

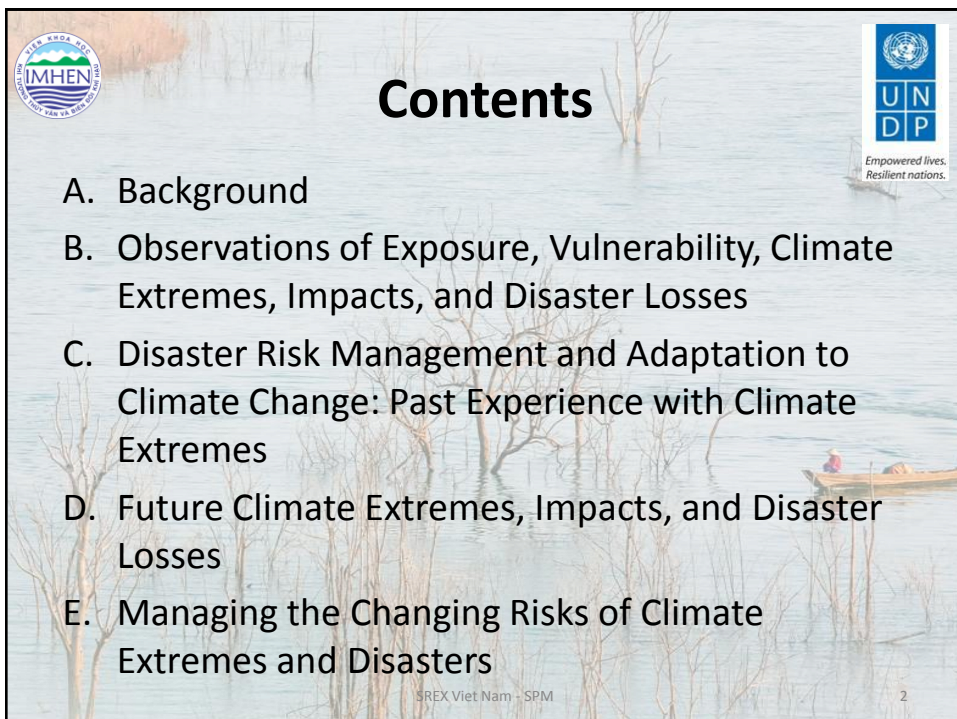
**Viet Nam Special Report on Managing
the Risks of Extreme Events and
Disasters to Advance Climate Change
Adaptation**

Summary for Policy Makers

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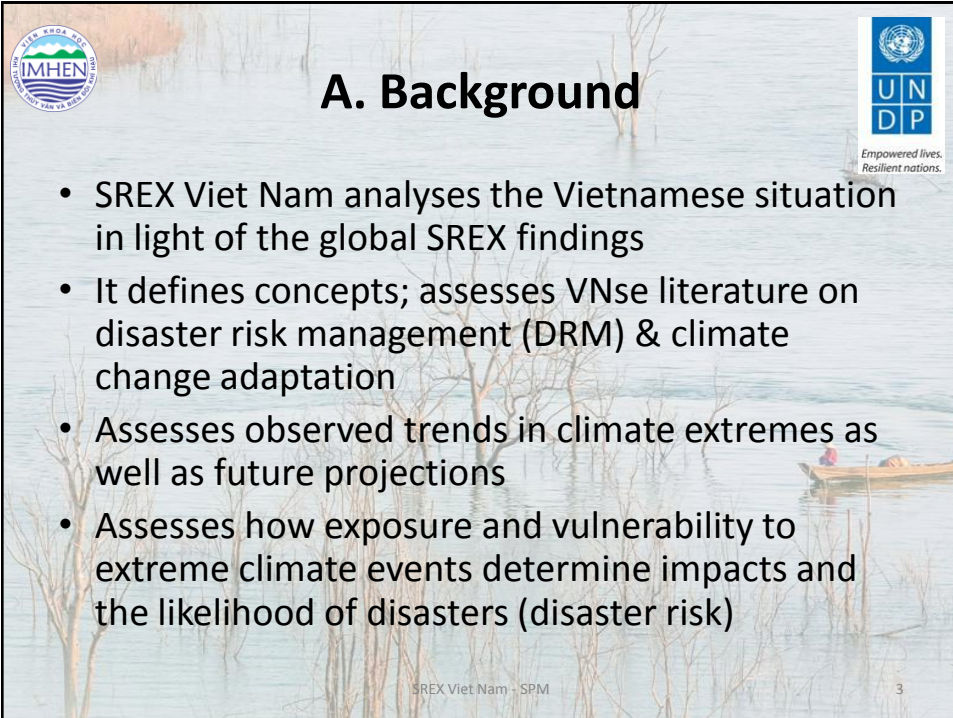


