# INDIGENOUS AND LOCAL KNOWLEDGE AND SCENARIOS

**NEA Initiative Global Workshop** 





Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

SwedBio

## Why ILK in Scenario Building?

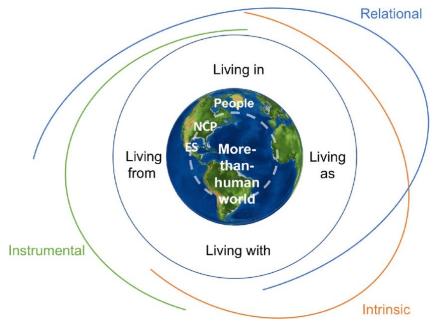
- Alternative Perspectives in scenario building:
  - A more comprehensive understanding of potential future trajectories
  - Alternative pathways that maybe absent from mainstream perspectives alone.

#### Holistic Approach: Incorporating plural values

 Ensures scenarios include ILK ways of knowing, social, cultural, ecological, spiritual and relational values

#### Local Contextualization:

- ILK is deeply rooted on local contexts
- How future changes/pathways could impact IPLC's practice, culture & ecosystems
- Building localized scenarios based on IPLC's preference and perspectives





## Why ILK in Scenario Building (2)

#### Climate Change: One of the key drivers of biodiversity

- Insights on ILK adaptative strategies
- Accounting DRR ILK practices
- Insights on future uncertainties and shocks
- > **Governance Options**: ILK is deeply rooted on local contexts.
  - Consideration of customary governance and cogovernance

#### Long-term Sustainability:

- ILK often empathizes on long-term sustainability drawing on their generations of living in harmony with nature.
- New perspectives on scenarios or pathways focusing on environmental sustainability.
- IPLCs future often rooted in the present and past

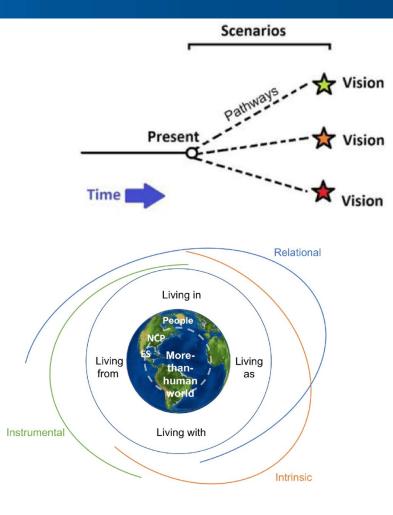


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## ILK AND SCENARIOS

### **Scenarios in the context of IPLCs?**

- IPLCs past is usually connected to the present and future - i.e. ancestors
- · IPLCs timeframe is often cyclical and non-linear
- IPLCs make decisions everyday concerning the future and their relationships with nature
- Humans are usually not the centre of Indigenous visions





## Why Consider ILK in NEA Scenario Building

- Detailed knowledge of biodiversity status, trends, drivers and impacts
- Environmental stewardship
- Threats to biodiversity and ILK
- Informed policies and collaborative governance
- Community-Based Research
- Integrating diverse values (intrinsic, instrumental and relational values)





## **Guide for including Indigenous visions in NEA Scenarios**

#### A. Organizing participatory and community-led **visioning and pathways activities Could Capture**

- Community's ILK systems, strengths, practices, worldviews, and values
- Future vision
- Pathways for achieving desired vision
- B. Develop a **narrative** based on themes, i.e.
  - Community ILK, practices, values and worldviews
  - Community desired future vision for their community/territory
  - Proposed pathways to attain the desired vision
- C. **Visualization** of the narrative (visions and pathways) i.e.
  - Artwork
  - Maps
  - Eco-calendars
  - Table Matrix

#### Note

- Experts judgement
- Literature review understand ILK and practices
- Methodology dependent on visualization format



