

Mainstreaming DRR and Climate Change impacts in Urban Local Government

A Road towards Sustainable Urban Development and Creating Safer Cities

Asian Disaster Preparedness Center
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adpc

Purpose of the Presentation

- **Highlight salient facts on the drivers of risk and vulnerability in urban areas**
- **Common Functions and services of urban local governments in Asia**
- **Mainstreaming DRR in to Local Government**
- **Open a dialogue –what steps can be adopted**

Risk Drivers

- **Impacts of Climate Change**
- **Nature of urbanization –formal as well as informal i.e. filling flood plains, insufficient capacity of drainage systems, poor maintenance**
- **Weak/absence of good governance (Non compliance with the Rule of Law –building codes)**
- **Poverty /inequality**
- **Demographic factors**
- **Environmentally unsound/ unfriendly practices**

Risk Drivers
Factors contributing to Increasing
vulnerability in Urban areas

Characteristics of the Urban Habitat



Source : <http://www.morishuz.com>

Nature of Settlement/Building Stock



Migration of population from rural areas due to economic reasons



Location of cities closer to hazard prone areas and its expansion



Urban Settlements frequently threatened by natural hazards and Fragile Ecosystems



Local Government Institutions

- **LGs are administrative offices of an area smaller than a state or a province**
- **In many countries in Asia LG systems have historically evolved to a present day context**
- **However structure, electoral system, powers & functional responsibilities, etc of modern LG institutions vary between countries**

Common Functions of Local Government

Emergency
fighting, a
search &

Solid
manag

Health, sanit
hygien

Land use

Shelter &
infrastructure
development

Informat
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Urban ser
drainage, wa
electricity,

City le

Welfare as

Budget allocation, tax
collection and
investment promotion

Why DRR in Cities?

- **Economic losses due to disasters limit the potential urban growth and sustainable development of urban areas.**
- **Cities need to be proactive and should have long term programs to reduce such potential impacts taking into consideration the futuristic risk.**

Objective of mainstreaming DRR at LG Level

- To **empower the LGs to undertake effective measures** to reduce disaster risks within the existing legal framework
- To enhance and **strengthen the mandate/scope** of LGs for reducing disaster risks.

Within existing legal framework ...

- **LGs can**

- formulate and implement appropriate strategies, action plans and development programs.**

- Such development programs can be design to reduce the disaster risks.**

Emergency services – Fire, ambulance services, Search, Rescue and Evacuation

- Establishment of Emergency Operation Centers (EOCs) at LG level
- Establish city level platforms with all stakeholder groups
- Set up emergency service units (Fire and ambulance services, Search and Rescue, Evacuation) and expand services depending on needs
- Explore possibility of making arrangements to get emergency assistance from resourceful LG within neighborhood. More resourceful local bodies can help neighboring LGs to optimize capacity
- Organize periodic simulations and drills with assistance of responsible agencies



Waste management *contd*

- Popularize “Reduce, Recycle and Reuse” waste among people
- Involve urban communities and their organizations in designing, planning and implementing, and maintenance of, efficient and hygienic waste disposal (both solid and liquid) facilities
- Encourage and promote more private and public sector partnerships
- Coordinate with other urban centers and cities to implement such interventions where economies of scale and other complementary benefits could be generated
- Strictly enforce existing law against haphazard dumping of waste
- Consider providing economic incentives for win-win solutions.



Waste management *contd*

- Avoid flood retention areas being used as dumping grounds
- Locate landfills away from flood prone areas
- Plan and implement ways of disposing of hazardous waste separately
- Plan to reduce un-systematic disposal of solid waste and to implement proper waste disposal means
- Explore potential benefits of converting solid waste into other products such as energy, fertilizer etc. and take advantage of globally promoted programs such as Cleaner Development Mechanism (CDM)
- Promote Cleaner Production (CP) in which reducing waste at source is possible instead of disposing at the end of the pipeline
- Promote production of compost fertilizer household and communities



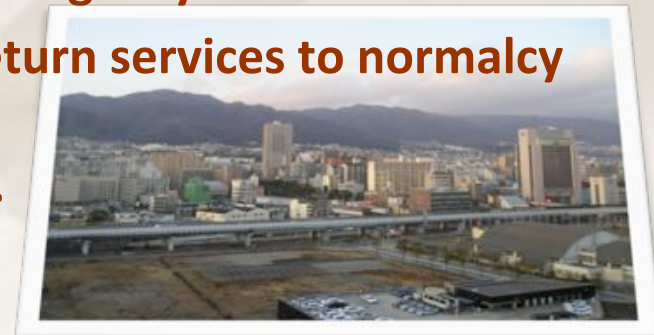
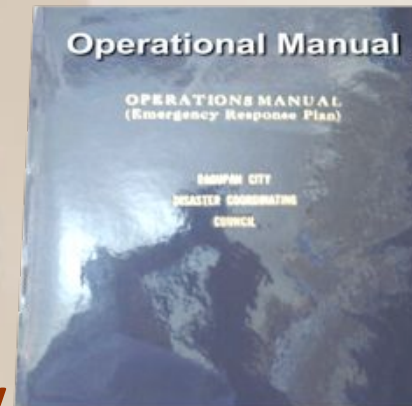
Health ,Sanitation and Hygiene

- Organize immunization programs to reduce the spread of disease
- Organize awareness programs for prevention of epidemic situations for cases such as dengue, malaria and any other vector born diseases before outbreak
- Implement prevention programs for controlling outbreaks of seasonal health hazards
- Provide training to community health workers
- Organize mobile clinics, medical assistance with help of health authorities, NGOs etc. after monsoon seasons
- Establish better monitoring and evaluation (M&E) systems to ensure routine health and sanitation functions
- Set up maintenance units to help clean polluted water sources after flood events
- Lead public-private partnerships and campaigns to promote effective hygienic practices, and making the city free from diseases
- Strictly enforce law on hygienic and civic conditions.



