# Adaptive capacity development planning

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#### Content

- Potential resources
- Institutional planning
- Planning methods and tools

#### **Justification**

- Reducing vulnerability and disparity is a key developmental challenge in Mongolia.
- In rural areas where there is limited diversification in the economy, income generating opportunities are few & far between & pastoral herding is the main source of income.
- Almost 70% of all herders are considered poor and except for few government officers in the soums most people lack job opportunities to provide for a stable income.
- Supporting rural livelihood & income diversification is one of the ways to reverse this situation by reducing livelihoods vulnerability & keeping people on the land.
- In the past dzuds have resulted in some herders abandoning nomadic pastoralism completely & many have migrated to urban areas in search of alternative livelihood opportunities.
- Migration in the past 20 years led to intensive urbanization process with over 1/3 of the population (67.9%) residing in urban settlements. The growing problem of the 'Ger District' of UB with limited access to electricity and no running water, sewage or central heating.

### Community capacity analyses on the Dzud disaster risk survival and adaptation

Table 1: Capacity analyses on the risk and vulnerability survival, Dzud						
Risk	Methods for adaptation	Resource				
Human	<ul> <li>Be insured in health insurance</li> <li>Provide mental support</li> <li>Buy some firsthand medicine</li> <li>such as blood pressure, cold fluetc.,</li> </ul>	- Be involved in medical examinations of soum and provincial physicians for free				
Livestock	<ul> <li>Prepare hay and fodder</li> <li>Well insulate the livestock barns</li> </ul>	<ul> <li>Be involved in livestock index insurance</li> <li>Receive assistance for certain amount of hay and fodder</li> </ul>				
Livelihood	<ul> <li>In case of expected dzud, slaughter some livestock</li> <li>Establish small farm Grow vegetables and potato</li> </ul>	<ul> <li>Be involved in livestock index insurance</li> <li>Take loan from small and medium enterprise fund of soum</li> <li>Be involved in volunteer social insurance</li> </ul>				

Be registered for local labor exchange, get unemployment benefit/allowance

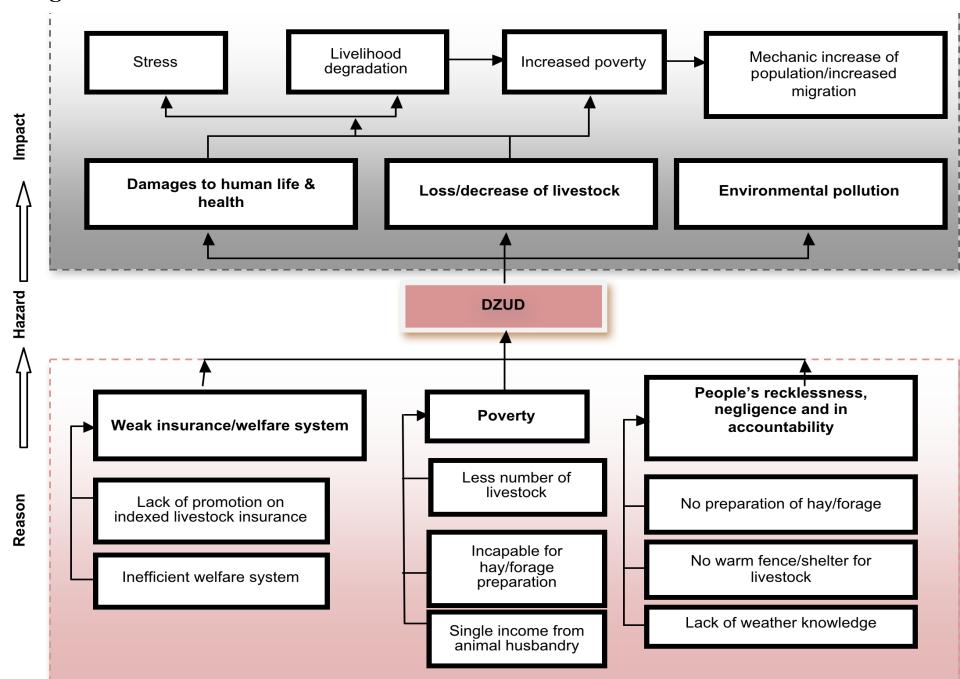
carrion (dead livestock) and get produce forage incentive Source: MRCS, 2012. The vulnerability and capacity assessment study, International Federation of Red Cross and Red Crescent Societies, Mongolian Red Cross Society, Ulaanbaatar