## **Example from IPBES ILK Dialogue workshop**

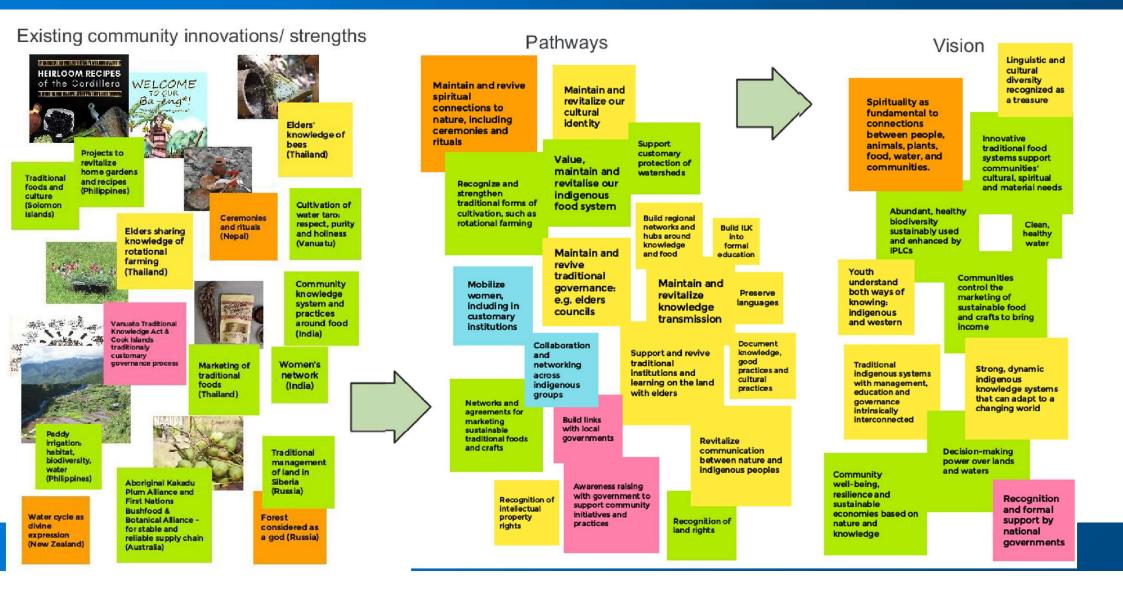
- Organized an ILK dialogue workshop as part of visioning and pathways activity and capture inputs via Jamboard
- Visions and pathways were visualized in forms of artwork

#### **Potential Questions** (based on IPBES dialogue workshop)

- a) What would a "good future" look like for your community and territories? What do you want your community and lands to look like in the future? Who, as IPLCs, do you want to be in the future?
- b) What are the current challenges or obstacles to achieving this good future?
- c) What are the current strengths of your community and territory?
- d) What positive forces currently exist in broader society that can support communities?
- e) What would need to happen to overcome challenges and build on existing strengths, so that communities can achieve good futures? What should the next steps be?
- f) How would these changes also contribute to global well-being?



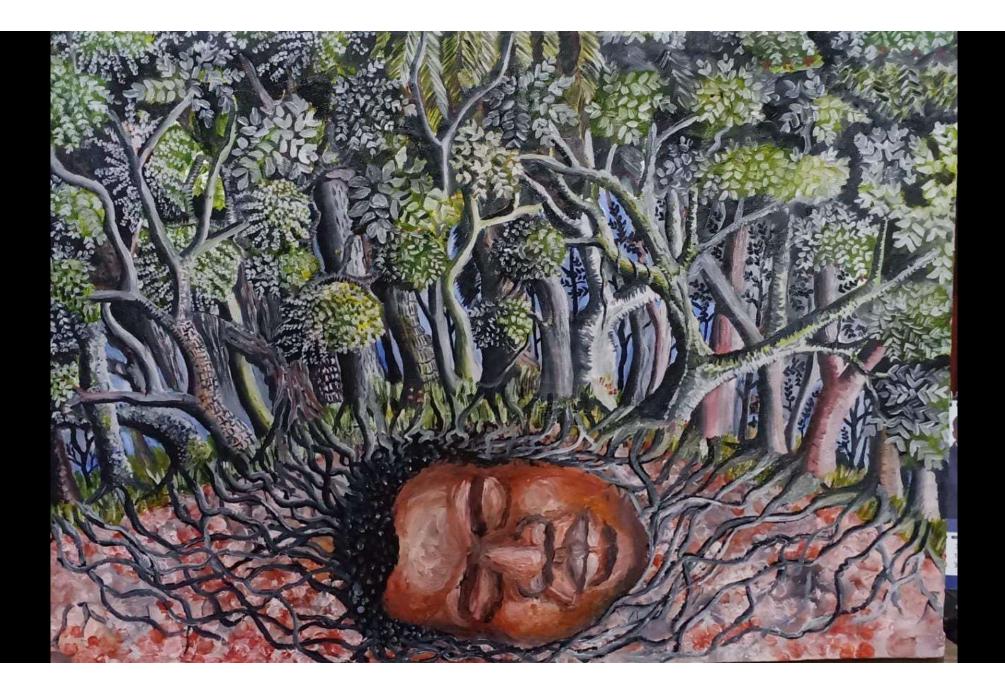
### IPBES 2021 Workshop: Asia-Pacific: Brainstorming -Jamboard



#### Artwork visualization: IPBES 2021 Workshop Asia-Pacific session



Representation of the Asia-Pacific session of the workshop, created by Anjali Choudhary.



