



Government's Regulatory Body for Housing and Land Development

Housing and Land Use Regulatory Board

Mainstreaming Climate Change Adaptation (**CCA**) and Disaster Risk Reduction and Management (**DRRM**) in the Comprehensive Land Use Plans (**CLUPs**)


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Commissioner

Housing and Land Use Regulatory Board



Outline of Presentation

- The CLUP and its Elements
 - Overview of the Enhanced CLUP Guidebooks 2013
 - Mainstreaming CCA and DRRM in the Comprehensive Land Use Plan (CLUP)
 - Rationale, Role and Key Elements of CLUP in Building Climate & Disaster Resilient Communities
 - References on Tools and Techniques, Processes for Climate and Disaster Risk Assessment (CDRA) in the CLUP
 - Defining Policy Options for CCA and DRRM in the CLUP
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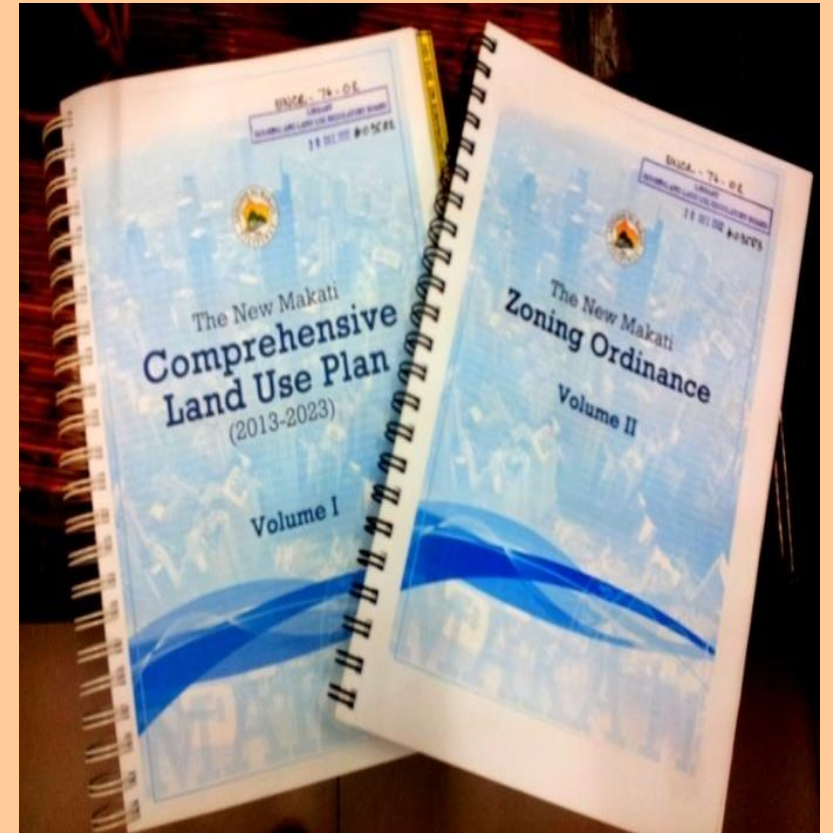
HLURB Planning Mandate



- Formulation of Land Use Planning Standards and Guidelines for the Guidance of Local Governments
- Review and ratify plans
- Technical Planning Assistance

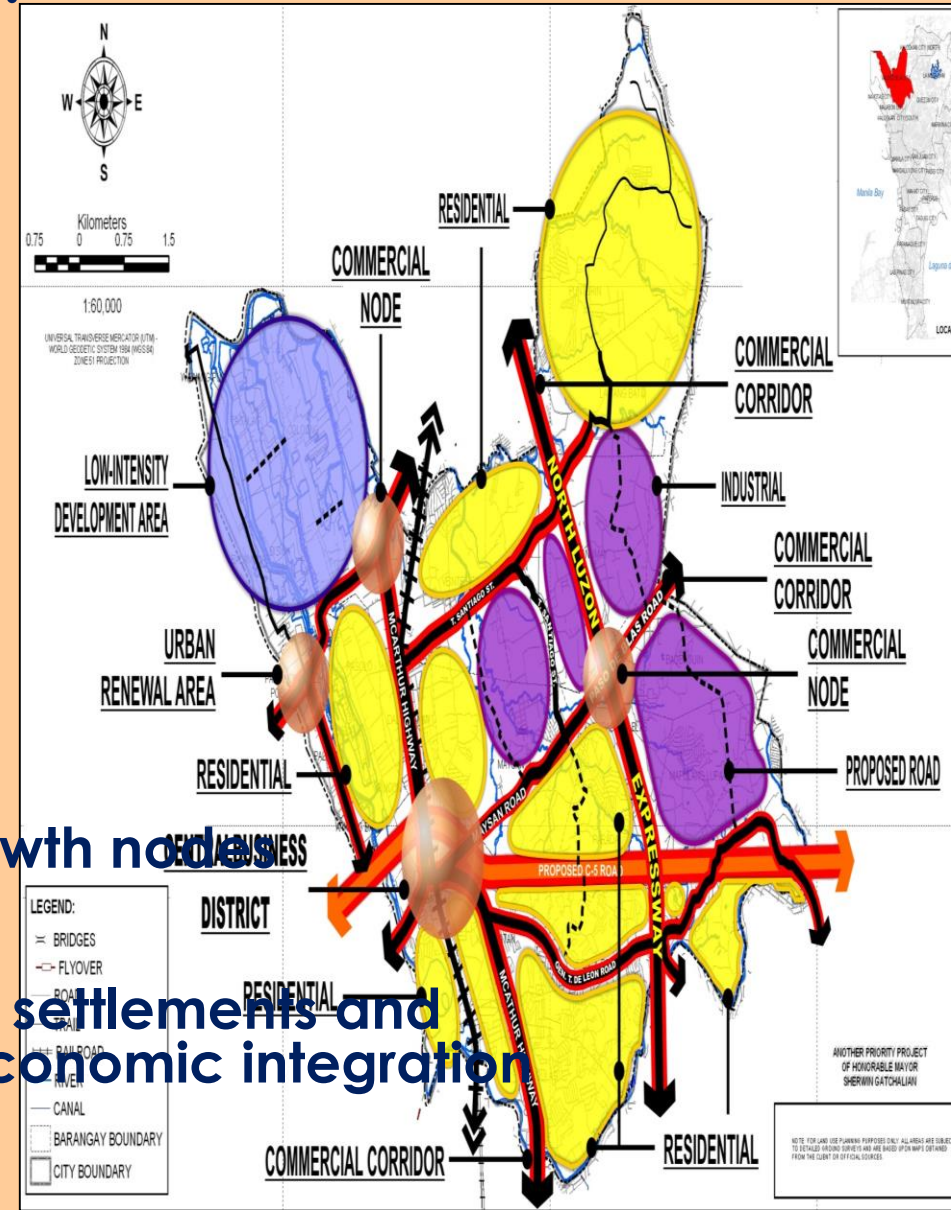
The Comprehensive Land Use Plan (CLUP)

