

Framework Adaptation for Assessing the Climate Resilience of Health Systems in Nepal

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Background

Climate change poses significant challenges to health systems. Assessing health system resilience to climate risks is essential for strengthening preparedness and response strategies. While global frameworks exist, their applicability in Nepal's diverse socio-environmental context requires adaptation. This study explores the process of adapting a global climate resilience capacity assessment framework to Nepal's health systems.

Objectives

- To adapt global climate resilience frameworks to Nepal's socio-environmental diversity, integrating local risks.
- Develop localized assessment tools (checklists, assessment framework) to evaluate health system resilience, infrastructure robustness, and sustainability metrics.
- Assessment and validate indicators through stakeholder consultation (health workers, communities) and field-testing.

Gaps in Health Systems to Respond Impact of Climate Change in Nepal

Workforce lacks knowledge, capacity, and resources to manage climate-related health threats.

Policies and planning for climate-related health risks are centralized, with limited local engagement.

Climate hazards like floods and landslides compromise health infrastructure, creating resource disparities.

Despite early warning systems for climate disasters, Nepal lacks an integrated, climate-informed health surveillance system.

Laboratory services face challenges in testing, transport, quality management, and regulation

No dedicated budget for climate-related health impacts and no guidelines for integrating climate resilience into healthcare financing.

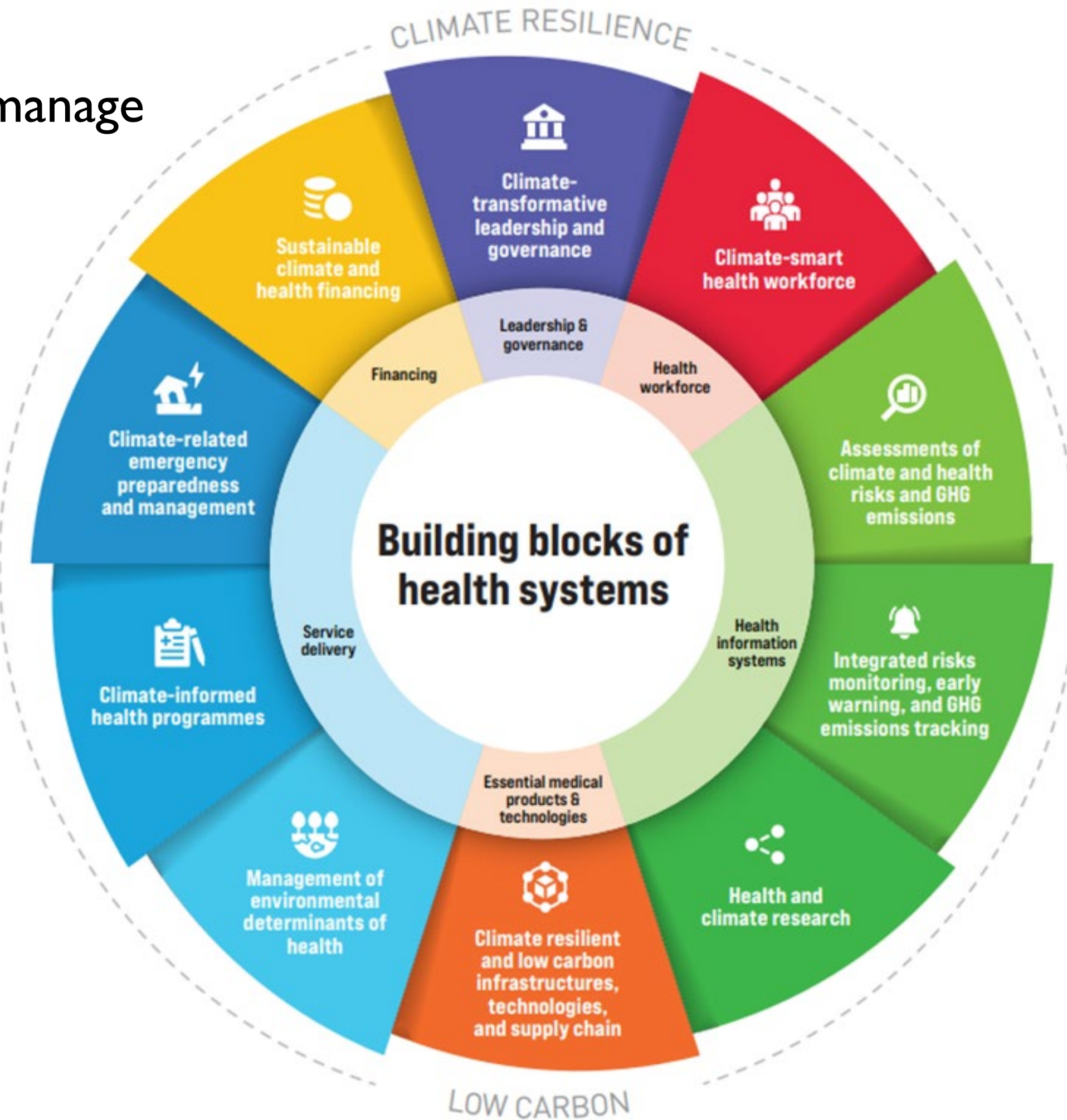


Figure: Conceptual framework: Building climate-resilient and environmentally sustainable health care facilities,WHO

Contextualization

Adapt global resilience indicators to Nepal's socio-environmental context (e.g., integrate mountain/plains disparities, rural healthcare access).

