

Conservation Organizations and Adaptive Capacity: Why Local Input Matters

Elizabeth McLeod¹ & Brian Szuster²

¹ The Nature Conservancy

² University of Hawaii at Manoa

Adaptive Capacity

- ◆ ability of systems, institutions and individuals to adjust to potential damage, take advantage of opportunities, or respond to consequences (IPCC 2014)
- ◆ four dimensions of adaptive capacity: learning to live with change, nurturing diversity, combining different types of knowledge, maintaining self-organization (Folke et al., 2003)
- ◆ social capital, social networks, institutions, and governance as important determinants of adaptive capacity (Lockwood et al., 2015)

Why is it important to assess adaptive capacity?

- ◆ identify risks
- ◆ prioritize management interventions
- ◆ reinforce effectiveness of conservation actions
- ◆ prioritize conservation investments
- ◆ direct resources to achieve desired outcomes
- ◆ inform the allocation of adaptation funding



Why is it hard to assess adaptive capacity?

- ◆ evolving socio-environmental assessment frameworks are becoming more integrated and complex
- ◆ context-specific and shaped by dynamic factors (not easily generalizable)
- ◆ factors do not carry equal weights between contexts
- ◆ lack of clarity on the relative importance of individual factors
- ◆ lack of agreement on methods
- ◆ often limited resources to assess adaptive capacity

Study Objectives



Despite both the benefits of adaptive capacity assessment and an extensive literature, little agreement exists on:

- ◆ the most relevant factors needed to support local adaptive capacity assessments, and
- ◆ specific guidance on how adaptive capacity assessments should be conducted

Cassandra De Young discussed yesterday, different groups are asking different questions, for different reasons

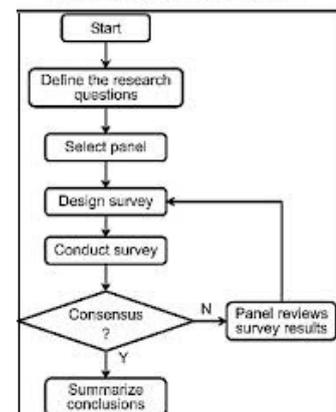
What are the key questions?

Evaluating Adaptive Capacity - International Experts -

Delphi Technique

- ◆ structured interaction among group of experts to achieve convergence on a subject
- ◆ 12 international experts agreed to participate (peer reviewed articles, on-going research, development or application of tools, >10 years experience, global expertise)
- ◆ developed prioritized list of factors influencing adaptive capacity
- ◆ at least two rounds of answering questions / giving justification for answers required (we completed 3)
- ◆ opportunity available between rounds for changes and revisions