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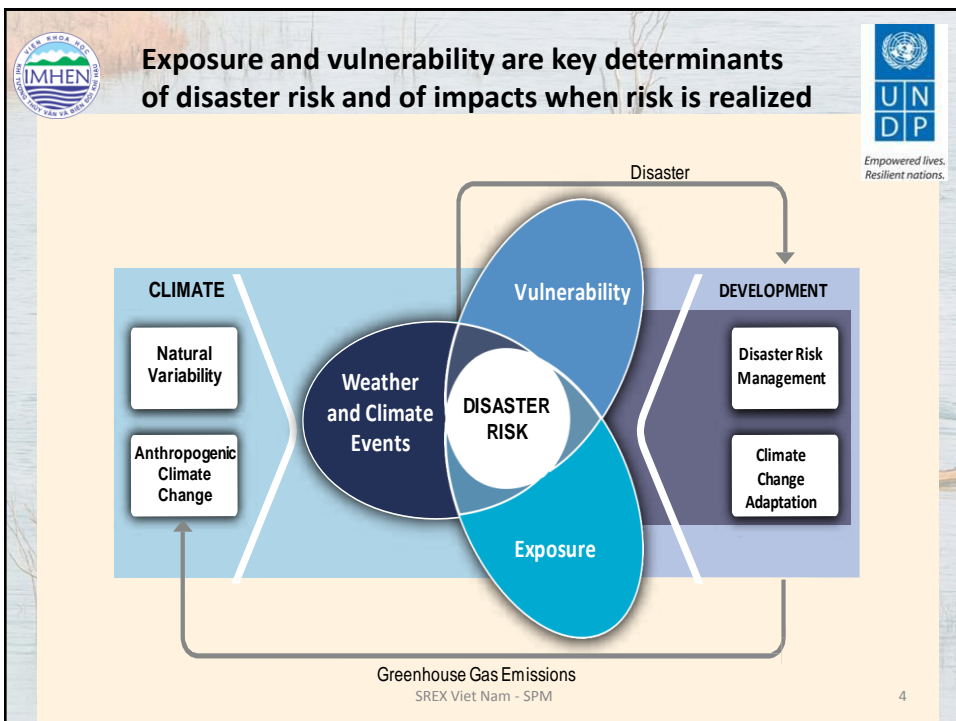



A. Background

- SREX Viet Nam analyses the Vietnamese situation in light of the global SREX findings
- It defines concepts; assesses VNse literature on disaster risk management (DRM) & climate change adaptation
- Assesses observed trends in climate extremes as well as future projections
- Assesses how exposure and vulnerability to extreme climate events determine impacts and the likelihood of disasters (disaster risk)


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B. Observations of Exposure, Vulnerability, Climate Extremes, Impacts, and Disaster Losses

