



AMERICAN MUSEUM OF NATURAL HISTORY

CENTER FOR BIODIVERSITY AND CONSERVATION

# Practical experiences with linking cultural and biological diversity at local and global scales

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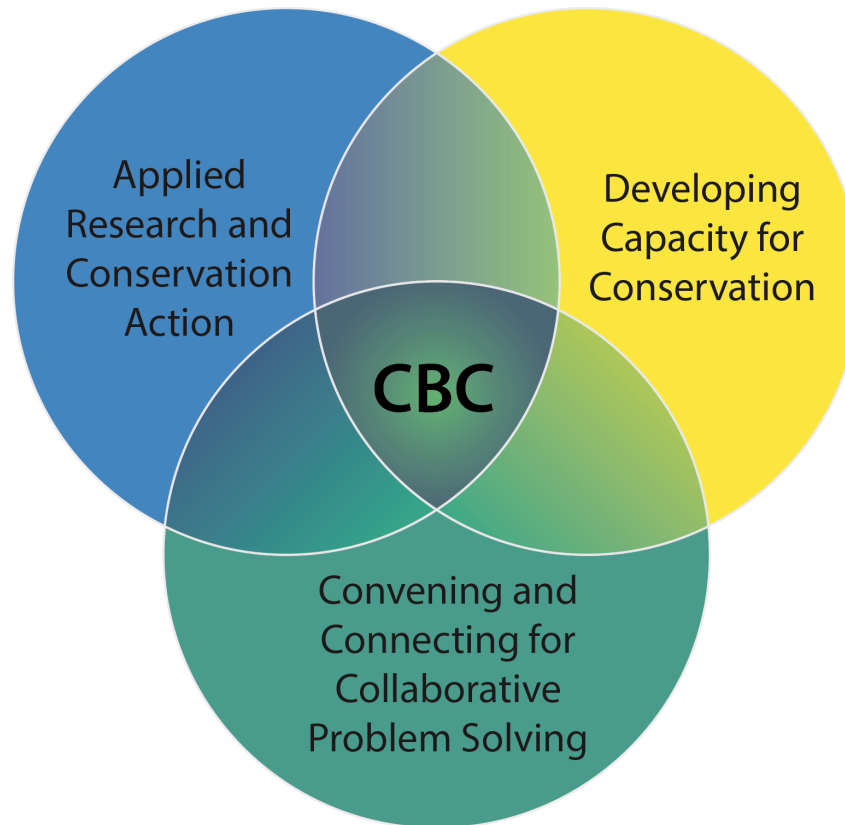
Center for Biodiversity and Conservation

American Museum of Natural History

The Summit Michtanbal on Indigenous Experience: Traditional  
Knowledge and Biological and Cultural Diversity

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# Center for Biodiversity and Conservation



The CBC transforms knowledge - from diverse sources and perspectives, and spanning areas of scientific research as well as traditional and local knowledge - into conservation action.

# Biocultural Concepts

- Human practices, knowledge, and beliefs influence and are influenced by the landscapes of which humans are a part

(Cocks 2006, Maffi 2005, Maffi and Woodley 2010, Wilson 2008)

# Biocultural Concepts

- Human practices, knowledge, and beliefs influence and are influenced by the landscapes of which humans are a part
- Interweave of biological and cultural diversity, people and place, and the continuing adaptation and co-evolution between landscapes and ways of life

# Biocultural Approaches to Biodiversity Conservation

- Goals and interventions culturally appropriate
- Build on worldviews, knowledges, and values of the local community
- Focus on the feedbacks/relationships between people and place
- Principles of sustainability

# Local actions

- Community visioning
- Planning
- Indicator selection
- Implementing
- Measuring and Evaluating

# Local actions

- Visioning: Imagine a resilient Pacific community/biocultural landscape.
- What are valued characteristics of that community/landscape (cultural, biological, social, political)?
- What knowledges do you have/need to manage this landscape; who holds/earns the knowledge and how?





- Indicators: What are key connections between different aspects of the valued biocultural landscape that help to maintain it?
- Indicators: How do you know what success looks like? What do you measure/talk about with others to share challenges and successes?