Set up plant to process carrion and

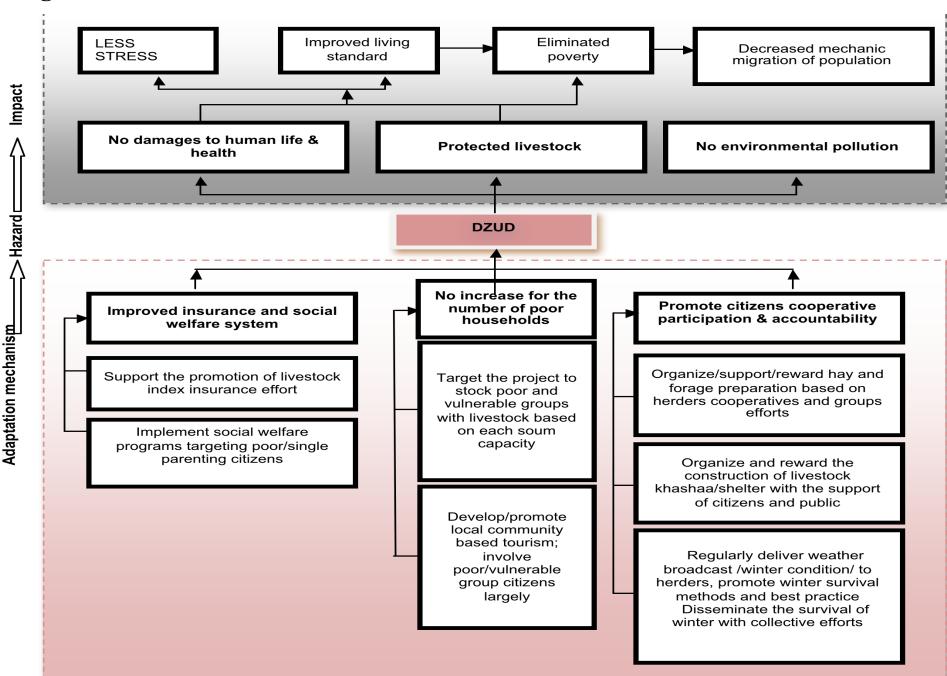
Be involved in the removal of

Environment

#### Diagram 1: PROBLEM TREE /DZUD/



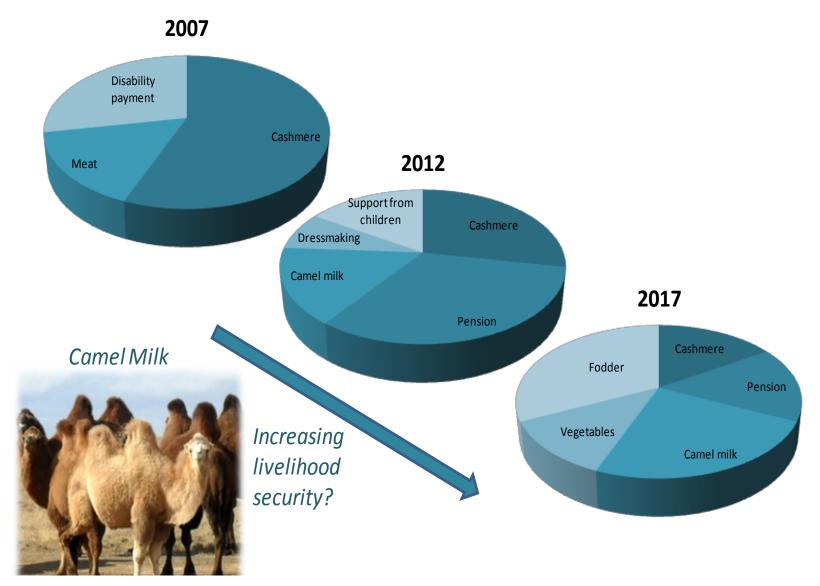
#### **Diagram 2: TARGET TREE /DZUD/**



#### **Potential resources**

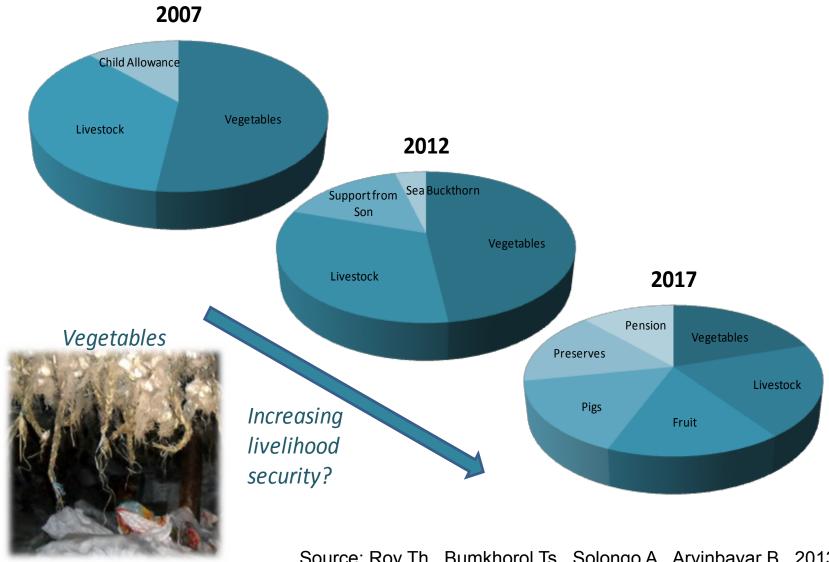
- Herders have become aware of other income-generating enterprise activities for livelihoods diversity.
- One Village One Product initiatives are evidently working well in providing support to enhancing social cohesion. They