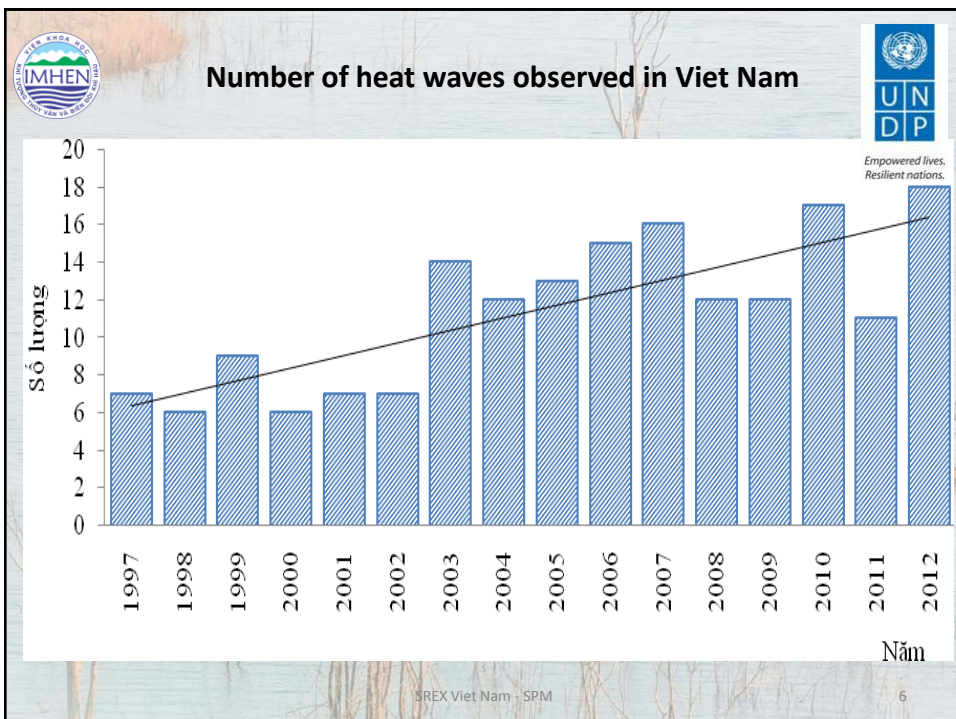


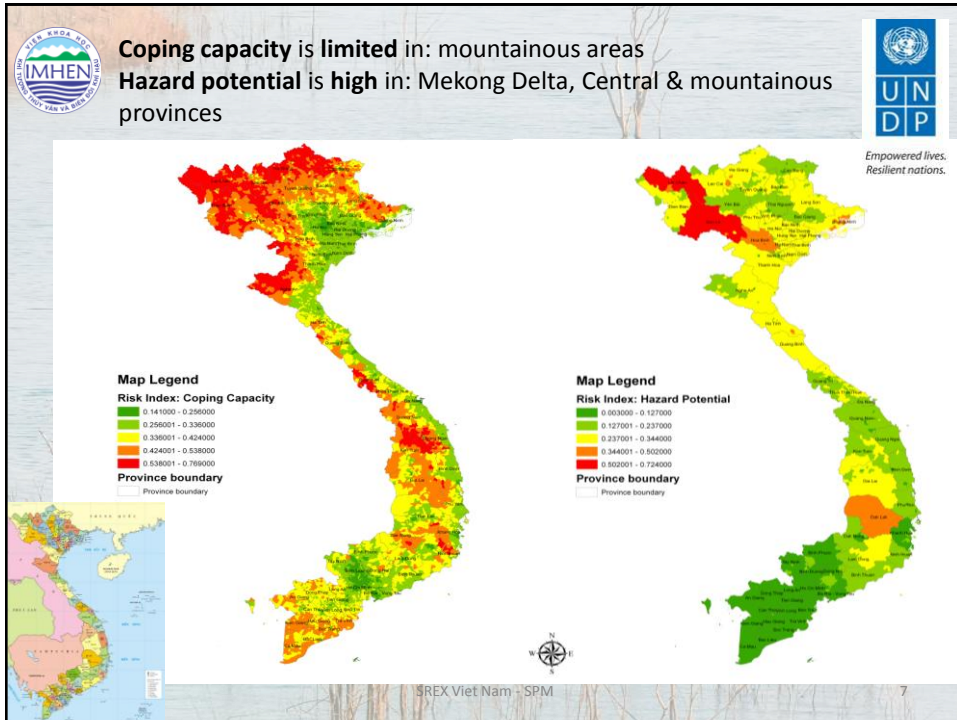
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Resilient nations.*

- Exposure and vulnerability depend on many factors
- Some extremes have changed, globally
- Climate extremes changed in Viet Nam but extreme events are rare, so there are few data to assess changes:
 - Nr of cold days and nights decrease nationwide
 - Nr of hot days increased especially in North and C. Highlands
 - Nr of extreme rainfall events increased especially in Central and South Central provinces
 - Nr of consecutive dry days increased and total precipitation decreased in Northern regions
 - No evident variability in the frequency of tropical cyclones but those with very high intensity increased

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C. Disaster Risk Management and Adaptation to Climate Change: Past Experience with Climate Extremes