# Indicators

Variables that summarize or otherwise simplify relevant information, make visible or perceptible phenomena of interest, and quantify, measure, and communicate relevant information Gallopin 1996



# Indicators are not universal

- **What** indicators we choose to measure and **how** we measure them reflects our worldviews and impacts the people and activities that are included in or affected by a given plan for action.

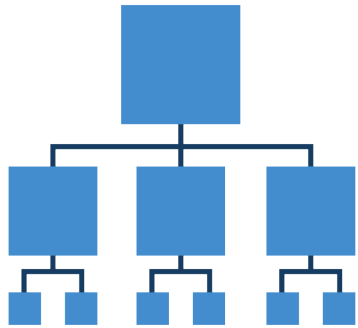
# Locally relevant indicators of resilient biocultural landscape not in global indicator sets

- *Solesolevaky* – Fijian
- *Lale dron* – Marshallese
- *Laulima* – Hawaiian

Working together for a common good

# Global

Global goals and  
indicators



Aichi targets

Sustainable Development Goals

ordered

heirarchical

comparable

quantitative

# Responses of local community members to international indicators and framing

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- Healthy environment and healthy people all connected
- Vulnerability frameworks
  - Inverse of resilience

# International Household Food Security Indicators



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## ***In the past 12 months . . .***

*Were you ever hungry but didn't eat  
because there wasn't enough food?*

*Did you ever reduce the size of a child's  
meal because there wasn't enough  
food?*

*Children skipped meals because there  
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**Culturally inappropriate questions –  
Food provision fundamental to  
lifeways/Ways of being**



## Solution: Frame with a Resilience Perspective

*What are the ways that you ensure that no one in your community goes hungry?*

*How do you ensure that you can access food after a tropical cyclone?*

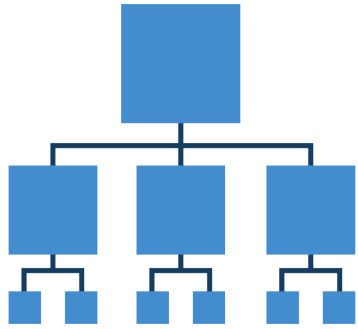
*What are the knowledge sources for emergency food (upland gardens, etc.)? Who holds that knowledge and how is it passed on?*

*How many days after a major disruption in your food system can you survive on existing or emergency food sources?*



# How to link local to global indicators

Global goals and indicators



ordered  
hierarchical  
comparable  
quantitative

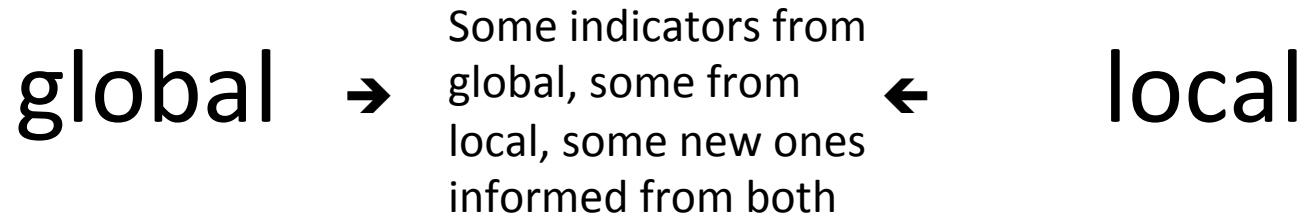
Local goals and indicators

Elements connected,  
cannot easily  
compartmentalize  
Indicators shared via  
multiple systems  
including stories, art,  
song, poems, qualitative