Framework Preparation

Analyze existing climate resilience frameworks (e.g., WHO, UNFCCC) to identify core components and collect data on Nepal's climate risks and health system vulnerabilities

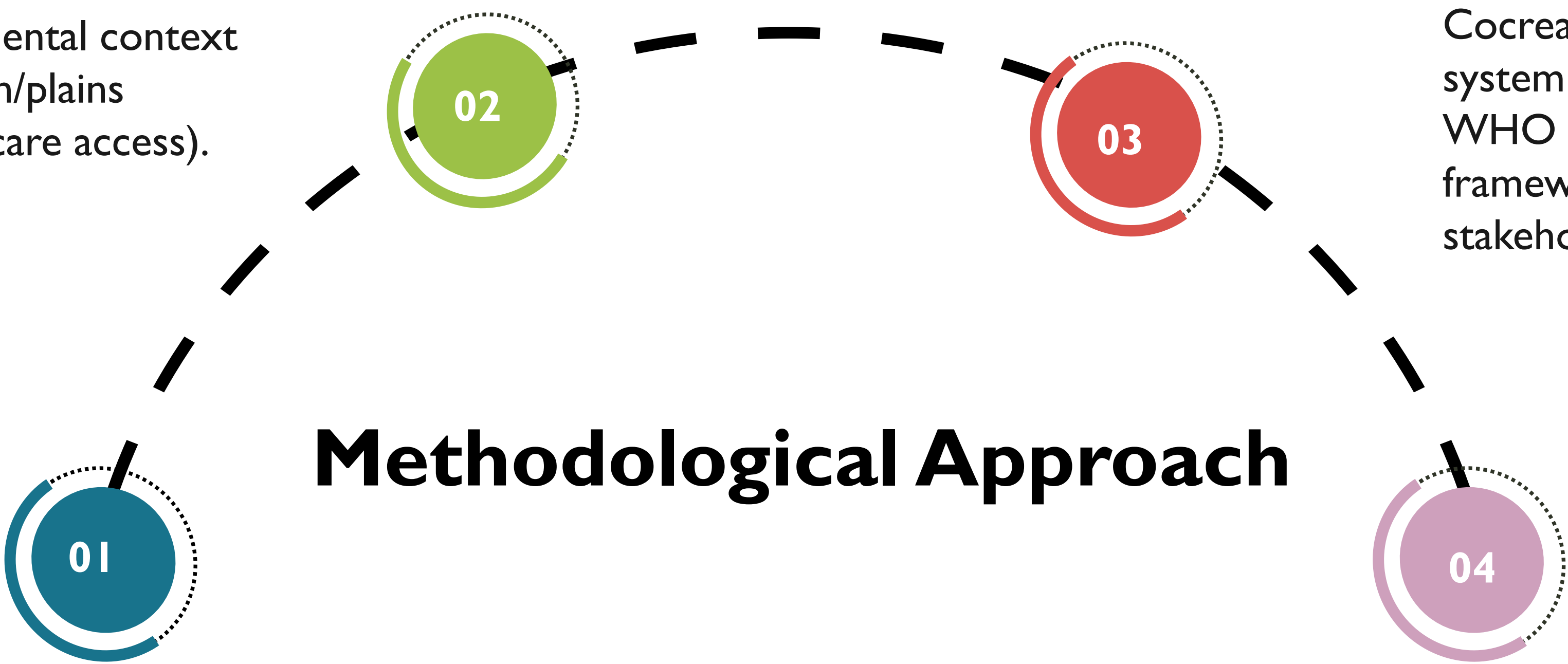
Assessment tool development

Cocreation of practical tools to evaluate health system and health facilities' resilience based on WHO framework and deploy the adapted framework to monitor performance, collect stakeholder feedback.

Refinement

Adjust improve relevance and effectiveness

Methodological Approach



Key Findings

Global indicators require significant adaptation to capture the diverse geographic, context specific strategy, cross-sectional collaboration, and administrative realities of Nepal on following dimension

Green Infrastructure

indicators should emphasize, flood, landslide, and other climate extreme resilience in health facility design.

Localized Energy Solutions

promotion of solar hybrid systems for off-grid health centers.

Improved Water Security

indicators should track water availability, storage capacity, and conservation measures.

Capacity Building

training indicators should include climate adaptation, emergency response, and energy efficiency

Integration with National Health Policies

ensuring that climate resilience indicators align with Nepal's national health policy and climate change strategy.

Waste Reduction

emphasizing biodegradable materials, waste segregation, and recycling.

Conclusion

The findings provide insights for scaling up climate resilience assessments across Nepal after tailoring to local context to strengthen Nepal's capacity to adapt to and mitigate the impacts of climate change on public health.

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