- Development practice and policy shape disaster risk
- Management of disasters & climate extremes at local level is critical for enhancing resilience, adaptation and recovery
- Inequalities influence local coping and adaptive capacity
- Post-disaster recovery & reconstruction can reduce risk
- Risk sharing mechanisms can increase resilience
- DRM and climate change adaptation need 2-way approach
- Need integration of DRM and climate change adaptation, and integration of both into policies and programs
- Coordination of DRM between sectors and localities limited

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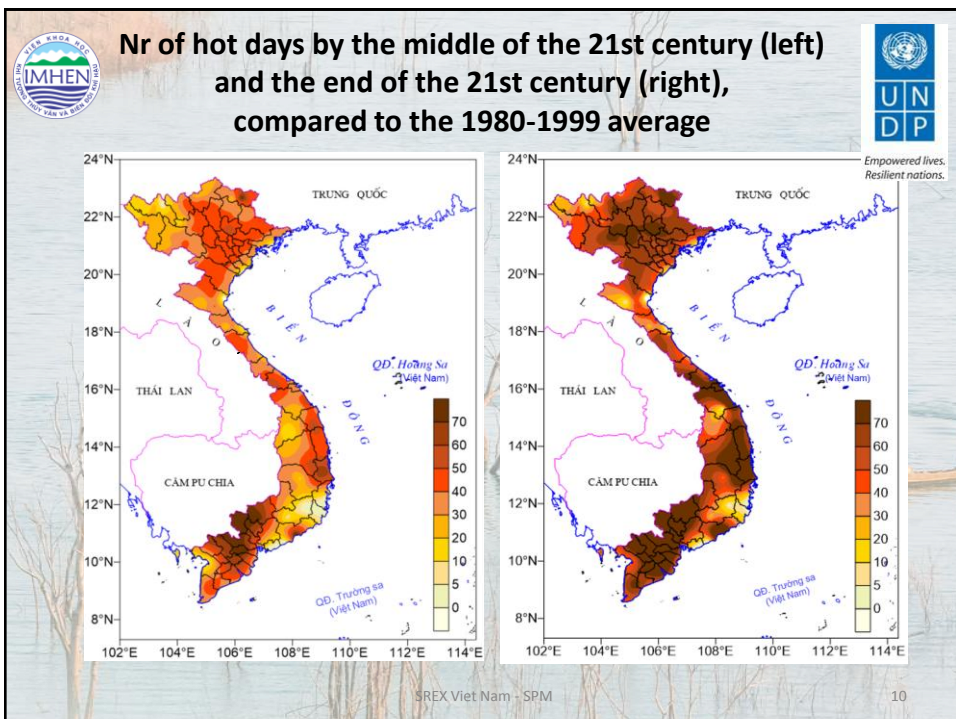
D. Future Climate Extremes, Impacts, and Disaster Losses