- ▶ A document embodying specific proposals for guiding and regulating the growth and/or development of a City/ Municipality.
- ▶ A long-term plan (10 yrs. minimum)
- ▶ A tool for managing land and natural resources at the local level.



CLUP will indicate the following:

- Urban expansion areas
- New or proposed settlement areas
- Urban rehabilitation or renewal areas
- Location of social infrastructure
- New or additional development areas or growth nodes
- Infrastructure and circulation network linking settlements and production areas to achieve physical and economic integration



VALUE OF CLUP FOR LGUs

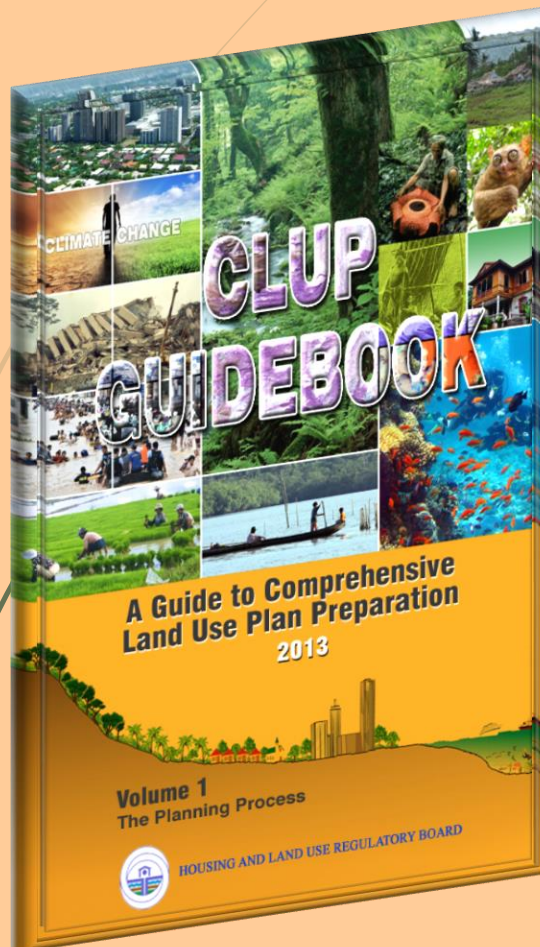
- **Legal justification for Zoning Ordinance**
- **Guide for investors**
- **Helps a community define itself**
- **Inventory of land resources**
- **Basis for grants and other funding sources**
- **Basis for granting Locational Clearance for any development projects**
- **Basis of authority to issue Development Permits for subdivision projects**

HLURB-GIZ eCLUP Project:

