



**GROUP 3:  
TRADITIONAL KNOWLEDGE**

# OUR PRESENTATIONS

- ◆ Complementarities of Human-Nature Well-beings: A Case Illustrated through Traditional Forest Resource Users of Sundarbans in Bangladesh, by Prof. Rashed Titumir, Unnayan Onneshan.
- ◆ Mobilizing TK Innovations and Practices in Rotational Farming for Sustainable Development, by Dr. Prasert Trakansuphakon, IKAP, Thailand.
- ◆ Dayak Suaid answers to oil palm development threats to landscape and environmental services, by Mr. Dico Luckyhalto, FPP, Indonesia.
- ◆ Traditional Knowledge on Ecosystem Management by the Dusun People in Tambunan District, Sabah, Malaysia, by Mr. Julius Kulip, University Malaysia Sabah.
- ◆ Customary Management of Natural Resources by Hani People, minority ethnic group in the south Yungang province, by Prof. Dayuan Xue, Minzu University, China.



# QUESTIONS TO BE ANSWERED

Q1. What is the value of your SEPLS? Why is it important?

Q2. What aspects or practices can/should be mainstreamed?

Q3. What are some challenges to mainstreaming?

Q4. How have you met, or what you need to meet, these challenges?

Q5. Any recommendation?



# OUR ANSWERS

A1. Value of our SEPLSs and their importance

A2. Challenges in mainstreaming

A3. How we are addressing these challenges

A4. Our recommendations

Suggestions for concrete actions

# A1. VALUE OF OUR SEPLSS AND THEIR IMPORTANCE

## Bangladeshi Sundarbans:

Values of SEPLS encompass economic and non-economic aspects, including relational values. Multiple values of Bangladeshi Sundarbans include rich biodiversity –inscribed as Ramsar Site (1992) and World Natural Heritage Site (1997)- and livelihood basis for traditional resource user groups (3.5M people)

TK associated with the use of Sundarbans ecosystem and resources include

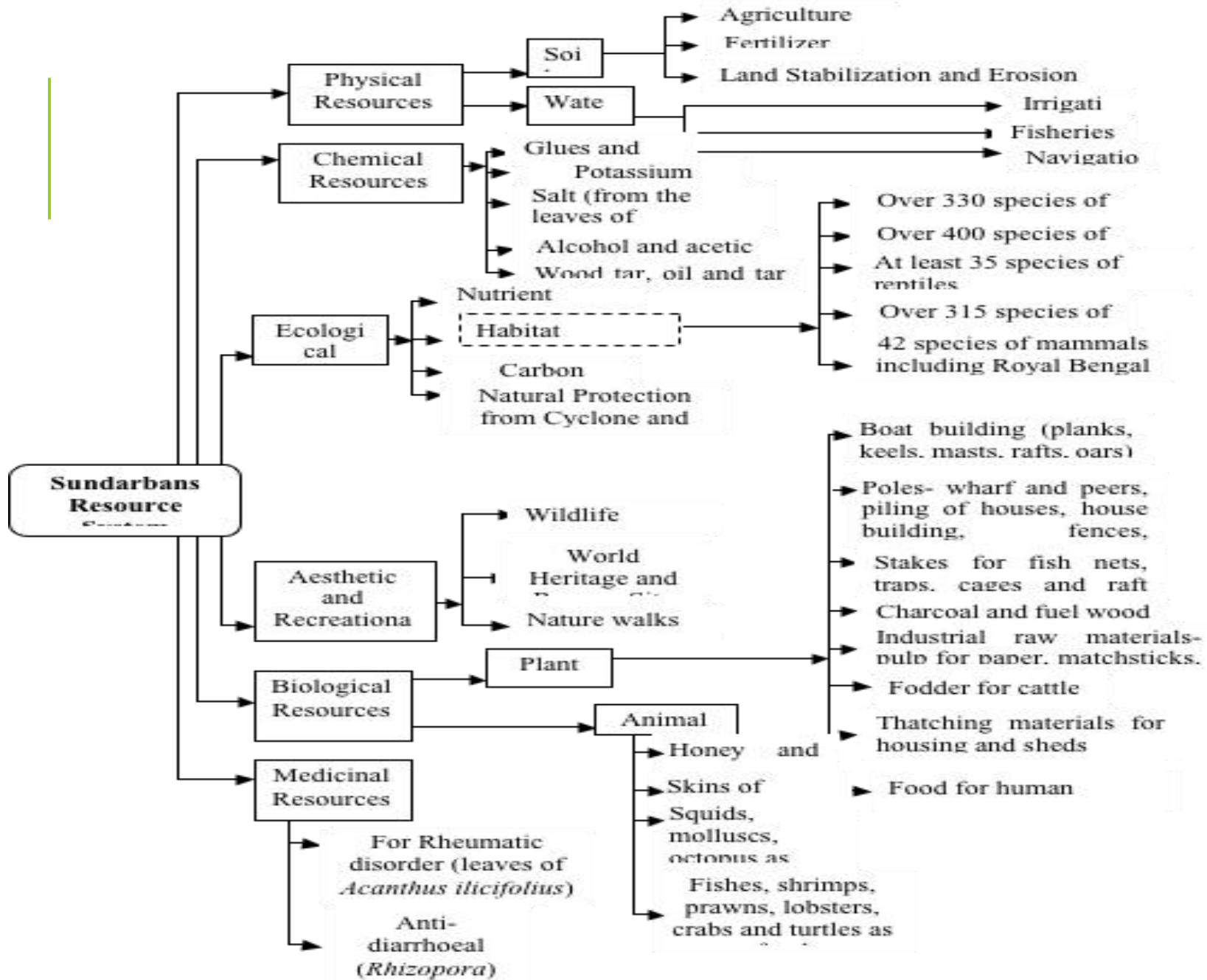
*Mouals* (honey/wax collectors): Partial harvest of honey combs