should be further encouraged as a means to contribute to enhancing levels of social capital within rural communities.
- The key issue is rural-urban migration and the pull of the urban centres as 'livelihoods of last resort' for those who are affected by external shocks such as the periodic dzud events.

#### Case#1: Changes in Camel Milk HH Enterprise Mix



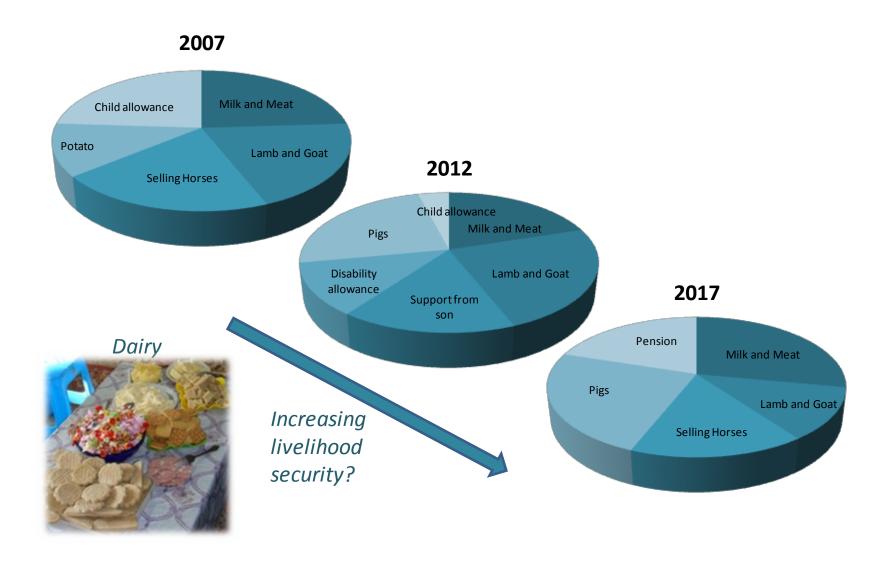
Source: Roy Th., Bumkhorol Ts., Solongo A., Arvinbayar B., 2013. Evaluation of the Livelihood Support Projects of UNDP, Ulaanbaatar