## ADDITIONAL EXAMPLES OF VISUALIZATION OF IPLC's VISIONS

- Artwork Maps
- Calendars
- Table

#### **Artwork Visualization: Indigenous Philosophies of Well-being**



Painting "Our lives are in the land" by Christi Belcourt (Métis Artist)

Allin Kawsay (Peru), Mauri Ora (Aotearoa) Ubuntu, Sumaq Kawsay, Mino-bimaadiziwin

#### Visualization: Community-led Mapping

- Community Participatory GIS
- Participatory 3-D Modelling
- Direct-to-digital mapping
- Eco-cultural maps



Tharaka eco-cultural map of desired future @Gathuru



Participatory 3-D modelling @TheNatureConservancy



#### Visualization Examples: Eco-cultural Maps



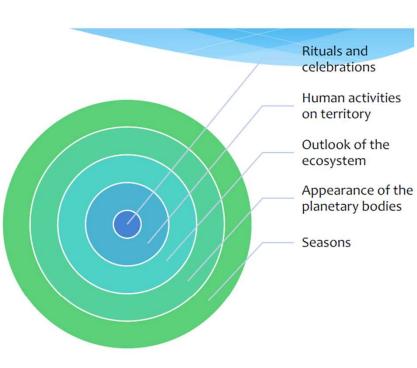
An eco-cultural map of Kathita River in Kenya

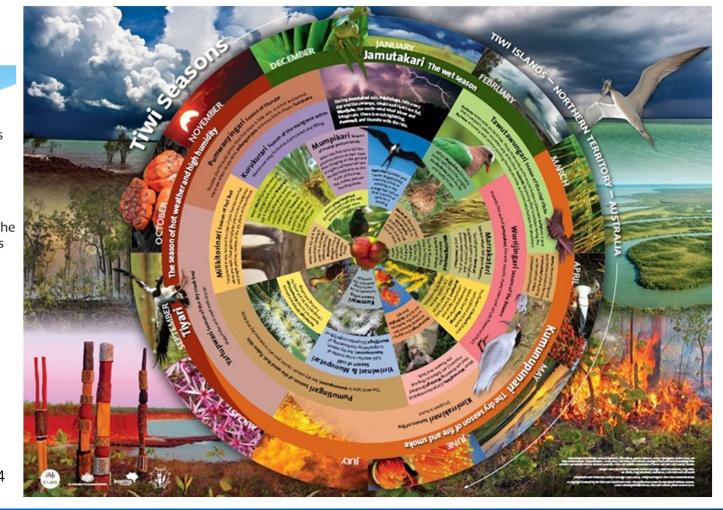
Depicting past condition –which is the desired community vision (Gathuru, 2015)





### Visualization Examples: Eco-cultural Calendar

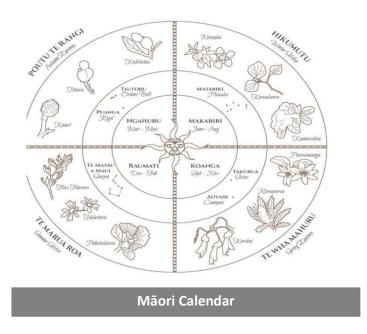




Tipiloura et al. 2014



### **Visualization: Indigenous Calendars**







- Aotearoa: Maramataka (Moon calendar)
- Peru: Inti and Killa Calendar (Sun and Moon calendar)
- Mayan Calendar: Mexico & Guatemala
- Menominee: 13 Moons Calendar

#### 

## How to Include ILK in Scenario Archetypes

#### **Business as usual**

- Impacts of BAU on IPLCs
- > Visualization of these impacts on IPLCs
- Focus on instrumental values

#### Economic Growth/GDP oriented

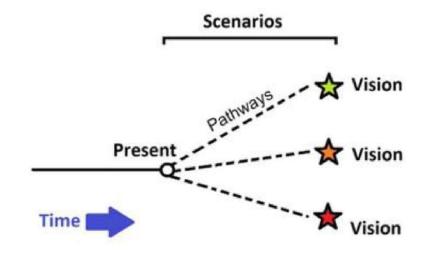
- Impacts on IPLCs
- Visualization of these impacts on IPLCs
- Focus on instrumental values