*Bawalis* (wood collectors): Leaving at least one stem in each tree clump to allow for faster regeneration;

*Golpata* (wood collection (*Nypa fruticans*)): harvest restricted to the trees with leaves with no less than 9-ft long, only once a year between October to May;

*Jele* (traditional fisher folks): Restriction in fishing gears, e.g. 'jal' net prohibition

- People use traditional rules and restrictions adaptively to maintain ecosystems in ways not substantially different from the process in scientific studies



# A1. VALUE OF OUR SEPLSS AND THEIR IMPORTANCE

Thai Karen's rotational farming:

Propagation of *P'dav* tree (*Macaranga denticulate*) during fallow period enriches soils and improves rice productivity. Fallow woodland provides resources to villagers, as well as habitats and food resources for wildlife

Elders own the knowledge inherited from ancestors on *P'dav* tree seed collection, planting methods and caretaking



# A1. VALUE OF OUR SEPLSS AND THEIR IMPORTANCE

## Kapuas Hulu (Indonesia):

Forests provide multiple benefits to people: water, timber, hunting (mammals), fishing (freshwater resource), gathering (NTFPs), beauty (aesthetic sense).

TK on Mixed agroforest and shifting cultivation which underpins produces rubber, rain-fed rice and pepper



*Agriculture landscape in Emperiang*



# A1. VALUE OF OUR SEPLSS AND THEIR IMPORTANCE

TK on ecosystem management by the Dusun People in Sabah:

‘*Adat-Kampung*’ or ‘*Pantang-Larang*’: customary rules associated with punishment (‘*Sogit*’) for infringement of rules

‘*Sogit*’: fine by local authorities in forms of animals/salt bowl provisions, gazette under Sabah State Native Customary Laws 1992. Individuals judged guilty by native courts are subject to ‘*Sogit*’, e.g. damage to burial grounds, adulteration of water sources, ignoring customary rules, etc.

No go-for-hunting signs, e.g. encounters with ‘*Lintugi*’ or milipods, wood peckers, forest rats

Belief in spirits in rice, forests and mountains

➤ TK safeguarding ecosystems in Sabah

# A1. VALUE OF OUR SEPLSS AND THEIR IMPORTANCE

## Hani terraces agro-ecosystem:

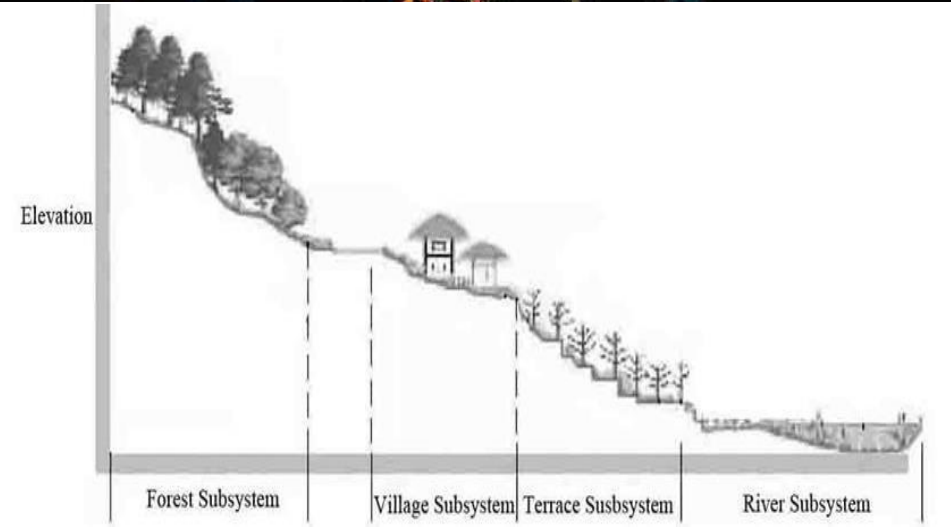
Food provisioning, water flow regulation, prevention of soil erosion and land slides, forest resource provisioning, etc., underpinning agro-ecosystems stability and contributing to better-off, social well-being and stability of Hani people's life. Registered as a National Wetland Park and GIAHS –attracting tourists

TK in Hani terraces agro-ecosystem include:

**Water resource allocation system** (irrigation channels and ditches) managed on 'allocation according to demands' and 'builders reap the benefits' principles, under supervision by elders commissions. Economic punishment existent.