#### Case#2: Changes in Vegetables in the HH Enterprise Mix



Source: Roy Th., Bumkhorol Ts., Solongo A., Arvinbayar B., 2013. Evaluation of the Livelihood Support Projects of UNDP, Ulaanbaatar

### Case#3: Changes in Dairy in the HH Enterprise Mix



Source: Roy Th., Bumkhorol Ts., Solongo A., Arvinbayar B., 2013. Evaluation of the Livelihood Support Projects of UNDP, Ulaanbaatar

### Key methods: Participatory approach

**At local level:** A management's quality of cluster, community, local government leadership & support, involvements of stakeholders & its cooperation are key factors in the successful projects ownership.

Public private dialogues & cooperation was very important

- to build sustainable ownership
- coordinate national level policy

**Priority issues:** Cooperation & dialogue b/w central & local officials is seemed to be limited or weak. Strengthening dialogue between

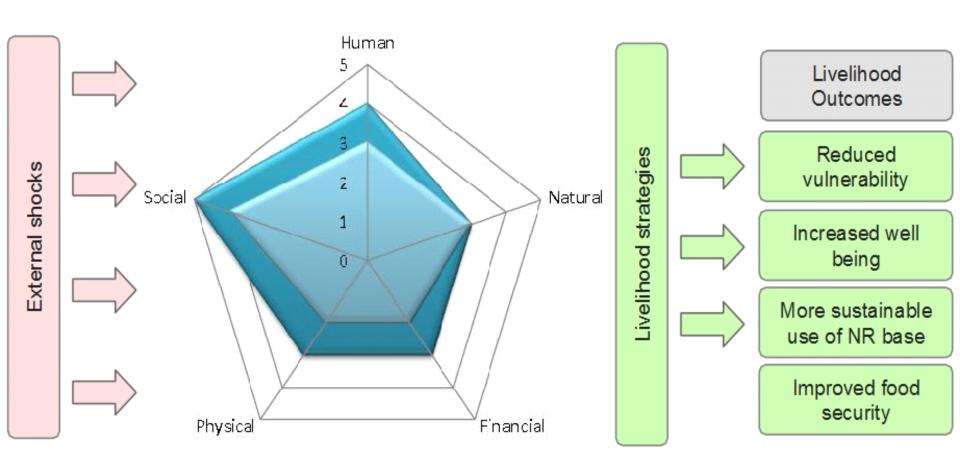
- central & local officials
- the public and the private sectors

### Institutional planning

	Institutional level					
	Wealth of Household	Community	Local/Aimag	National		
Institutional capacity	Wealth index/ Living standard	Initiative & cooperation	Technical & Operational support	Legal & policy support		
Identified institutions (entity)	<ul> <li>Number of livestock by type;</li> <li>Gender of head of the HHs;</li> <li>Family size</li> </ul>	<ul> <li>Local Cluster Development Initiative;</li> <li>One Village One Initiative;</li> <li>Herder's group</li> </ul>	<ul> <li>- Department of SME and Agriculture;</li> <li>- Taxation office;</li> <li>- Authority of Special Inspection;</li> <li>- Custom office;</li> <li>Local business incubators &amp; business training centers;</li> <li>- Affiliates of MNCCI and MONEF at aimag;</li> <li>- Local other NGOs</li> </ul>	- SME Agency;  - MoFALI; - National Committee on Regional Development; - General Department of Taxation; - Customs General Administration; - General Authority of State Registration		