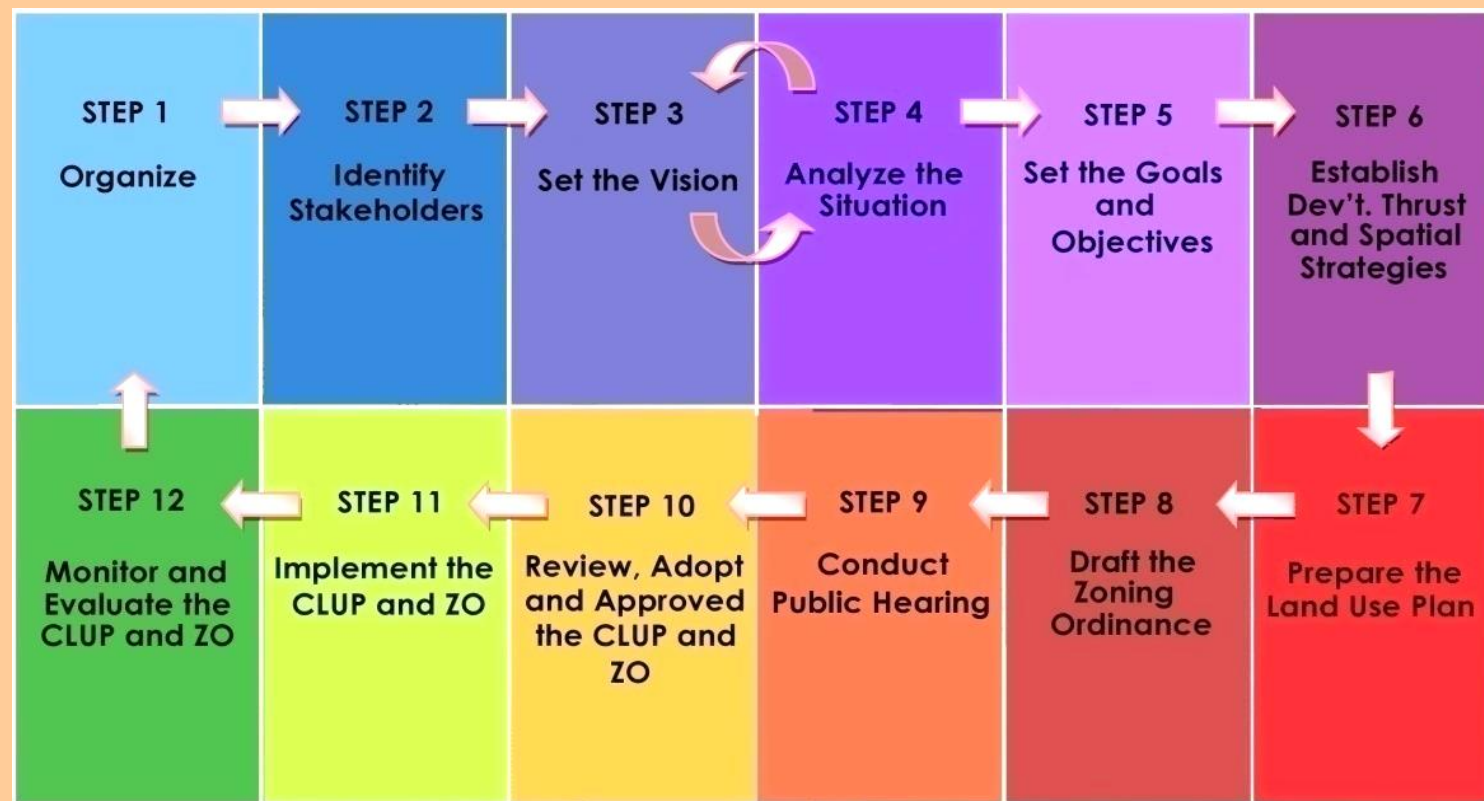
ENHANCEMENT OF CLUP GUIDELINES AND
MODEL ZONING ORDINANCE:

“MAINSTREAMING CCA AND DRRM INTO THE
ENTIRE ECO-SYSTEM TO INCLUDE FOREST,
COASTAL, BIODIVERSITY, ANCESTRAL DOMAIN,
HERITAGE CONSERVATION, GREEN GROWTH
AND URBAN DESIGN.”

Volume 1



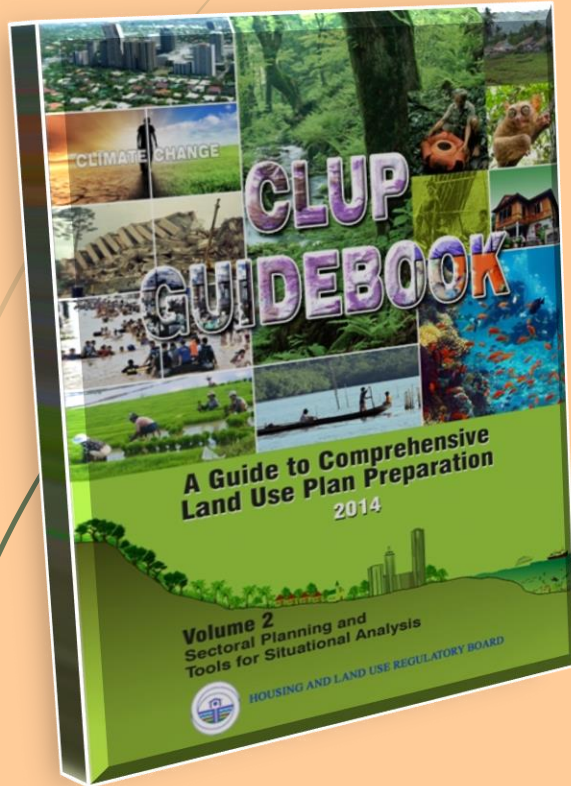
Cross-Cutting in the Planning Steps:
 Forest, Coastal, Ancestral Domain, Biodiversity Conservation, Climate Change,
 Disaster Risk Reduction, Heritage Conservation and Green Growth and Urban
 Design



