Connecting knowledge systems in ecosystem assessments

– previous experiences and looking ahead

SGA Network Annual Meeting

Stellenboch, South Africa 26 - 29 November 2012

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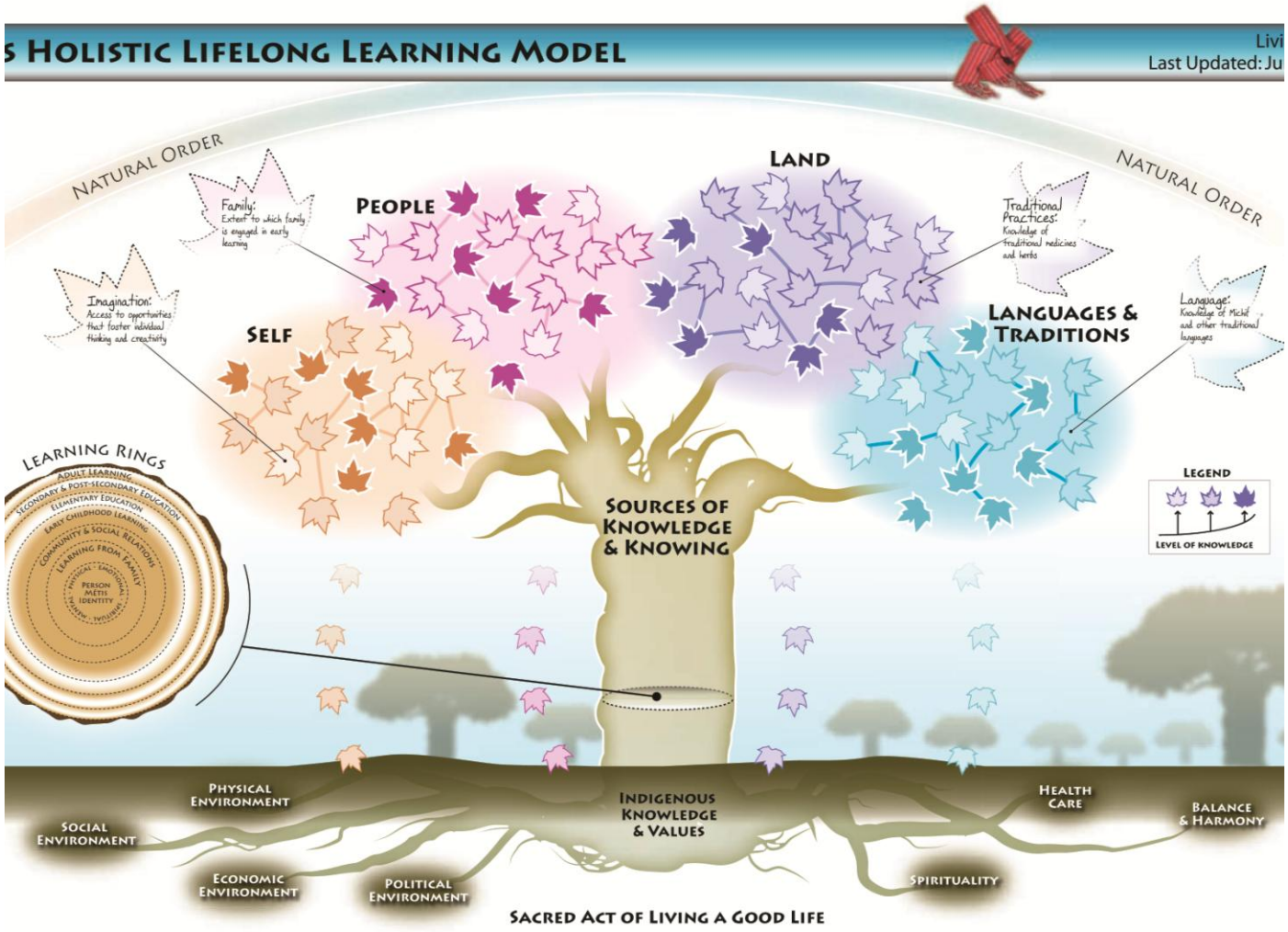
FUNDED BY MISTRA