	Institutional level					
	Wealth of Household	Community	Local/Aimag	National		
Institutional capacity	Wealth index/ Living standard	Initiative & cooperation	Technical & Operational support	Legal & policy support		
Financial support	- Loan guarantees;  - Local soft loan (without interest rate 0%) Leasing	- Loan guarantees;  - Local soft loan (without interest rate 0%)  - Leasing	- Aimag/soum development fund  - SME fund for small and medium business	<ul> <li>- Law on Exemption from VAT (Value added tax) and Customs duty for SME used equipments;</li> <li>- SME fund for small and medium businesses;</li> <li>- Employment Promotion Fund for small and micro businesses;</li> </ul>		
Human capacity building support	<ul> <li>Vocational and business trainings &amp; workshops;</li> <li>-Distribution of vocational training &amp; business guidebook materials</li> </ul>	<ul> <li>Vocational and business trainings &amp; workshops;</li> <li>Distribution of vocational training &amp; business guidebook materials</li> </ul>	- Organizing field visit & training  - Distribution of SME related materials & guidebooks	<ul> <li>SME Agency's training program;</li> <li>National program on vocational education and training;</li> <li>Grants for vocational education trainees;</li> </ul>		

### Adaptive capacity development planning tools



There are two core principles:

The first principle reflects the finding by the IPCC that "many actions that facilitate adaptation to climate change are undertaken to deal with current extreme events".

The second principle reflects a finding by the IPCC, that "adaptation measures are seldom undertaken in response to climate change alone". Decision-makers should therefore integrate climate adaptation with economic development – rather than tackling climate risk as a stand-alone issue.

Thus, the key question is not "How can we minimize the damage from climate hazards?" but rather "How can we reach our development targets while accounting for current and future risks?"

#### Applying first principle, we could:

- Adopt a comprehensive risk management approach assessing a location's risk across all climate hazards and economic sectors, and creating a ranking of risks including quantifying and assigning "price tags" to specific risks
- Use scenario planning to help decision makers select and prioritize climate adaptation and resilience measures in a situation of uncertainty about future climate.

Three scenarios: "base" scenario, "moderate" and "high" climate change scenarios

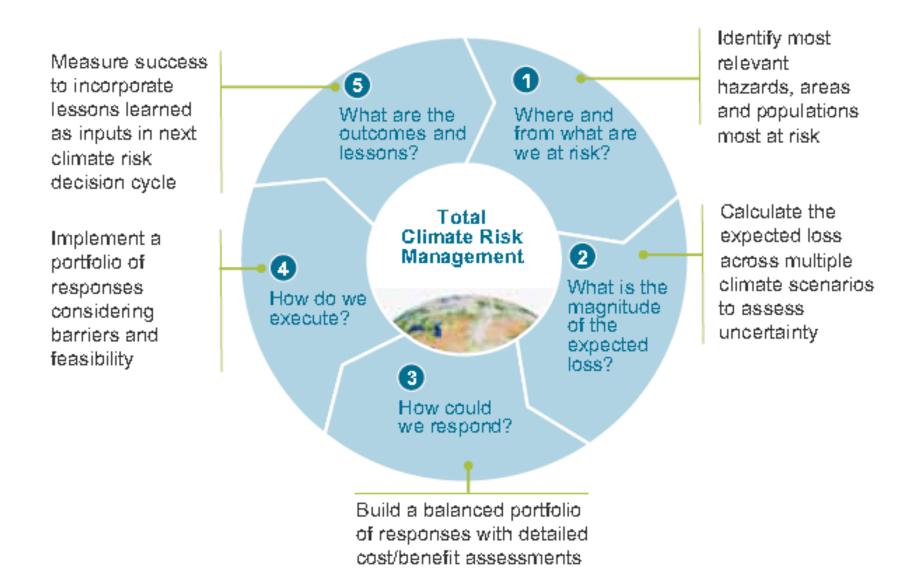
### Applying second principle, we could:

- Develope a comprehensive inventory of localized adaptation measures, many of which spanned both climate adaptation and economic development, with the participation of local and international experts and stakeholders from both the climate and development fields.
- Apply cost-benefit discipline to derive an effective portfolio of measures for each location, identifying the broader economic benefit of each measure along with its cost.