#### Sustainable development oriented -based on GBF

- Largely factor in Indigenous visioning
- Visualization of Indigenous futures
- Multiple evidence-based approach
- Inclusion of intergenerational knowledge
- Indigenous economies and entrepreneurship
- Inclusion of plural values

#### Each scenario archetype define

- Level of IPLCs participation in decision-making
- Knowledge systems informing policies under considered scenario archetype





## Visualization: Matrix Table: Cambodia NEA

Ecosystem Services Category	Ecosystem Services	Business as usual	Development with conservation consideration	Nature-based Solutions
Cultural Services	Spiritual/religious	$\downarrow$	7	1
	Aesthetic/scenic	$\checkmark$	7	7
	Educational	$\rightarrow$	7	$\uparrow$
	Heritage/ historical diversity	$\rightarrow$	$\rightarrow$	1
	Recreation/ecotourism	$\rightarrow$	7	$\uparrow$

↑ Strong increase,  $\land$ \_-Increase, ↓ -Strong decrease,  $\lor$ \_-Decrease, ↓ -Variable,  $\rightarrow$  -Stable





# Thailand case study on **ILK & NEA Scenarios**

















based on a decision of the German Bundesta

and Nuclear Safety

## **Thailand NEA ILK Authors Workshop**

12-14 July 2024, UNESCO Regional Office in Bangkok



#### **IPBES** report

Indigenous and local knowledge dialogue workshop on scenarios and the Nature Futures Framework

## ILK and scenarios

Scenarios allow the description and evaluation of possible futures based on choices made today, and they can include alternative policy or management options.

Scenarios can be quantitative (figures and mathematical models) and/or qualitative (stories and narratives about the future).

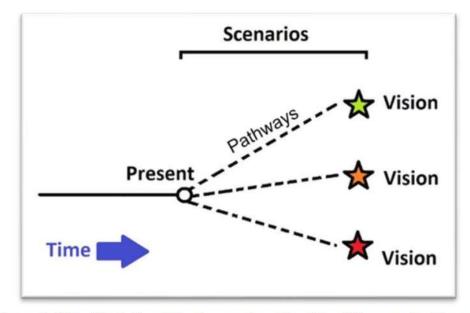
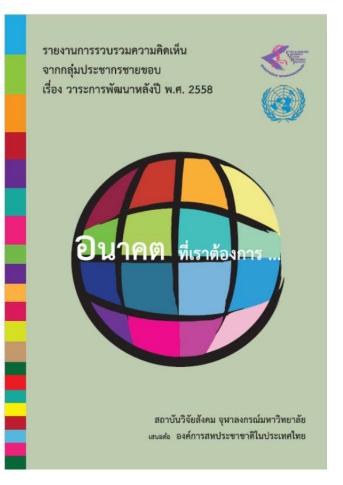


Figure 1. Simplified diagram of scenarios, showing visions and pathways.

## ILK and visioning futures

- Usual scenario building -- science-driven scenarios, based on calculation/quantitative studies and complex modeling
  - Al scenario generator?
- Multiple value systems
  - Nature contributions to people
  - Multiple perspectives on the "future/s"
- "Narratives" of diverse paths to the future



## ILK and visioning futures

 ILK "long-term sustainability" continuity of ancestors – present generations - future generations



• Future uncertainties



## ILK and visioning futures

- Multiple-scale scenario and building localized scenarios
- Envision possible outcomes of specific policy



By Wanpen Pajai

3 October 2022 at 7:00 (Updated on 3 October 2022 at 15:30)

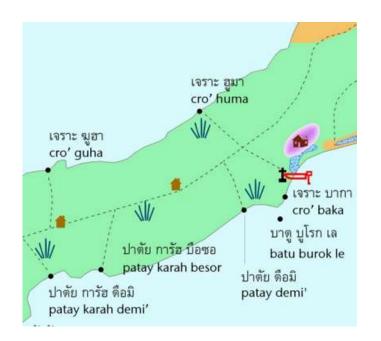
Plans to turn one of Phuket's few mangrove forests into a haven for luxury yachts and cruises causes protests.