Overview

- Diverse approaches for exchanging knowledge
- Validation of what for whom?
- Exchange of knowledge systems in the Millennium Ecosystem Assessment
- IPBES as a possible ”knowledge platform”



Indigenous, traditional, local and scientific knowledge systems can contribute to the sustainable management of ecosystems

Diverse knowledge systems

- Indigenous knowledge
- Indigenous science
- Traditional knowledge
- Aboriginal knowledge
- Traditional ecological knowledge
- Folk knowledge
- Local knowledge
- Farmers´ knowledge

…share sufficient meaning to be utilized interchangeably in many contexts (Berkes, 2012)

Essential attitudes

- Respect
- Trust
- Reciprocity
- Equal sharing

- *The first knowledge system clash – between natural sciences and social sciences and the humanities.*

Three general approaches to exchange between knowledge systems

- **Integration.**
- Components of one knowledge systems incorporated into another through a validation process

- **Parallell approaches.** Placing knowledge systems next to each other, using separate validation and assesing insights.

- **Co-production of knowlede.**
- Engaging in mutual processes of knowledge generation

Integration of knowledge

Successful application ex:

Soil classification, seed diversity, pest control

Positive:

- Makes knowledge valid for inclusion in and impact on ecosystem assessment at different scales

- May contribute to empowerment of local peoples and improvement of the knowledge base for decision making

Critique:

- takes for granted existing power relations between indigenous peoples and state / scientists

- "traditional knowledge seen as a new form of data to be incorporated into existing management…"

Way forward:

- new frames for integration
- greater cognizance of the social contexts of integration,
- expanded modes of knowledge evaluation,
- involvement of inter-cultural "knowledge bridgers."

Parallell approaches.

- Separate mechanisms for validation be used for different knowledge systems
- Emphasize complementarity
- Dual based evdience – exists as idea, but remians to be developed
- Challenge remains on who determins the validation
- And to what extent it will be perceived as valid knowledge for inclusion in ecosystem assessment.

Co-production of knowlede.

Emerging paradigm: *s*cientific and indigenous knowledge holders working together to co-produce new solutions to complex challenges:

- Joint formulation of novel research questions
- Collaborative methods for data gathering
- Flexible arrangements for interaction
- Complementary data sets – qualitative & holistic along with quantitative and reductionist
- Respect for different approaches, worldviews and epistemologies

Validation in science policy processes like MA and IPBES

- Science needs validation to be credible for decison making

- Validation of what for whom?
- In what context?

MA identified two main challenges:

- Who establishes what appropriate ”validation” of information is?
- Can an assessment that is grounded in formal Western scientific traditions ever be legitimate, credible, and useful to indigenous and local communities? - and the other way around

Reid 2004

Validation of multiple knowledge systems in the MA

Mechanisms for allowing use of diverse knowledge

→ subglobal

Scientific mechanisms of validation: triangulation of information, review by other communities and stakeholders etc.

Methodology not given

Local and indigenous knowledge in IPBES

- Multidiciplinary Expert Panel with broad participantion
- Platform should collaboratre with networks of knowledgeholders and recognize and respect the contribution of indigenous and local knowledge…”
- Exploring ways and means to bring different knowledge systems, including indigenous knowledge systems, into the science-policy interface.”
- IPLC participate in the Plenary as observers. The Plenary encouraged to take into account input and suggestions made by relevant stakeholders, such as IPLC.
- Secretariat to compile critical review of assessments including experiences with the integration of knowledge systems.

Concluding words

- Be aware where you are on the scales
- Validation – crucial but make sure you do not ”validate away” the gains of diversity in knowledge systems
- Diversity of knowledge systems strengthens resilience building
- IPBES has potential beyond a ”Science policy platform” as a ”Knowledge platform”

Thank you!

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