The 12-Step CLUP Process

Volume 2

Sectoral Studies and Tools for Situation Analysis



SECTORAL STUDIES

- Demography
- Social
- Economic
- Infrastructure



ECOSYSTEM ANALYSIS

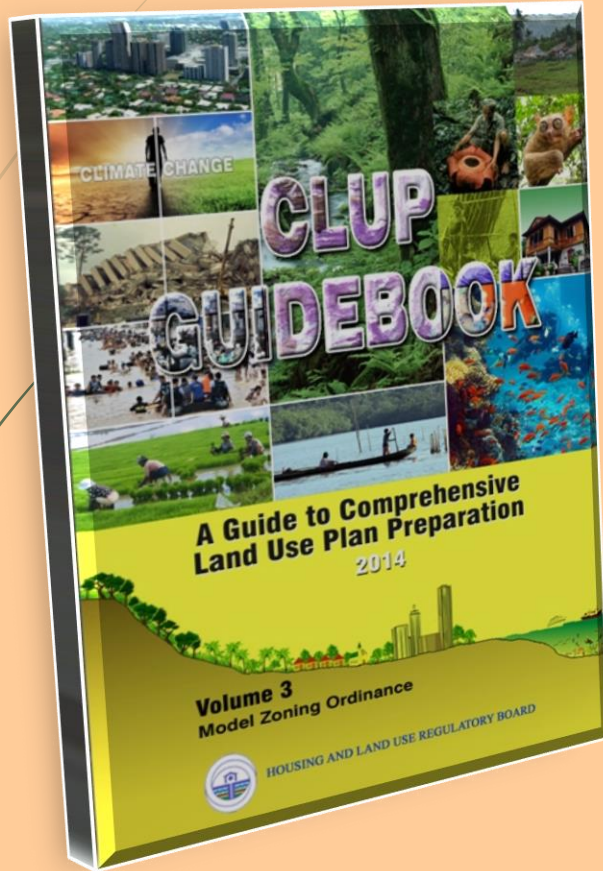
- Resource Mapping
- Climate Change and Disaster Risk Assessment
- Forest Land Use Planning
- Coastal Planning
- Biodiversity



SPECIAL AREA STUDIES

- Green Growth
- Urban Development
- Heritage Conservation
- Ancestral Domain

Volume 3

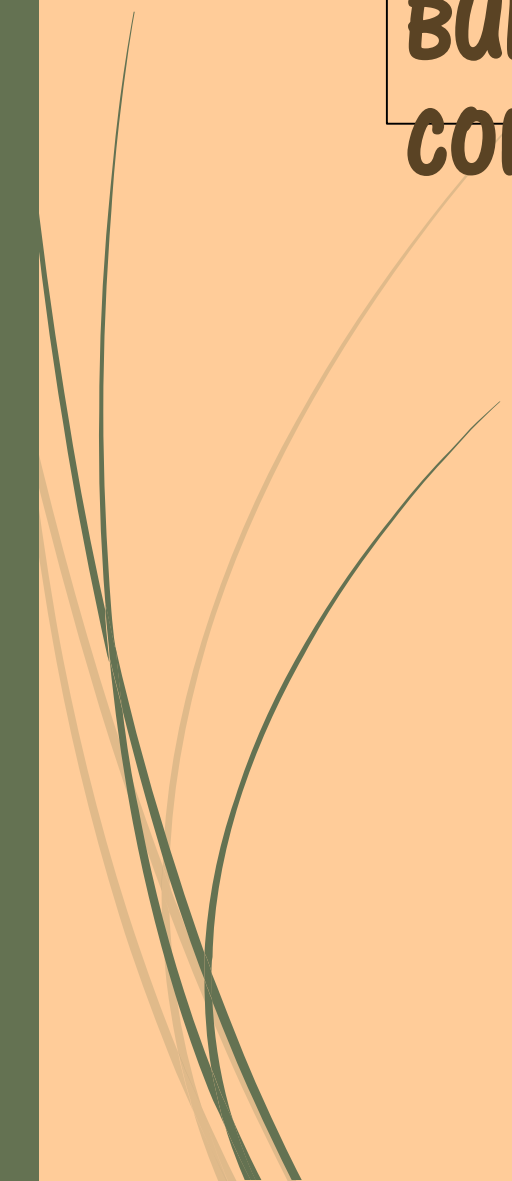


Model Zoning Ordinance

- Zoning will cover the entire territory – both public and A&D lands
- Zoning of the city and municipal waters
- Highlights protected and production areas in forest and coastal land uses
- Overlaying of zones (*base zones + additional zones + other restrictions*)

