

Technical Deep Dive on Seismic Risk and Resilience March 12 – 16, 2018 Tokyo, Sendai and Kobe













## **Kenya Key Takeaways from TDD**

- 1. Preparedness is expensive but not doing so is even more expensive
- 2. Neighboring countries face similar challenges, we should share experiences and data and look for regional cooperation (i.e. seismic hazard mapping)
- 3. Roles and responsibilities for emergency response and early warning systems should be clearly defined (who coordinates, who participates and who supports)
- 4. Building regulations have proven to be effective importance to keep updating with the lessons from the different events

5. Technical capacity is a fundamental pillar and should be continuously improved





















## **Kenya Accomplishments Needed**

- 1. Improved seismic network and hazard/ risk information
- 2. Strengthen building regulations and implementation capacity
- 3. Create risk awareness















# Kenya Actions to be Taken for the improvement of seismic information



#### Short-term:

- Mapping stakeholders (Metereological Dept., University and line Ministries) –
   Ministry of Mining
- Organizing a regional workshop and development of a road map Ministry of Mining with WB support

### Medium-term:

- Creating coordination mechanism for seismic risk monitoring
- Collecting existing information and identification of gaps for a national seismic hazard map to inform building regulations

### Long-term:

- Developing a national seismic hazard map to inform building regulations
- Designing a seismic network and road map for implementation









# Kenya Actions to be Taken to strengthen building regulations and implementation capacity



#### Short-term:

- Stakeholder validation workshop to discuss current draft of the built environment bill
- Finalizing the bill and submit for cabinet and parliament approval
- Definition of road map for legislation (regulation framework and standards) and capacity building

#### Medium-term:

- Development of the regulations and standards including sanction mechanisms
- Assessment of capacities and gaps of approval process (siting, design, inception, construction, up to decommission)
- Strengthen audit and inspection of building and other structures for safety
- Start capacity building implementation (local governments, practitioners, professional bodies, developers, etc.)

#### Long-term:

- Develop a prototype of the approval of development projects
- Continue capacity building implementation (local governments, practitioners, professional bodies, developers, etc.)
- Conduct periodic regulation reviews
- Conducting comprehensive vulnerability assessment of buildings (critical and high population density buildings)
- Formulation and implementation of land use plans at the country level









# Kenya Actions to be Taken for Create risk awareness and sensitization





### Short-term:

- Creating political awareness lobby for the incoming regulations statistics and human and economic effects of the building collapses
- Community sensitization of main causes of building collapses

### Medium-term:

- Dissemination of building regulations and standards
- Design and implement a media campaign

### Long-term:

- Revise professional curricula for architects and engineers
- Technical vocational training
- Training of trainers
- Development of user friendly / simplified guidelines for different security and safety issues









## Barrier/Challenge of Implementation of Plan Grant Follows Reduction and Recovery



- 1. Political interference corruption
- 2. Lack of awareness about building secutiry from tenants
- 3. Impunity
- 4. Lack of ethics
- 5. Rapid rural-urban migration increasing demand for housing
- 6. High poverty levels make people live in squalid conditions















## **Kenya Support Needed**



### World Bank:

- DRM and Urban Policy dialogue through the CAT DDO
- Expertise in seismic hazard mapping and regional workshop
- Support in building regulation road map (BRR support) and built environment bill validation workshop
- Development of communication materials

### DRM Tokyo Hub

- Capacity building opportunities in built environment
- Capacity in seismic monitoring and link to JMA on the design of the seismic and tsunaminetwork

### Knowledge Products (Case Studies, Policy Notes, etc.)

- Support Revision and validation of the built environment bill
- Support seismic hazard / vulnerability studies