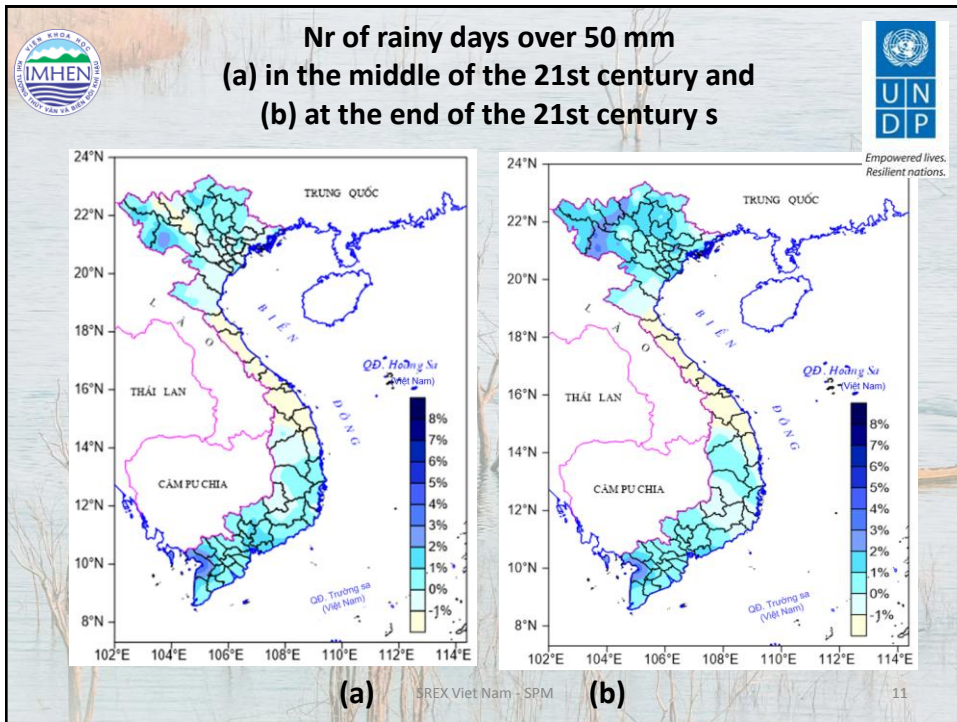


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- Confidence in changes in extremes depends on many factors
- Number of heat waves will increase, especially in the Central Region
- Frequency of heavy rainfall will increase, especially in the South
- Low confidence in change river flooding because of extremes
- Drought is likely to increase in most climate zones
- Nr of typhoons is uncertain but strong typhoons likely increase
- Increase in extreme coastal water levels very likely
- Extreme impacts mainly on sectors linked to climate
- Increased exposure causes higher economic losses (typhoons), in the absence of additional protection measures
- Disasters / climate extremes influence population mobility

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E. Managing the Changing Risks of Climate Extremes and Disasters

- Social, economic, environmental sustainability can be enhanced by DRM and climate change adaptation
- Measures with benefits in the short as well longer term are most effective for disaster risk reduction and adaptation
- Cooperation and coordination among DRM and climate change adaptation agencies is critical
- Opportunities exist for synergies from international finance for DRM and adaptation
- Iterative process of evaluation, learning, and innovation reduces risk and promotes adaptation
- Raise awareness and mobilize communities in disaster risk reduction and adaptation

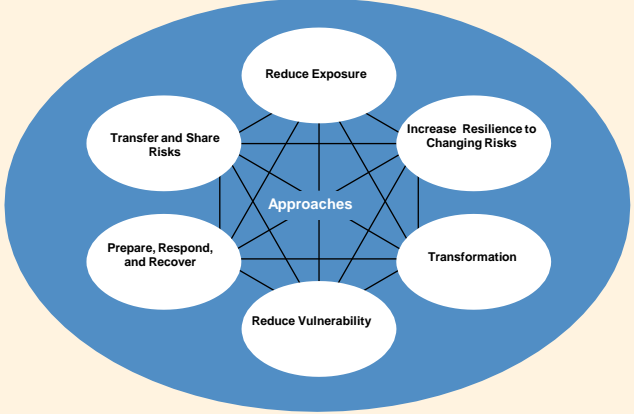
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Disaster risk management and adaptation to climate change focus on reducing exposure and vulnerability, and increasing resilience to the potential adverse impacts of climate extremes



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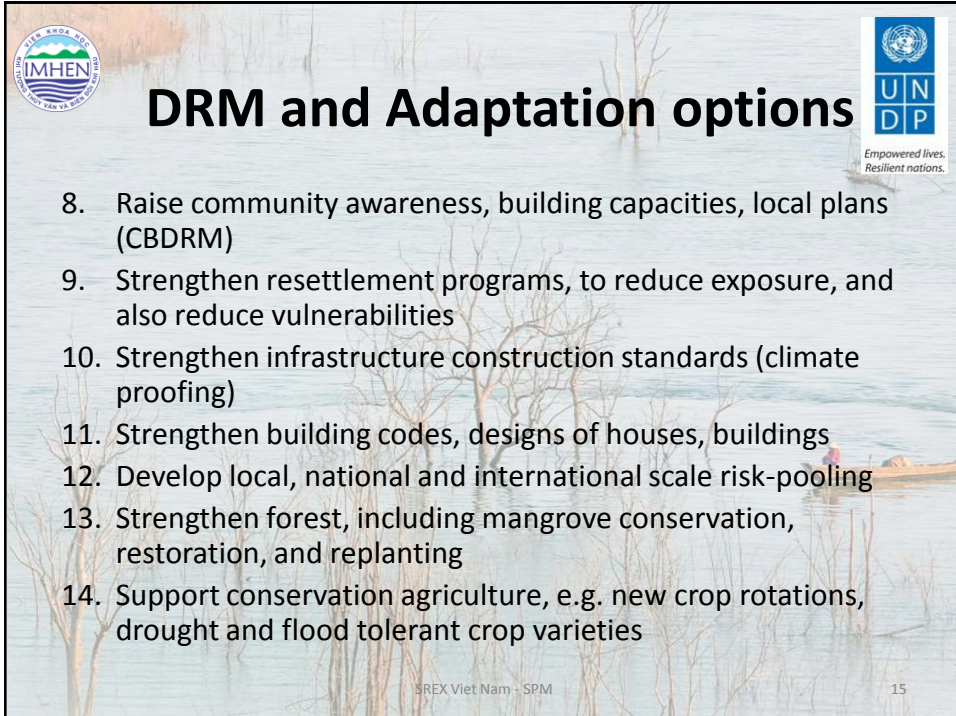
DRM and Adaptation options