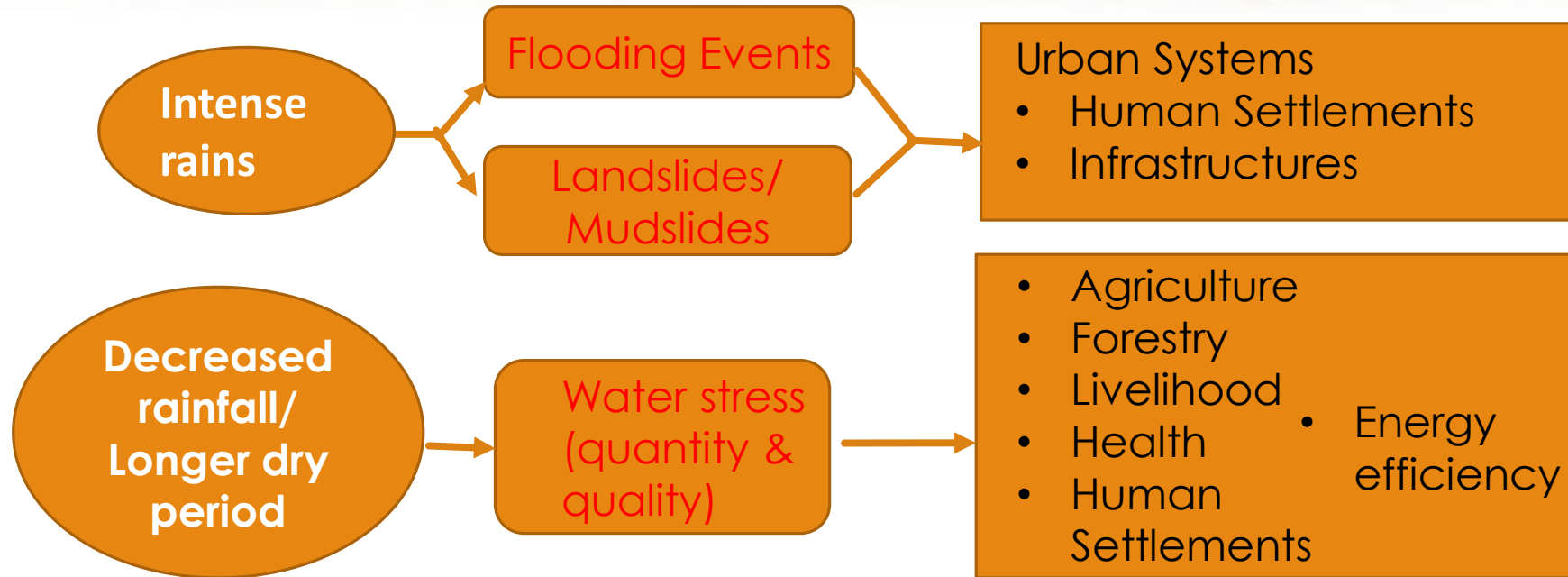


ROLE OF THE COMPREHENSIVE LAND USE PLAN (CLUP) IN BUILDING CLIMATE AND DISASTER RESILIENT COMMUNITIES

- ▶ **The CLUP is a tool for guiding development directions to prepare for and to mitigate the impacts of climate change and disasters.**
 - ▶ **The CLUP is an effective disaster risk reduction instrument which may result in climate change adaptation.**
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Impacts of Climate Change in the Philippines

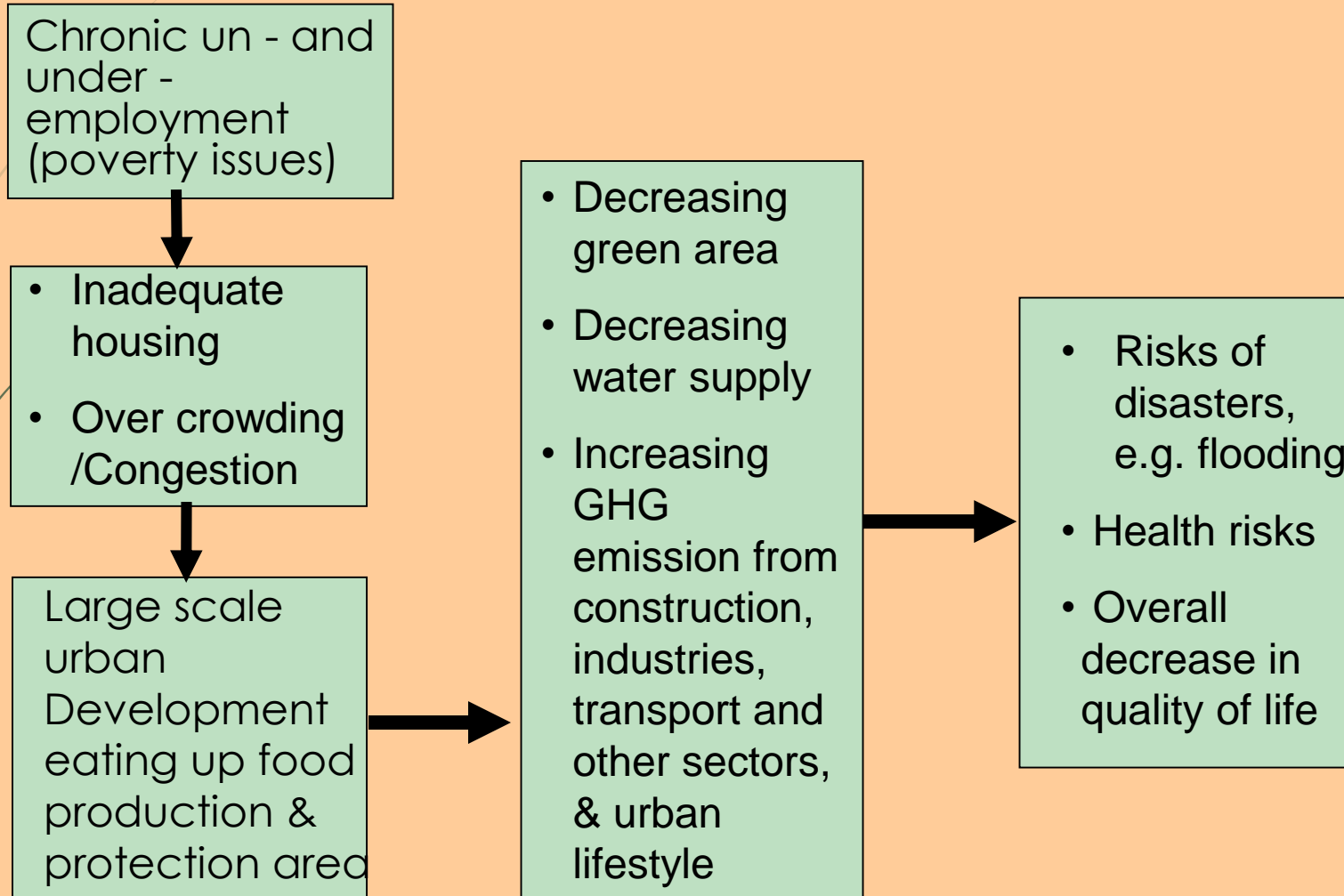
1. MORE FREQUENT EXTREME WEATHER/CLIMATE EVENTS