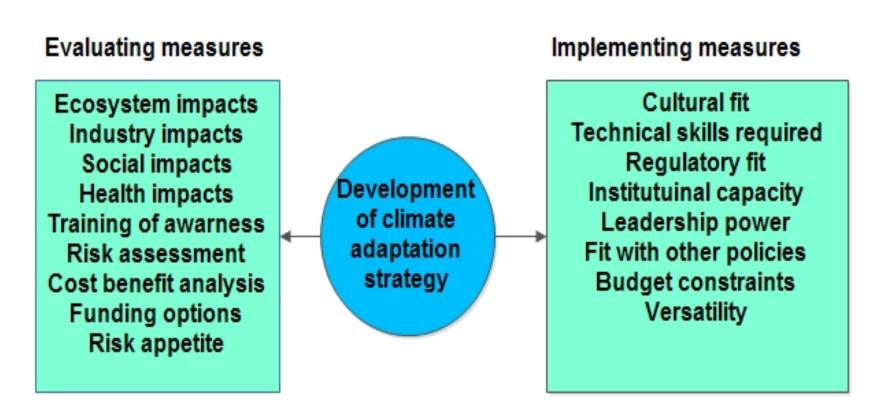
It is important to note, as the IPCC has, that countries' climate resilience depends on their socio-economic position, with many developing and least developed countries facing particularly difficult challenges both in addressing current climate risk and adapting to potential climate change – for such countries, it will be all the more vital that climate responses are coordinated with economic development strategies.

The framework derived from above two principles – a tool to assist decision makers in managing the total climate risk of a country, region and community – poses five questions, each driving a core set of Analyses

### A framework for assessing and addressing total climate risk



### Cost-benefit approach focuses on loss averted



Cost-benefit analysis and other economic assessments form only a small portion of necessary decision-making information

# Steps to implementing a comprehensive strategy for adaptive capacity development

# STEP 1: Start with a comprehensive approach and objective

To develop a comprehensive approach to adaptive capacity development, a stakeholder-driven effort is required at the national, regional and community level, assessing all relevant risks from a local base.

The objective of this more comprehensive approach could be a policy framework for adaptive capacity development, providing a broad policy wrapper for the full range of measures.

#### STEP 2: Prioritize hazards and Locations

Conducting a more comprehensive effort would still require a prioritization approach in order to focus the analysis, based on the question: "Where and from what is the country most at risk?"

A comprehensive national study could assess the climate risk of an entire country but still focus the analysis of adaptation measures on the hazards most relevant and sectors most vulnerable for each specific area

STEP 3: Recognize the uncertainty about future climate Building scenarios based on existing science and being explicit about the range of uncertainty is critical: such scenarios allow potential future climate-related loss to be quantified.

# STEP 4: For cost-effective priority measures, define current and target penetration

An assessment of the current penetration, expected growth, and targeted level of penetration of these measures will help crystallize the focus of a climate-resilient development strategy – will indicate where funding can be invested for greatest impact.

# STEP 5: Focues ond addressing traditional development implementation bottlenecks

Achieving climate-resilient development will entail grappling with many of the same bottlenecks historically faced in implementing development efforts. These include setting an appropriate policy framework, institutional capability, basic infrastructure, and access to finance. Addressing organizational issues at the local level will be a further key requirement for successful implementation of adaptive capacity development strategies.

# STEP 6: Encourage sufficient funding from the international community

Incorporating an assessment of future climate risk into countries' current development decisions is the ultimate goal in addressing the adaptation challenge

International funding could encourage this outcome through investment in technical skills, policy and planning, and knowledge dissemination at the country level.

## STEP 7: Recognize, facilitate and mobilize different roles for each stakeholder

It is also clear that the implementation of adaptation solutions will be led, financed, and scaled up by different actors depending on the nature of the measures.