**Headwater forests and sacred forests** under strict protection

**Customary management of diversified biological resources:** 92 crop varieties, 135 rice varieties and other edible wild biological resources



## A2. CHALLENGES IN MAINSTREAMING

### Across scales

**Patron-client relationship:** creating local dependency on centralized resources

**Upscaling:** success at small scale does not always lead to success at larger scale

**Different recognition of land use** by local communities and outsiders, e.g. fallow forest

**Limited recognition by government/law** of customary regulation/practices and its benefits to people and nature

**Need for regulation (or community protocols) for curbing rent-seeking and rent-dissipation,** e.g. on forest resources and those in line with ABS

**Expanding oil-palm plantation** in NPs, where even local people's access is limited, destroys forests and pollute water

## A2. CHALLENGES IN MAINSTREAMING

### **Across scales (contd.)**

Limited access to centralized systems, e.g. online reporting system

Contradictions in government legislations/policies: e.g. customary rules, which usually support sustainable forest management, were recognized in the mainstream legal system but the application to the government for new land use requires opening-up forests

### **Across generations**

TK transmission to younger generations: young people outmigration to cities, TK marginalized in mainstream education system, etc.

## A2. CHALLENGES IN MAINSTREAMING

### **Across different knowledge systems**

**Gap between TK and science:** Understanding of forest management from locals point of view is substantially different from science point of view

Limited recognition of cultural ecosystem services

**Water resource management** as a matter of social concerns but not research topic

### **Other challenges**

**Climate change:** increasing cyclone impacts on people and mangroves in Sundarbans

**Mutually-connected threats** to Hani terraces agro-ecosystem, such as tourist boom, massive infrastructure development, alteration of livelihoods from traditional agriculture to tourism, intrusion of alien culture, population outmigration, climate change, etc.

# A3. HOW WE ARE ADDRESSING THESE CHALLENGES

## **Across scales**

Government support to village decree on forest management promotes resource inventory (forests, fish ponds, beautiful waterfalls, etc.) and village projects (e.g. ecotourism and eco-farming)

Recognition of native customary laws in government legal system, which now have nearly equal status to civil laws

State's support to the implementation of customary rules and practices

Traditional practices have become recognized as cultural heritage under the Thailand National Cabinet Resolution

# A3. HOW WE ARE ADDRESSING THESE CHALLENGES

## **Across generations**

TK transmission in local schools

TK documentation



# A3. HOW WE ARE ADDRESSING THESE CHALLENGES

## **Across different knowledge systems**

**Community-based Mangrove Aqua-silviculture (CMAS):** advantages against conventional (engineered) shrimp-culture verified by economic and ecological return analysis

**Scientific validation/triangulation and public information (e.g. videos)** are recommended for creating better awareness of the benefits of TK

**Integrated science-social-cultural approach** to problem solving

**Understand well-being/good quality of life from non-economic point of view:** Are people really happy by earning more and spending more in cities?

**Mapping** to bridge the gap on the recognition of land use by different stakeholders

# A4. OUR RECOMMENDATIONS

## 1. Across scales

National level acts and policies [(e.g. NBSAPs and forest users acts)] should recognise, enable and promote communities to practice maintain and use traditional knowledge and practices that are important for their livelihood and well-being. Communities need to be empowered for valuing, practicing, protecting and interacting with governments on their own TKPs.

## 2. Across generations

Integrate TKPs into mainstream (national) education curriculum, CEPA programmes. Empower, create processes and spaces for knowledge holders to interact with younger generations, e.g. through setting up community knowledge centers, integrating into school curriculums and promotion and advancement of active traditional practices and rituals.

# A4. OUR RECOMMENDATIONS

## 3. Across different knowledge systems

Recognition and advancement of traditional knowledge as science, ideas, innovation and practices, and promotion of integration of traditional knowledge and natural and social sciences.

# SUGGESTION FOR CONCRETE ACTIONS

## 1. Across scales

IPSI Case studies on the first recommendation on mainstreaming across scales

## 2. Across generations

IPSI, its members and other stakeholders to promote processes to develop TK curriculum and transfer TK indicators and community-based monitoring and information system (CBMIS).

## 3. Across different knowledge systems

IPSI, its members and other stakeholders to promote of cross-learning amongst TK holders, academics and government officials through field-level interactions, including conferences at local levels and joint publications.