2. SEA LEVEL RISE



Impacts of Rapid Urbanization





Rationale: Mainstreaming CCA and DRRM in the CLUP

The goal of incorporating CCA and DRRM into the CLUP is to be able to *regulate and control physical development so as to reduce casualties and damages, and to minimize the negative impacts of hazard events.*

Mainstreaming these in the CLUP will also ensure that land use development policy and zoning will include the *identification and implementation of appropriate risk management options to reduce current risks and prevent new forms of risks.*



KEY ELEMENTS OF LAND USE PLANNING

For CCA and DRRM

- National agencies and local government coordination
- Recognition of the natural link between the various ecosystems, from the Ridge-to-Reef
- Application of relevant techniques and tools to determine suitability of lands for different uses
- Knowledge of the existing physical conditions such as slope and elevation, soil type and land forms



KEY ELEMENTS OF LAND USE PLANNING

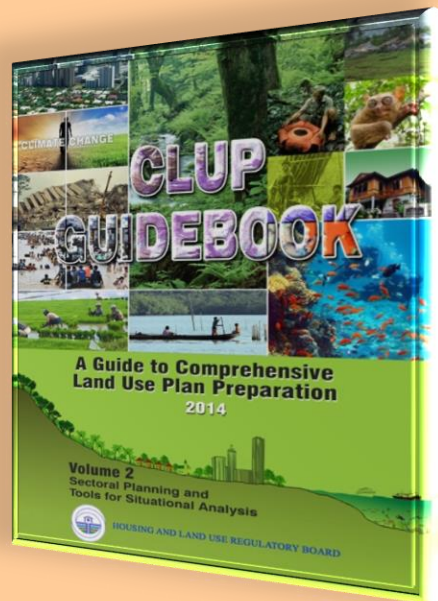
For CCA and DRRM

- Identification of preservation areas, open spaces, environmental critical areas, historical or cultural preservation areas
 - Community involvement and support in information and data gathering and land resource mapping
 - Integrated approach to risk management and adaptation to climate change.
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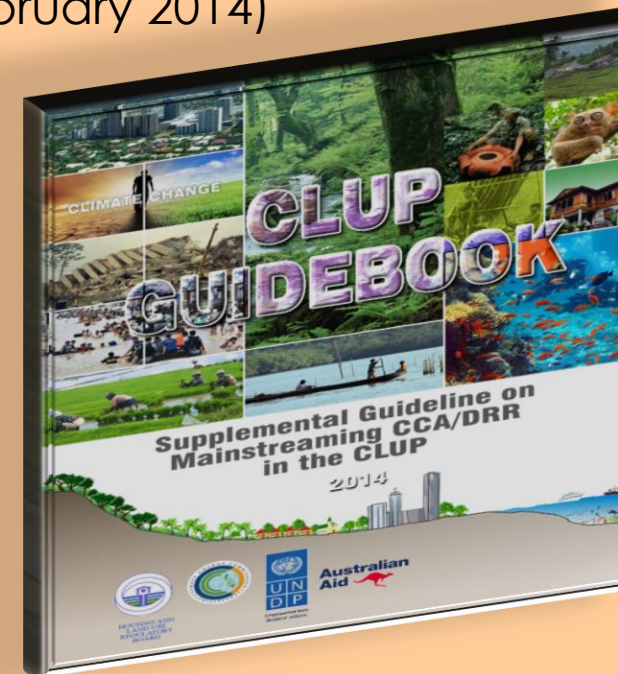
Tools and Techniques for Climate and Disaster Risk Assessment (CDRA) in the CLUP

References:

- ▶ **Climate Change Adaptation and Disaster Risk Reduction** (Volume 2, CLUP Guidebook 2014, HLURB)




- **Supplemental Guidelines on Mainstreaming Climate and Disaster Risks in the Comprehensive Land Use Plan** (Project Climate Twin Phoenix: HLURB/Climate Change Commission/UNDP/AusAID) – approved by HLURB in February 2014)




Climate and Disaster Risk Assessment (CDRA)

- Better understanding of climate change and hazards that may potentially affect the locality
- Better understanding and analysis of the contributing factors of risks (i.e. **hazard, exposure, vulnerability, adaptive capacity**)
- Identification of priority decision areas/sectors;
- Allow the identification of spatial based intervention policies and strategies to reduce risks and vulnerabilities