# How to link local to global indicators

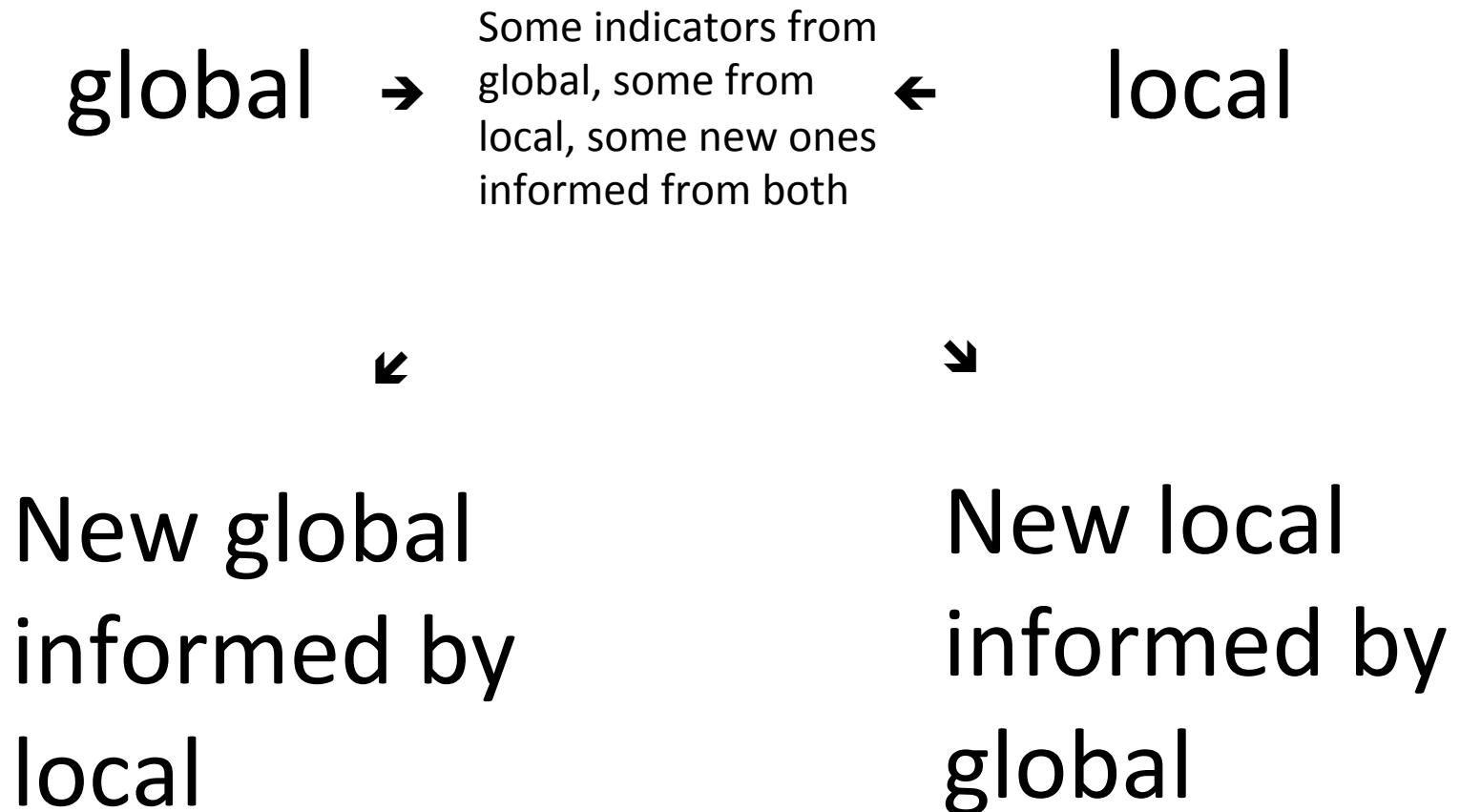
global → ← local

# How to link local to global indicators





# How to link local to global indicators



# Potential practical approaches for linking biological and cultural diversity

- UNESCO-SCBD Joint Programme on links between biological and cultural diversity could develop shared indicators across conventions
- National Biodiversity Strategic Action Plan process could attend to cultural relevancy of indicators
- Biodiversity Indicator Partnership could actively consider cultural-biological issues
- Other provincial and national indicator efforts/frameworks like Melanesian well-being/Buen Vivir/Mauri Model
- Develop framework for locally-appropriate, globally-applicable indicators drawing inspiration from *Vitality Index of Traditional Ecological Knowledge*

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