Flow of Delphi Surveys



Stakeholder Focus Group Site

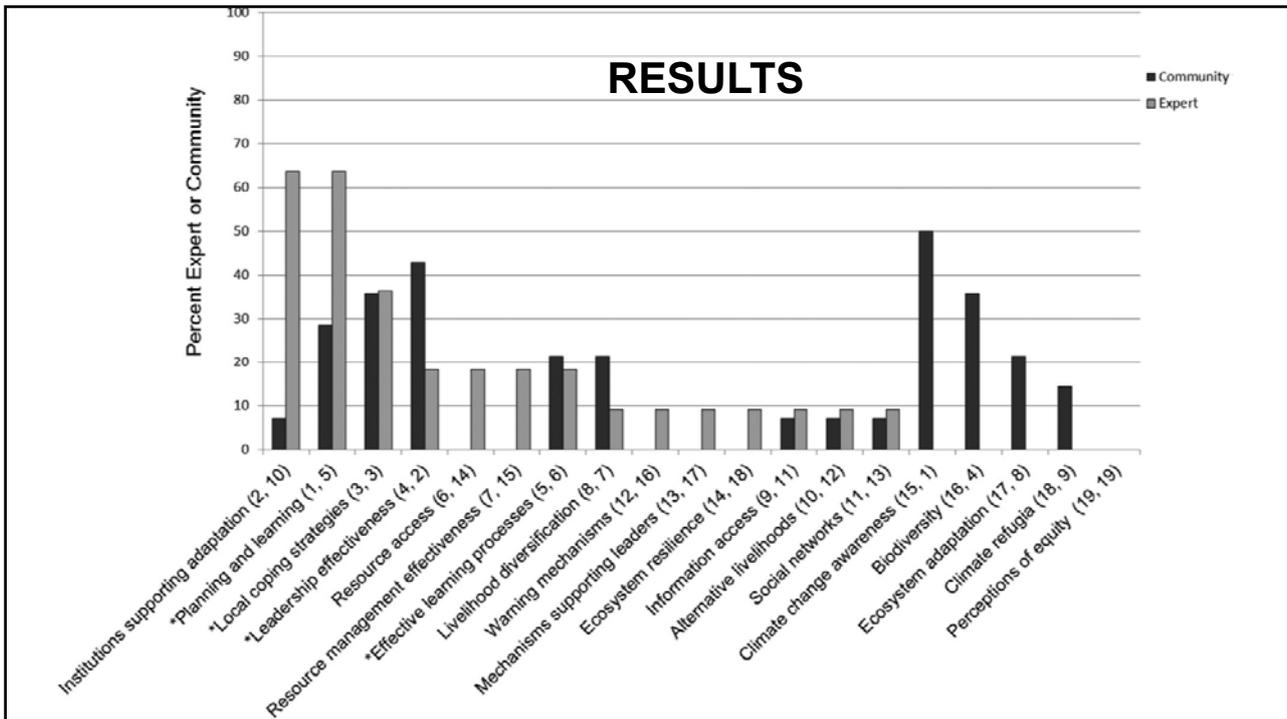


Evaluating Adaptive Capacity - Stakeholder Focus Groups -

Focus Groups in Pohnpei, Micronesia

- ◆ local stakeholders asked to identify factors likely to affect community adaptation to climate change
- ◆ 17 community members from 3 villages
- ◆ gaps filled and ranked factors
- ◆ consensus achieved on 1st, 2nd, 3rd most important, and the least important factor





DISCUSSION

- ◆ adaptive capacity assessment required to inform conservation planning, management and investment decisions
- ◆ guidance needed on which factors to assess and this research provides a starting point
- ◆ more research needed in different areas to clarify priority adaptive capacity factors
- ◆ existing approaches also includes factors that are vague or poorly defined (must be clarified to be useful to communities)
- ◆ differences in priorities between experts and local stakeholders in Micronesia illustrated an important perception gap

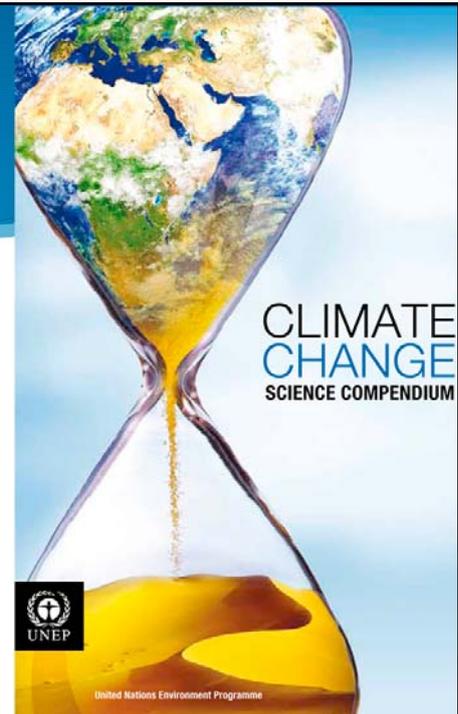
CLIMATE
CHANGE

SCIENCE COMPENDIUM

UNEP
United Nations Environment Programme

DISCUSSION (cont.)

- ◆ conservation organizations typically prioritize ecological factors but this research confirms the importance of both social and ecological indicators
- ◆ need to consult with both experts and communities (consensus on basic assumptions and priorities not a given)
- ◆ differing views on importance of climate change awareness between experts and local stakeholders confirms this view



Conclusions

- ◆ effective adaptive capacity assessment depends on ability to innovate, learn, maintain collective memory, collaborate
- ◆ conservation organizations and other relevant groups need to assess, monitor and understand the highly contextual variables that influence adaptive capacity
- ◆ need to identify and reinforce most important factors that empower community response to climate change and enhance social and ecological resilience
- ◆ adaptation assessment often completed by international experts, but local input is critical, and can change how projects are prioritized, funded, and completed