Urban Services (drainage, electricity, water supply, gas etc.)

- Design urban services to be hazard resistant and accommodate long term requirements
- Undertake **routine maintenance of drainage facilities**
- Plan alternative arrangements for continuity of services during emergencies and be prepared to activate such plans should the necessity arise
- Solicit assistance of professionals to develop guidelines for locating infrastructure away from hazard prone areas and high safety standards to urban services in hazard prone areas
- Develop emergency response guidelines for service departments for quick response and recovery
- Constitute maintenance teams for making available emergency service facilities at short notice in the event of an emergency
- Train maintenance personnel on speedy action to return services to normalcy in the event of a disaster and keep them ready and prepared to respond at the occurrence of a disaster.



Budget allocation, tax collection and investment promotion

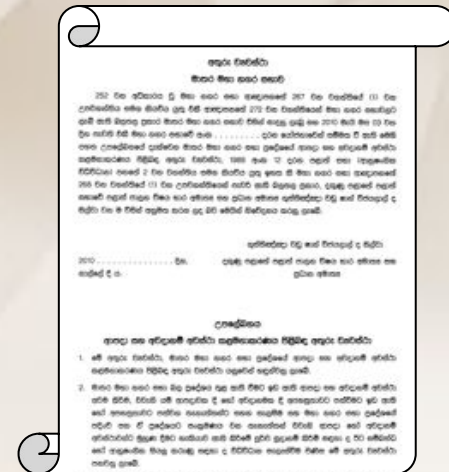
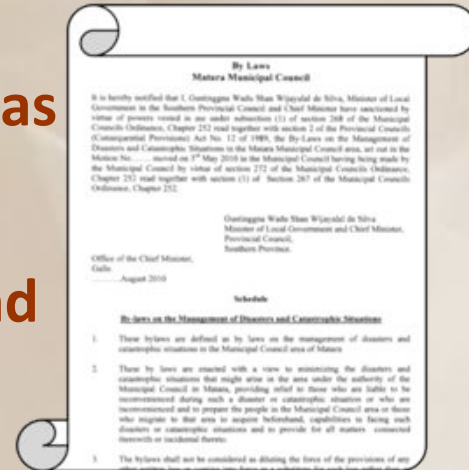
- **Introduce new tax regulations, tariff systems etc. for hazard prone areas to discourage development in unsafe areas**
- **Reduce tax and improve services to encourage development in safer areas**
- **Allocate a percentage for DRM initiatives from the annual budget process**
- **Allocate funds to other city departments for the training of officials and purchase of emergency response equipment**
- **Develop city-wide programs to encourage and mobilize the support of the private sector, NGOs, and civil society organizations to undertake DRM activities**
- **Allocate an annual budget for developing action plans, contingency plans etc. and conduct regular simulations, drills etc.**

Welfare services during emergencies (food, nutrition and other non-food items, welfare activities etc.)

- **Develop a database of LG level NGOs, civil society organizations, private sector etc. to obtain assistance and encourage participation in welfare activities during disasters**
- **Encourage Red Cross Societies and civil society organizations to undertake regular programs involving volunteers to improve response capacity**
- **Organize regular city level meetings with NGOs, CBOs, and civil society organizations before monsoon seasons to ensure supply of resources and engagement in welfare activities during disaster events**
- **Identify evacuation centers and improve the facilities**
- **Involve Girl Guides, Scouts, Red Cross volunteers etc. in first aid and first medical response during emergencies**
- **Develop a welfare/emergency fund to assist victims during disasters through volunteer contributions (not only in cash but also material and in kind contributions).**

Steps proposed for mainstreaming DRM for Urban Local Authorities

- **Understand the Hazard environment, vulnerability and risk due to natural disasters as per historical records**
- **Extend the extent of assessment to understand the futuristic risk environment.**
- **Obtain the assistance of professional bodies / mandated national level agencies to conduct HVCA**
- **Identify needs in terms of new policies and mandates, legal & institutional arrangements, resources, information dissemination and awareness creation and ensure external assistance**



- ❑ Develop a **long term action plan** for the city identifying areas for reducing the risk (use any mechanism available for the city to develop a city level forum to involve all other stakeholders)
- ❑ Identify areas where DRM can be mainstreamed through **integration of DRM actions in to existing service functions** , development programs undertaken by the local government
- ❑ Build **alliances** to improve the resource base.
- ❑ Identify the external assistance needed which can be provided by others such as Central/provincial Governments, NGOs, professional bodies, private sector etc.
- ❑ Ensure **community participation** in all steps



Enhancing the capacity of LGs

- **By modifying existing laws and other legal provisions**
- **By strengthening the institutional set up**
- **By enhancing the human resource capacities through training & capacity building initiatives**
- **By building partnerships with others stakeholders**
- **Through better communication strategies citizens, city groups, NGOs, Civil Society etc**



Conclusion

- **LGs have the mandate for development**
- **Risk reduction should be considered as an integral part of the development mandate**
- **LGs therefore should assess the risk environment at their operational level**
- **And build risk reduction measures in to the routine service functions including development programs**



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Thank you...