Step	Entry Points for Mainstreaming CCA and DRRM into the 12-STEP CLUP Process
1	Organize <ul style="list-style-type: none"><li data-bbox="563 444 2079 486">• Incorporate the conduct of the CDRA in the work and financial plan<li data-bbox="563 511 2150 554">• Organize key sectoral representatives who will participate in the CDRA
2	Identify Stakeholders <ul style="list-style-type: none"><li data-bbox="563 829 2405 936">• Include local stakeholders and representatives from the hazard mapping agencies who will participate and assist in the CDRA
3	Set the Vision <ul style="list-style-type: none"><li data-bbox="563 1179 2430 1286">• Fine tuning Vision descriptors and success indicators based on the relevant findings from the CDRA

Step	Entry Points for Mainstreaming CCA and DRRM into the 12-STEP CLUP Process
4	Analyze the Situation <ul style="list-style-type: none">• Enhanced understanding of climate and disaster risks affecting the locality• Priority Decision Areas based on risk evaluation• Policy Interventions/Options with emphasis on Risk Management Options• Adjusted land demand to account for backlogs due to risks and vulnerabilities• Analysis of land supply and suitability based climate change and possible impacts on the severity and frequency of natural hazards
5	Set the Goals and Objectives <ul style="list-style-type: none">• Specific targets/success indicators to address current risks• Goals, objectives and success indicators related to future planned disaster risk reduction and climate change adaptation
6	Establish Development Thrust and Strategiew <ul style="list-style-type: none">• Incorporate climate change adaptation and disaster risk reduction concerns in evaluating development thrust and spatial strategy options• Ensure selected dev' t thrust and spatial strategies account for the future climate change scenario and its possible impacts to the severity and frequency of natural hazards.



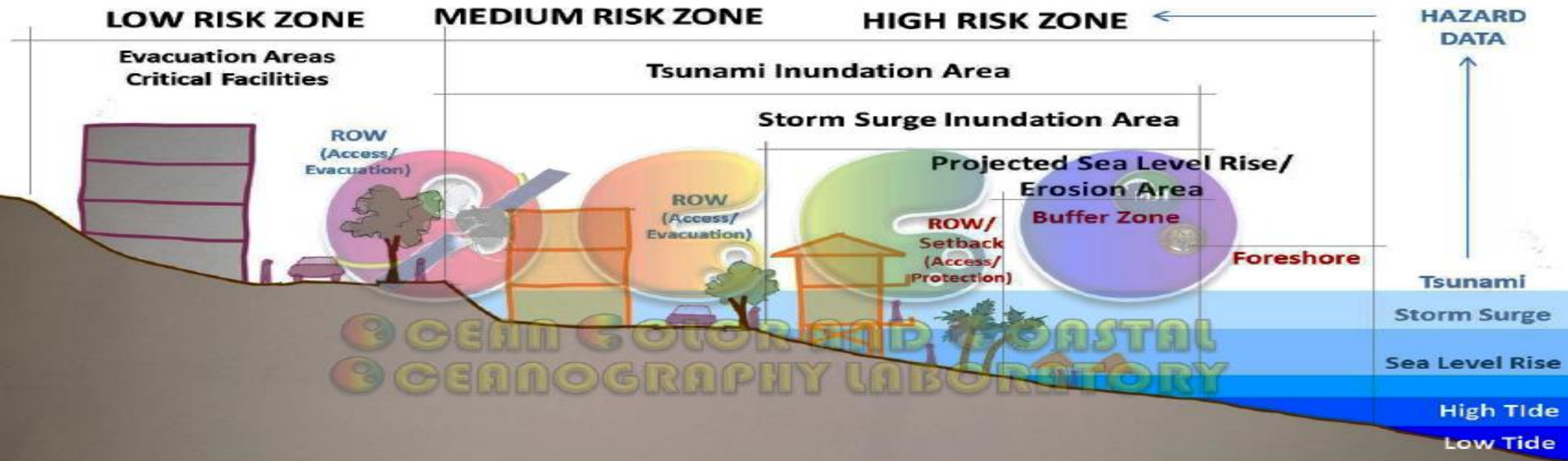
Step	Entry Points for Mainstreaming CCA and DRRM into the 12-STEP CLUP Process
7	Prepare the Land Use Plan <ul style="list-style-type: none">• Climate and disaster risk sensitive land use allocation/spatial location.• Apply risk reduction approaches (risk avoidance, mitigation, transfer and retention) in designing the land use scheme and land use policy development• Menu of programs and projects for disaster risk reduction; and climate change adaptation
8	Draft the Zoning Ordinance <ul style="list-style-type: none">• Establish hazard overlay zones and priority risk management zones/districts• Zoning regulations to reduce risks by applying risk reduction approaches such as density control, hazard resistant building design standards, site development standards, and additional development requirements• Consultation with hazard experts and stakeholders in the identification of zoning regulations
9	Conduct Public Hearing <ul style="list-style-type: none">• Consultation with stakeholders on the acceptability of proposed risk management options.