Specific roles for particular stakeholders might include:

National government, Sectoral government agencies, Local government, International organizations/companies, Private sector and Households/Individuals

### Country case study methodology

- Measure success based upon key performance metrics
- Incorporate lessons learned in next iferation of the total climate risk decision cycle
- Identify key barriers to implementation
- Determine actions required to implement measures

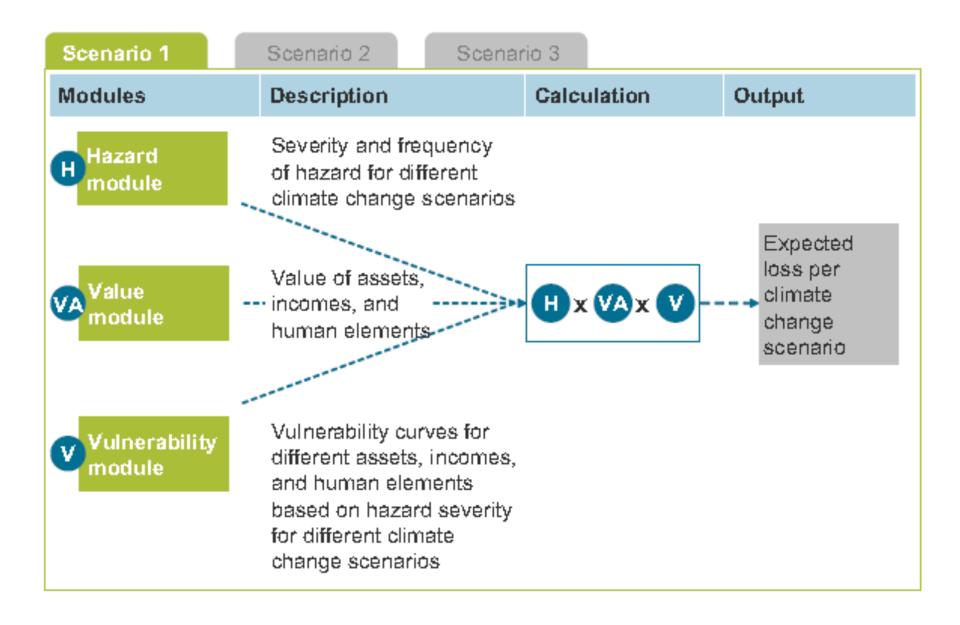


- Identify most relevant hazard(s)
- Identify most at risk areas
  - Population (especially vulnerable population)
  - Economic value (Assets, GDP)
  - Hazard:
    - Assess frequency and severify per scenario
  - Value: Quantify population, assets and income value at risk
  - Vulnerability:

Defermine vulnerability of population, assets and incomes

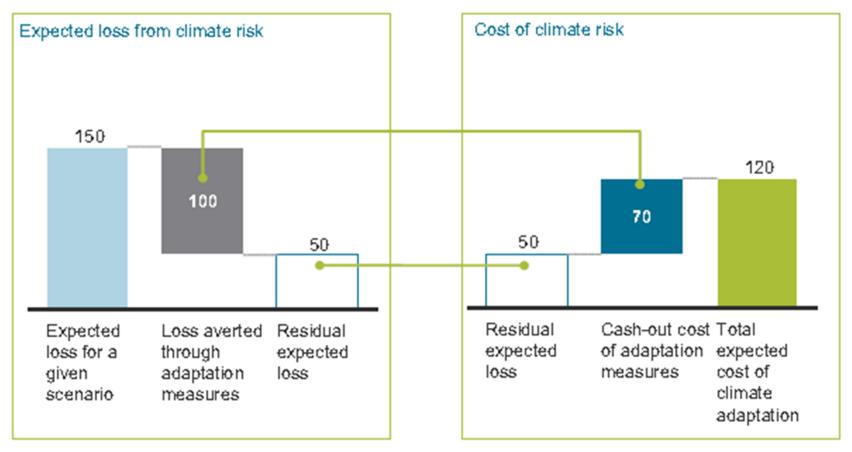
- Identify potential adaptation measures
- Determine basic feasibility of potential measures.
- Defermine societal costs and benefits (loss averted) of measures

### Three assessments used to quantify expected losses for each scenario



### Conceptual relationship between expected loss from climate risk and the costs of adaptation

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Expected loss = the amount of damage likely to occur in a defined time period The total cost of climate change = sum of the cost of adaptation + any residual expected losses not averted by adaptation measures

### Thank you for your attention