Mainly low regret options to reduce the level of exposure and vulnerability to climate extremes :

1. Mapping various climate risks
2. Mapping exposure, vulnerabilities and adaptation measures
3. Improving forecasting capacities and early warning systems
4. Poverty reduction programmes
5. Strengthen social protection and social care networks to reach vulnerable groups
6. Integrate disaster risk reduction and climate change adaptation in urban & land use planning
7. Develop integrated plans for water resource management in river basins and key areas

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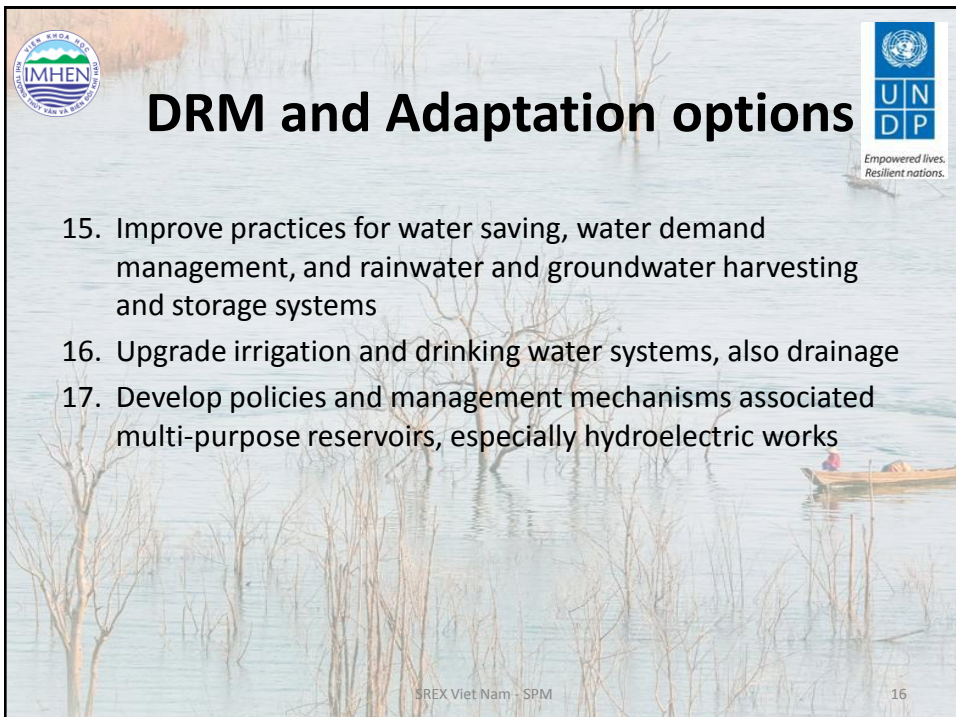
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 **DRM and Adaptation options** 
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8. Raise community awareness, building capacities, local plans (CBDRM)
9. Strengthen resettlement programs, to reduce exposure, and also reduce vulnerabilities
10. Strengthen infrastructure construction standards (climate proofing)
11. Strengthen building codes, designs of houses, buildings
12. Develop local, national and international scale risk-pooling
13. Strengthen forest, including mangrove conservation, restoration, and replanting
14. Support conservation agriculture, e.g. new crop rotations, drought and flood tolerant crop varieties

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 **DRM and Adaptation options** 
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15. Improve practices for water saving, water demand management, and rainwater and groundwater harvesting and storage systems
16. Upgrade irrigation and drinking water systems, also drainage
17. Develop policies and management mechanisms associated multi-purpose reservoirs, especially hydroelectric works

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