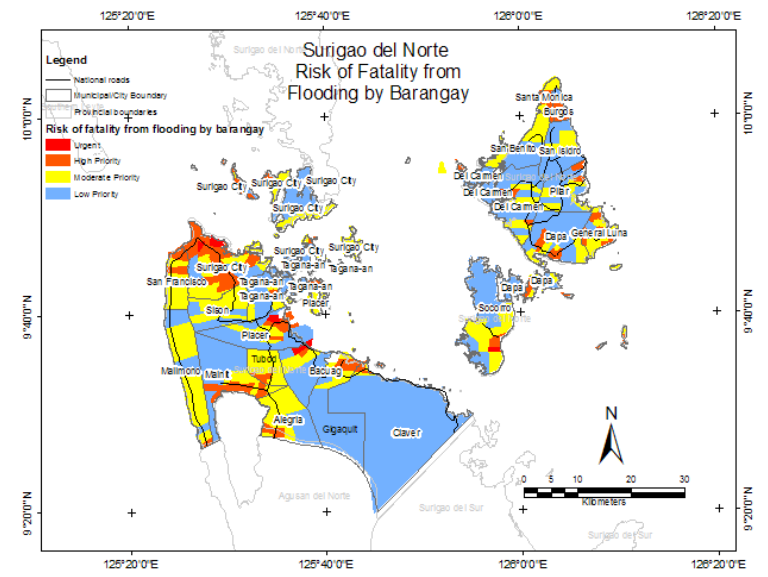


Development Planning

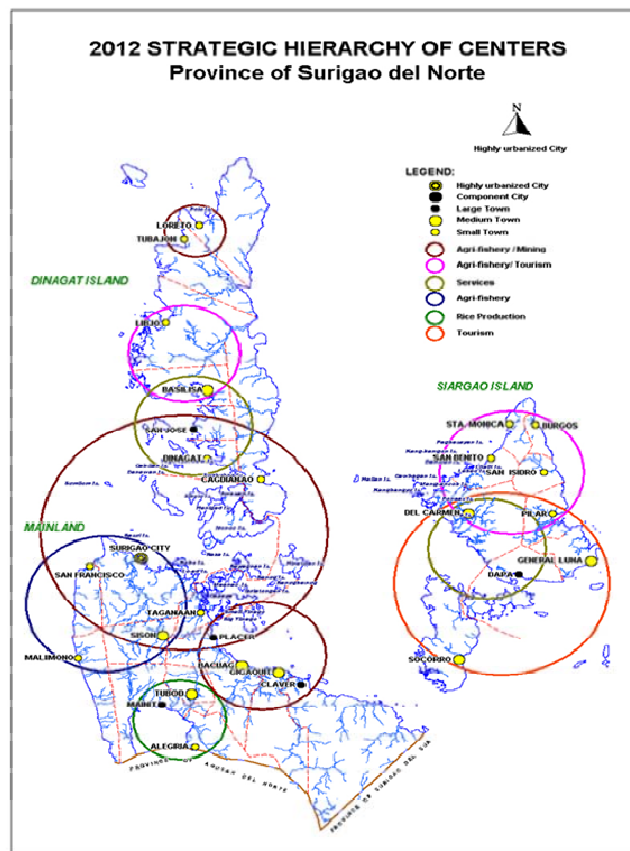
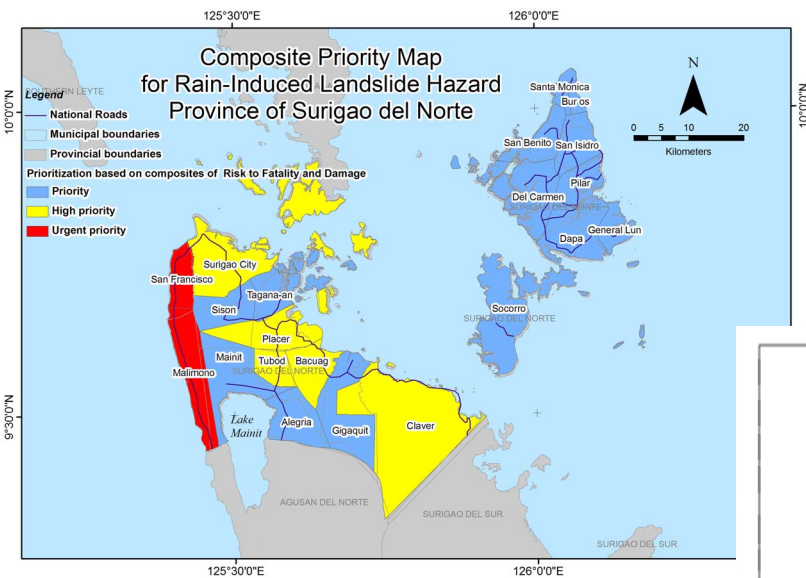




