



Strengthening Climate Change and Disaster-Related Statistics:

National Adaptation Planning Processes

Webinar

SGD Data and Statistics Unit

4 May 2023

UNFCCC Decisions on NAPs

Decision 5/CP.7 (2011)

Objective is to:

- reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience
 - facilitate the integration of climate change adaptation into development planning processes and strategies.
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- ✓ Planning for adaptation is a continuous, progressive and iterative process;
 - ✓ Country driven, gender sensitive, participatory, fully transparent, considering vulnerable groups and ecosystems;
 - ✓ Based on and guided by best available science

CoP 26 NAP decision

Stock-take by 1 February 2024 on formulating and implementing NAPs.

Where is UNEP supporting NAP processes?



- Plus NAP Global Support Programme
- Identifying climate risk and **adaptation priorities and integration** into development plans & budgets
- **Blue** = approved projects
- **Yellow** = projects under implementation

Nepal National Adaptation Plan

- 9 priority programmes in the Agriculture and Food Security Sector, estimated at USD11.2 billion to 2050.
- Programme on Sustainable Agriculture, Food and Nutrition Security and Climate Resilient Health and Hygiene – USD2 billion
 - Promotion of nutrition security for healthier livelihoods
 - Increase crop production through adoption of climate resilient and sustainable agricultural practices
 - Develop energy efficient agricultural technology



GOVERNMENT OF NEPAL

NATIONAL ADAPTATION PLAN (NAP)

2021-2050

SUMMARY FOR POLICY MAKERS



Risk and vulnerability factors in Nepal in the agricultural sector

Vulnerability stems from:

- Rising temperatures, changes in precipitation, extreme weather events
- High reliance on small-scale, rainfed agriculture, dryland farming
- Increased incidence of pests and diseases;
- Depleted grass and feed
- Heat stress, reduced appetite and reduced milk production, mortality
- Reduced arable land with flashfloods and landslides, accelerated soil degradation and soil fertility
- Shortages of water for crop production
- Limited access to agricultural extension services
- Poverty levels and limited access to inputs and capital
- Outmigration of men, feminization of agriculture.
- Impacts on agricultural GDP in 2020 of 1.5-2 %

Example of indicators used to measure vulnerability reduction

Outcome indicators:

- Increase in agricultural production, productivity – observed
- Reduced vulnerability - index of indicators OR perception-based/qualitative indicator

Causality: need to measure indicator progress in the actions leading to reduced vulnerability, e.g

- Access to extension services
- Access to inputs and capital
- Uptake of climate resilient agricultural methods
- Soil carbon and/or moisture content
- Vegetation coverage on land
- River flows – (5+ years longer time period)

Indicator selection depends on scale of the intervention and timescale of measurement.

Indicators measured at the macro level: limited number, showing national level changes, showing decoupling of loss and damage trends from weather trends over time

Complemented by deep dive analysis at the sector level to understand where to put resources and upscale effective interventions

Why is adaptation and the adaptation gap difficult to measure?

IPCC TAR (2001): Climate change adaptation (CCA) is defined as “*adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities*”. **Adaptation – process and outcome.**

