Community based preparedness and adaptation to climate change and other environmental risks

By Aslam Perwaiz
Program Manager
Asian Disaster Preparedness Center
Structure of Presentation

- Overview of Mekong Delta and its Vulnerabilities
- MRC’s Flood Management and Mitigation Program (Component-4)
- Community Preparedness for Climate Change and Environmental Risk
- Lesson Learning and Way Ahead
Mekong Delta and its Vulnerabilities

- 13 provinces and half of them highly vulnerable to Annual Mekong Flooding
- Coastal provinces affected by sea water intrusion and contaminated soil.
- Extreme weather conditions led to Drought in some of the provinces
- Typhoons are increasing
Emerging Threats

- **Sea level rise** could be anywhere between 30cms and 1 metre by 2100, although the upper end is more likely. If it does reach 1 metre, 90 per cent of the Delta would be inundated every year.

- Even by 2030, the sea level rise could expose around 45 per cent of the Delta’s land area to **extreme salinisation and crop damage through flooding**.

- The **dry season** flow of the Mekong River is projected to drop by between 2.0 to 4.0 per cent by 2070, which would another factor aiding salinisation and **water shortages**.

- **Declining crop productivity** would particularly affect the spring rice crop, which is expected to fall by 8 per cent by 2070.

Source: Oxfam
Impacts observed by Provincial Authorities (An Giang & Ben Tre)

- Increase variability and severity of the weather causing floods, droughts, river bank landslide, water pollution, and salt invasion, epidemic to the people, livestock and plants.

- Changed pattern of water resources in terms of rainfalls leading to floods in the rainy season and droughts in the dry season.

- Decreased agriculture produce and food security such as growth and productivity of plants, crop schedules, epidemic to plants and castles.

- To forestry, climate changes' impacts badly influence cajuput forests and forest on alum infected land, etc. Temperature and dry levels increasing may cause forest fires, development of insects and epidemic, etc.
Impacts observed by Provincial Authorities (An Giang & Ben Tre)

- **Important road lines are at risk of flooding, erosion and landslide, etc.**

- **Climate changes’ impacts to industry and constructions:** facing more frequently with flooding and challenges in water drainage of cities and waste accessing of industrial zones.

- **Climate changes’ impacts to people’s health**

- **Climate changes affect community and society, changes of population distribution, cities and centers and economic movement. National defense and security will face with new issues**

Scale of Intervention:
11 Province and 30 Districts
Cambodia: 4 Province, 10 Districts
Vietnam: 4 Province, 12 Districts
Lao PDR: 2 Province, 6 Districts
Thailand: 1 Province, 2 Districts

Principal objective: Relevant authorities and other stakeholders in all riparian countries (at the province, district and commune levels) have enhanced capacities in flood preparedness and emergency management.

Core Areas of Intervention
1. **Flood Preparedness Program Development and Implementation**
2. **Priority Activity Implementation to facilitate Flood Preparedness and Emergency Management**
3. **Capacity Building for Flood Risk Reduction**
4. **Flood Awareness and Education**
5. **Flood Knowledge Sharing and Documentation**
6. **Integration of Flood Risk Reduction into local development planning process**
7. **Trans-Boundary (Province to Province) Joint Planning and Information Exchange**
FMMP Component 4 Activities
Community Preparedness for Climate Change and Environmental Risk

- Bringing Science to Community
- Participatory Community level Vulnerability and Capacity Assessment (VCA) through VNRC facilitators
- Awareness generation on environmental risks and Climate Change
- Annual Flood and Storm Control Plan to include Climate change preparedness and provision of protection of Agriculture and Aquaculture production
- Training for Hamlet leaders, farmers on coping strategies.
- Priority Projects Implementation
Lesson Learning and Way Forward

- Initial Baby steps are taken but there is a long way to go....
- Practical actions for institutionalizing changing climate and environmental risks.
- Community focus national and local research and policy planning
- Scaling up of community based planning and incorporation of climate change and environmental risk in the Annual Plan
- Provincial level budgetary provision for public awareness, training capacity building.
- Integration of DRR and CCA into the socio-economic planning process under SEDP 2011-2015