Hazard map



Risk maps



Planning Considerations

Given the risks, what changes may be made in the physical framework plan

- Rethinking roles/functions of settlement clusters
- Alteration of service and facility requirements
- Ensuring functionalities and linkages within and among settlement clusters as well as with key development areas outside the province (i.e. viz. neighboring provinces, regional hierarchy, mindanao-wide, national system)
- Responding to socio-economic fragilities and improving resilience (specific vulnerable sectors, population groups)

Legend:

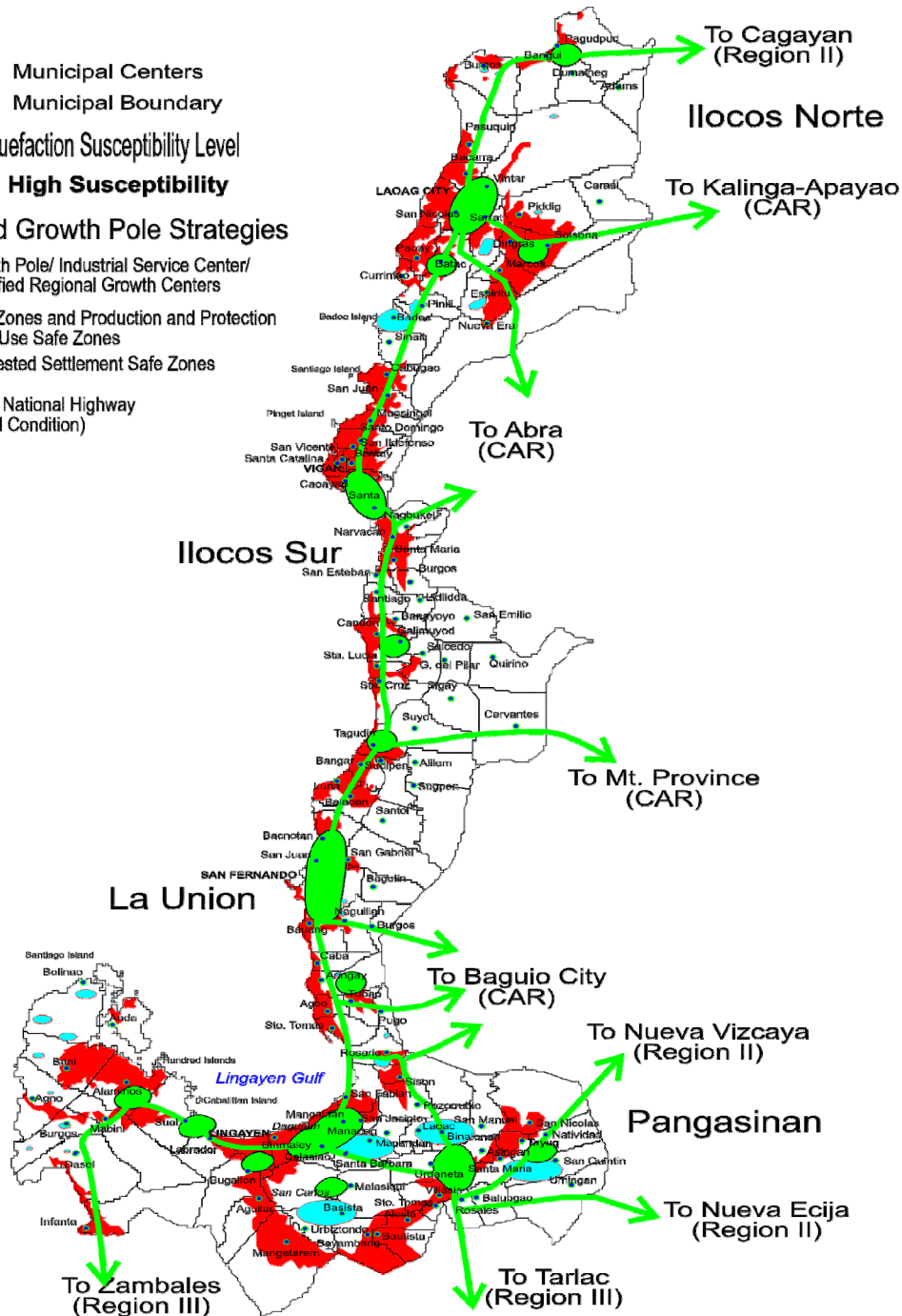
- Municipal Centers
- Municipal Boundary