# Thailand NEA in the process of considering scenario building

- Overview of Thailand scenario building:
  - Business as Usual (BAU) shows trends in land use, resource exploitation that results in the degradation of biodiversity, analyzing economic growth at the cost of environment.
  - Blue Growth (BG) is an assessment of the potential for sustainable growth by identifying key sectors of the Thai water/marine economy, then analyze impacts on the marine ecosystem and biological diversity with consideration on technological innovation and required policy changes, and with evaluation of potential economic benefits and environmental trade-offs.
  - O 30x30 (Increasing protected areas by 30 percent by 2030 is one of the global goals) this involves mapping protected areas and new areas with conservation potential, evaluate ecological representativeness of protected areas, analyze impacts on local communities and indigenous peoples, consider sustainable use strategies for areas outside protected areas, and evaluate governance structure and necessary funding mechanisms.

## Ways of knowing and ways to futures IPLCs -custodians of biodiversity? Where are they in visioning futures?



Tourism Authority of Thailand https://www.tourismthailand.org > Attraction · แปลหน้านี้ 🚦

#### Ko Lipe

The highlight of Ko Lipe is the nature of the coral surrounding the island, beautiful bays, and soft sandy beaches. The main beaches comprise: - Hat Pattaya .

PlacesofJuma

https://www.placesofjuma.com > koh-lipe... แปลหน้านี้ :

#### Koh Lipe: Ultimate Thailand Island Experience!

5 มิ.ย. 2567 - Koh Lipe is a tiny island in the very South of Thailand. To be more specific, in the province of Satun, not far from the Malaysian border.

- The Lost Passport
  - https://www.thelostpassport.com > koh-li... แปลหน้านี้ :

#### The Ultimate Koh Lipe Guide (2024 Update)

Koh Lipe is a small island in the far south of Thailand. It is about 80km from the coast of Satun Province, and 35km from Langkawi, Malaysia. The nearest point ...

- Salt in our Hair
- https://www.saltinourhair.com > thailand แปลหน้านี้ :



26 n.w. 2567 - Koh Lipe is a small tropical island located in Thailand's deep south, not far from Langkawi, Malaysia. It is a bit harder to reach due to its location.









## Relevance, ownership, inclusivity Customary governance and local decision making



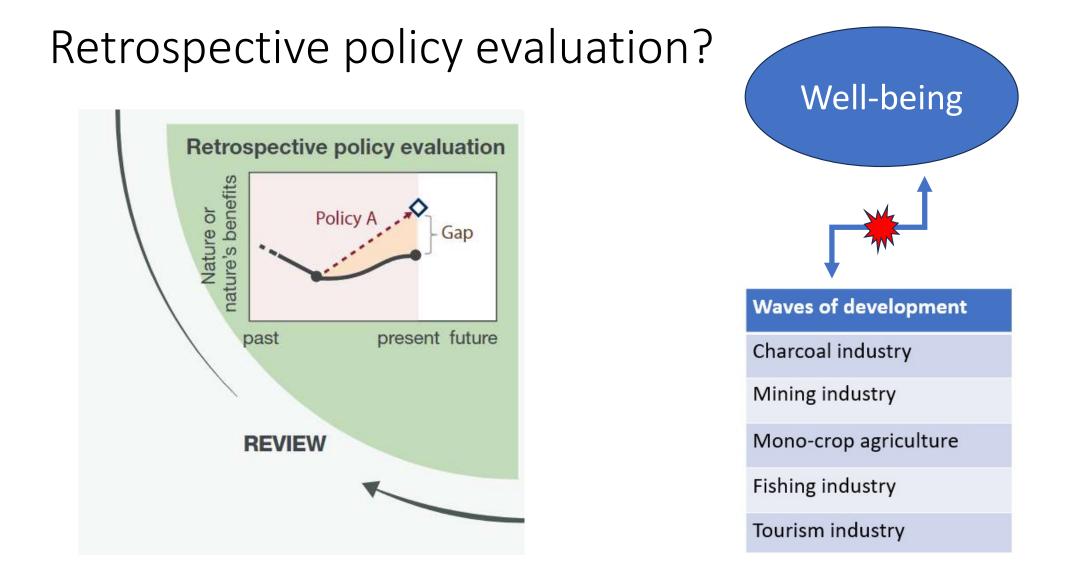
Community reserved zone for children and elderly to forage (on rocky beach) Photo by Sakunrat Yeesakul

## Relevance, ownership, inclusivity Customary governance and local decision making



Small effort but big effect





# THAILAND NEA – considering ILK in scenario building



- ILK LA and 8 contributing authors to work with the core team and other LAs in scenario building process
- Working with ethnic and local communities in incorporating ILK and ways of knowing/identifying strengths/challenges/opportunities in the visioning/scenario building



# Thank you



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