Step	Entry Points for Mainstreaming CCA and DRRM into the 12-STEP CLUP Process
10	Review, Adopt, and Approve the CLUP and ZO <ul style="list-style-type: none"><li data-bbox="555 319 2303 419">• Ensure identified risk management options to effectively address current and prevent future risks are translated in the CLUP and ZO;<li data-bbox="555 439 2303 596">• Inviting representatives from mandated agencies involved in DRR-CCA (i.e. hazard mapping agencies, Provincial DRRMO, Provincial CCO) during the review and approval process
11	Implement the CLUP and ZO <ul style="list-style-type: none"><li data-bbox="555 772 2257 1043">• Strengthen the support institutional structures, systems and procedures for enforcement and monitoring program and project assessment; prioritization and development; budgetary support/requirements; Information Education and Communication Campaign; interface with other local level plans to implement DRR-CCA agenda
12	Monitor and Evaluate <ul style="list-style-type: none"><li data-bbox="555 1279 2211 1379">• Identify risk reduction and climate change adaptation monitoring parameters and procedures, PPAs impact monitoring and evaluation

POLICY OPTIONS and ZONING REGULATIONS

H. Zoning – Risk Level



ALLOWABLE USE W/ CONDITIONS
 Use, density, building height,
 structure, floor level, etc.

POTENTIAL CONFLICT AREA
 A & D? Existing devt.? Proposed
 devt.? Informal settlement? Fishing
 village? Indigenous group?

Policy Options and Zoning Regulations

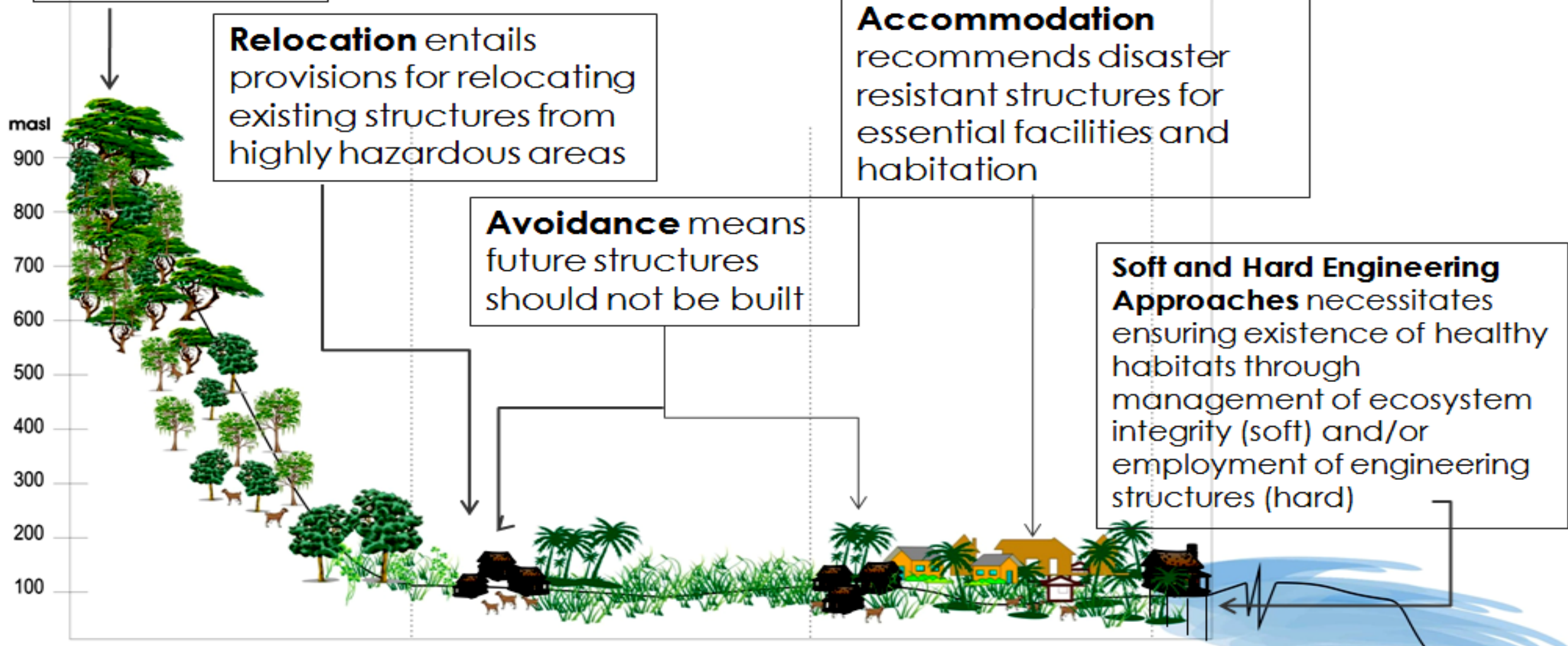
Protection of the watershed for freshwater sources

Relocation entails provisions for relocating existing structures from highly hazardous areas

Accommodation recommends disaster resistant structures for essential facilities and habitation


Avoidance means future structures should not be built

Soft and Hard Engineering Approaches necessitates ensuring existence of healthy habitats through management of ecosystem integrity (soft) and/or employment of engineering structures (hard)





Policies and Spatial Strategies in the CLUP and Zoning Ordinance

- ❑ Prevent future development in areas highly susceptible to hazards where possible;
 - ❑ Keep land use intensity, buildings value, and occupancy to a minimum in areas where development cannot be prevented;
 - ❑ Encourage risk mitigation through proper urban design, site planning, and building design in areas where development occurs and where the above strategies are not viable;
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Policies and spatial strategies in the CLUP and Zoning Ordinance

- Protect life and existing development from losses
- Conserve protective environmental systems
- Prevent future development from creating conditions that contribute to risk.

“Climate change will not be effectively managed until individuals and communities recognize that their behaviour can make a difference.”

– The Royal Society, Climate Change: what we know and what we need to know. (2002)

Thank you!



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