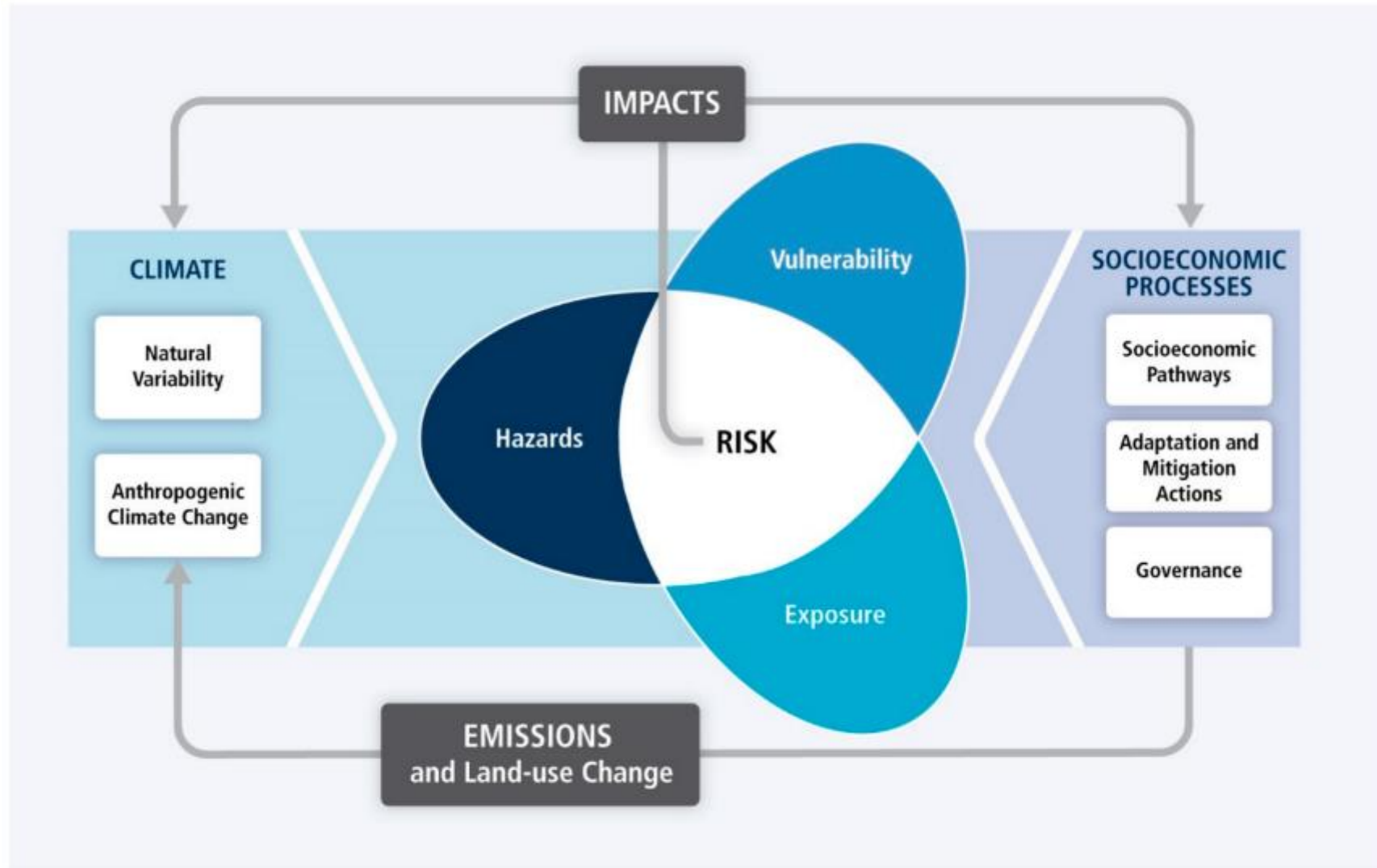
IPCC FAR (2013/4) Risk is caused by the climate hazard, exposure of people to the hazard and their vulnerability status. Vulnerability: financial, physical, social organization, institutions; education, rights/power/entitlements/Adaptive capacity = **multi-faceted = basket of indicators to measure vulnerability and risk.**

- Set the climate vulnerability baseline and the adaptation goal
- Consider that vulnerability comes from different factors.

Adaptation measurement approaches: i) robust decision-making ii) avoided losses from climate hazards; iii) positive targets (# water storage facilities)

ii) Could include development work that addresses or transforms the underlying socioeconomic drivers of vulnerability, adaptive capacity, and resilience

IPCC (Assessment Report No.5): Risk Conceptual Framework



Take-aways

Natural assets play a key part in the climate impact and risk chain. 60% of ecosystem services and up to 70% of regulating services are being degraded or used unsustainably and measuring and maintaining natural capital stocks as they form the basis for current and future climate resilience would be crucial.

Analysis of climate impact chains in different ecosystem contexts, leading to identification of climate risks and the key indicators of vulnerability: environmental, social, and economic.

Understanding the key drivers of vulnerability will enable adaptation strategies to be identified, targets established and tracked, and identify which of the **231 SDG indicators** are most relevant to vulnerability and adaptation.

Climate baselines need to be tracked along with key indicators measuring vulnerability reduction to assess adaptation progress. National statistical offices could start to track macro-level indicators along with the climate baseline, for example, rainfall patterns and food production. The GGA process could develop complementary research frameworks to carry out deep-dive analyses on progress in reducing exposure and vulnerability to climate change.



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National Adaptation Plans



25 MAR 2021 | PRESS RELEASE | CLIMATE CHANGE

Pakistan to develop National Adaptation Plan for climate change

Thank you for your attention

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