Expected Liquefaction Susceptibility Level

- High Susceptibility

Preferred Growth Pole Strategies

- Growth Pole/ Industrial Service Center/ Identified Regional Growth Centers
- Safe Zones and Production and Protection Land Use Safe Zones
- Suggested Settlement Safe Zones
- Major National Highway (Good Condition)



Planning Considerations

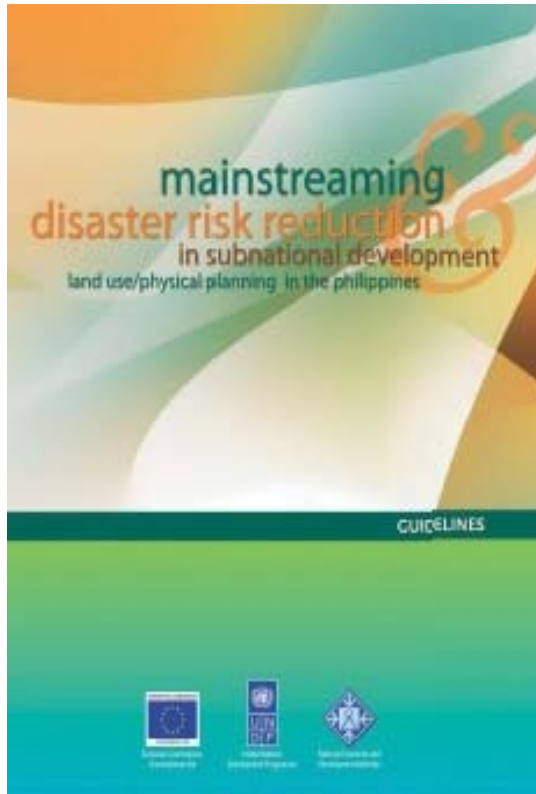
Test validity of key strategies given the risks identified:

- key settlements shall have major urban functions and roles ... dispersal of socio-economic activities to identified growth nodes ... emergence of new cities & urban areas
- Provide extra incentives to investments locating in preferred areas for agriculture, industrial and tourism
- Strengthen backward & forward linkages thru efficient physical & economic access between raw material source & processing areas and production & market access

Administrative Order No. 1

(17 September 2010)

Directing the local government units, particularly provinces, to adopt and use in their planning activities the guidelines on mainstreaming disaster risk reduction (DRR) in subnational development and land use/physical planning



www.neda.gov.ph

MALACANAN PALACE
MANILA

ADMINISTRATIVE ORDER NO. 1

DIRECTING THE LOCAL GOVERNMENT UNITS, PARTICULARLY PROVINCES, TO ADOPT AND USE IN THEIR PLANNING ACTIVITIES THE GUIDELINES ON MAINSTREAMING DISASTER RISK REDUCTION (DRR) IN SUBNATIONAL DEVELOPMENT AND LAND USE/PHYSICAL PLANNING

WHEREAS, the Philippines, due to its location and geographic landscape, is considered as one of the most disaster prone countries in the world, experiencing an average of four disasters per year or a total of 373 disaster events triggered by natural hazards from 1905 to 2006;

WHEREAS, development efforts are disrupted by natural hazards since budgets intended for pursuing planned development are diverted to finance disaster response, rehabilitation and reconstruction endeavors;

WHEREAS, the country's vulnerability to natural hazards will continue to hinder socioeconomic development unless practical solutions are done to avert or minimize the potential damage of said hazards;

WHEREAS, the Medium-Term Philippine Development Plan identifies disaster mitigation as a priority thrust and this will be achieved by, among others, the integration of a disaster management strategy in the development planning process at all levels of governance;

WHEREAS, the development plans that Local Government Units (LGUs), especially provinces, regularly prepare can be an effective tool to reduce the country's vulnerability to natural hazards;

WHEREAS, introducing natural hazard risk analysis in planning will strengthen the ability of provinces to identify areas at risk to natural disasters;

WHEREAS, the NEDA Board-National Land Use Committee (NB-NLUC) has recognized the importance of mainstreaming Disaster Risk Reduction (DRR) in subnational planning in line with its Disaster Risk Management (DRM) Action Agenda;

WHEREAS, the National Economic Development Authority (NEDA), in line with its plan and policy formulation mandate and in response to the NB-NLUC's DRM Action Agenda, has developed the Guidelines on Mainstreaming Disaster Risk Reduction in Subnational Development and Land Use/Physical Planning (DRR Guidelines);

WHEREAS, the use of the DRR Guidelines by the LGUs is expected to effectively integrate DRR in its planning and reduce or prevent adverse effects of disasters in socio-economic development;

NOW, THEREFORE, I, BENIGNO S. AQUINO III, President of the Republic of the Philippines, by virtue of the powers vested in me by law, do hereby order:

SECTION 1. The Local Government Units (LGUs), particularly provinces, are directed to adopt and use the DRR Guidelines to enhance natural disaster risk reduction efforts in the local development planning process. To the extent possible, the disaster risk assessment methodology introduced in the DRR Guidelines shall be followed to ensure proper siting of development undertakings and to enable the identification of areas at risk to natural disaster and the appropriate mitigation measures.

SECTION 2. The NEDA is directed to conduct capacity-building activities for planning offices at the local, regional and national levels towards the DRR Guidelines in the development usage of the process and to provide copies of the DRR Guidelines to the LGUs.

SECTION 3. All departments, agencies, bureaus and instrumentalities of the government are hereby directed to provide technical assistance as maybe necessary to support DRR-enhanced local planning.

SECTION 4. All executive issuances, rules and regulations or parts thereof, which are inconsistent with this Administrative Order are hereby repealed and/or modified accordingly.

SECTION 5. This Administrative Order shall take effect immediately.

DONE, in the City of Manila, this 17th day of September in the year of Our Lord, Two Thousand and Ten.

Office of the Director of the Philippines
PNOY000123

By the President:

PAQUITO N. OCHOA, JR.
Executive Secretary

Source: NEDA

Current initiatives

- ✓ **NEDA-UNDP-AusAID:** Integrating Disaster Risk Reduction and Climate Change Adaptation in Local Development Planning and Decision-making Processes (Integrating DRR/CCA Project).
- ✓ **NEDA-UNDP:** Millennium Development Goal Achievement Fund 1656: Strengthening the Philippines' Institutional Capacity to Adapt to Climate Change (MDG-F 1656 Programme)
- ✓ **UNDP-AusAID Project:** Enhancing Greater MetroManila's Institutional Capacities for Effective Disaster/Climate Risk Management towards Sustainable Development

Issues and Challenges

- **Access and availability of strategic knowledge**
 - ✓ Having access to relevant information and localizing it from the Philippine perspective
 - ✓ Creating a good data management and reporting system
 - ✓ Disseminating relevant information

Issues and Challenges

- **Capacity Development**

- ✓ The need for key stakeholders and institutions to formulate their respective DRR/CCA agenda to serve as a guide to effectively address disaster risks as well as climate change adaptation and mitigation
- ✓ The need for “relevant, timely and accessible data and information” is critical for the planning and implementation of DRR/CCA measures.
- ✓ The need to build knowledge and capacities of staff and officers of agencies on DRR as well as climate change adaptation and mitigation

Thank you!