



Resilience assessment in SEPLS and its policy uptake through activities by Taiwan Partnership for the Satoyama Initiative (TPSI)



Satoyama Development Mechanism (SDM) 2020 Project
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Our journey in the next 15 mins:

Part I: Taiwan Partnership for the Satoyama Initiative (TPSI, est. 2015): *purpose, members, activities*

Part II: SDM 2020 Project: Resilience assessment in TPSI SEPLS: *Why? Who? How? What?*

Part III: Policy uptake: Resilience assessment within the post-2020 transformative change framework for the Satoyama Initiative in Taiwan

**Part I: Taiwan Partnership for the
Satoyama Initiative (TPSI, est. 2015):
*purpose, members, activities***

I. Why Taiwan Partnership for the Satoyama Initiative (TPSI)?

- **Taiwan:** small area size + high population density = many environmental and socio-economic challenges faced by SEPLS
- **2011:** the Satoyama Initiative was introduced to Taiwan – high popularity and many inspiring case studies
- **BUT,** faced with a lack of:
 - comprehensive policy and strategic planning;
 - knowledge enhancement and academic studies;
 - capacity building mechanism;
 - experience sharing and learning from good Satoyama practices
- **Est. 2015: TPSI 臺灣里山倡議夥伴關係網絡** as a solution: an integrated approach to setting up a national strategic framework for promoting the Satoyama Initiative in Taiwan



I. TPSI Strategic Framework:

Two action targets and Five types of activities

(based on IPSI Operational Framework, 2010)



- Since 2015: Forestry Bureau, Council of Agriculture, Taiwan: financial and institutional support
 - through the network of 8 district offices of the Forestry Bureau
- Since 2018: Taiwan Ecological Network Project **國土生態綠網** (2018-2021, 2022-2025): legal instrument for effective implementation
- TPSI members (>235 organisations): government agencies, research and academia, NGOs and NPOs, community organisations, green enterprises, farms and agro-parks, individuals <...>

Source: Lee et al., 2019

I. Act local: at the heart of TPSI activities

- **Four regional exchange bases:** capacity-building and on-the-ground activities
- **2016-2022: Annual TPSI regional workshops:** exchange of practical experiences and solutions to common challenges:
 - revitalisation of SEPLS
 - regional/ national networking
 - youth participation, intergenerational communication and knowledge transfer & role of women
 - SEPLS resilience and biodiversity
 - marketing and socio-economic development in SEPLS
 - ecosystem connectivity & Taiwan Ecological Network



**Part II: SDM 2020 Project: Resilience
assessment in TPSI SEPLS:
*Why? Where? Who? How? What?***

II. SDM 2020 Project: Resilience assessment in TPSI SEPLS: Why?

2020 CHINESE TAIPEI (TAIWAN)

IGES

Project title :

Development of locally-sensitive indicators of resilience as a tool for adaptive landscape management in Taiwan's SEPLS



The Satoyama Development
Mechanism Project 2020

Landscape-seascape of Xinshe SEPLS, Hualien County, Taiwan

1 / 2

- 5 years past: TPSI successes by 2020: an extensive knowledge database on Taiwan's SEPLS, experience exchange and learning, growing network of practitioners <...>
- BUT: a lack of comprehensive understanding of "How are we doing?" and "What can we do better?":
 - The need for an in-depth participatory assessment of environmental and socio-economic situation in TPSI SEPLS:
 - To evaluate risks and resources in TPSI SEPLS;
 - To foster adaptive co-management in TPSI SEPLS;
 - To feed in this knowledge into national policy – Taiwan Ecological Network – for nation-wide SEPLS revitalisation
- Thus, SDM 2020 Project proposal was born

II. [Let's take a step back for a moment]

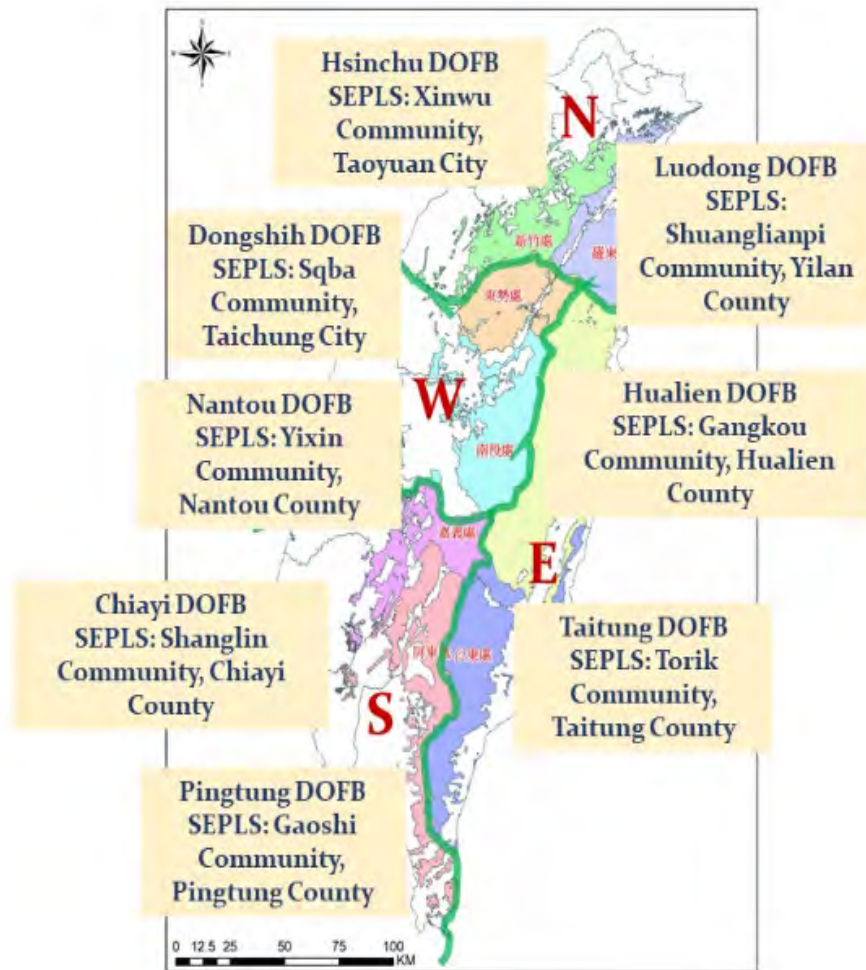
Pre-SDM 2020 Project pilot study: the Xinshe Initiative (est. 2016)



- **Location:** Xinshe Village, Fengbin Township, Hualien County, Taiwan
- The Xinshe “Forest-River-Village-Ocean” Eco-Agriculture Initiative (**the Xinshe Initiative**) - an integrated landscape-seascape approach

- **Multi-stakeholder platform:** 2 Indigenous communities and 4 government agencies, facilitated by NDHU
- Based on the 5 perspectives of the Satoyama Initiative (ABCDE)
- **Adaptive co-management (ACM) cycle:** planning – implementation – monitoring & evaluation (M&E) – adjustment
- **Resilience assessment workshops (RAWs)** – an M&E tool
 - applied in 2017-2018 and 2020;
 - 20 localised place-specific indicators of resilience (learning from Bergamini et al., 2014);
 - used for adjustment of existing (2017-2020) and design of new (2021-2026) action plan(s)

II. SDM 2020 Project: Resilience assessment in TPSI SEPLS: Where? and Who?



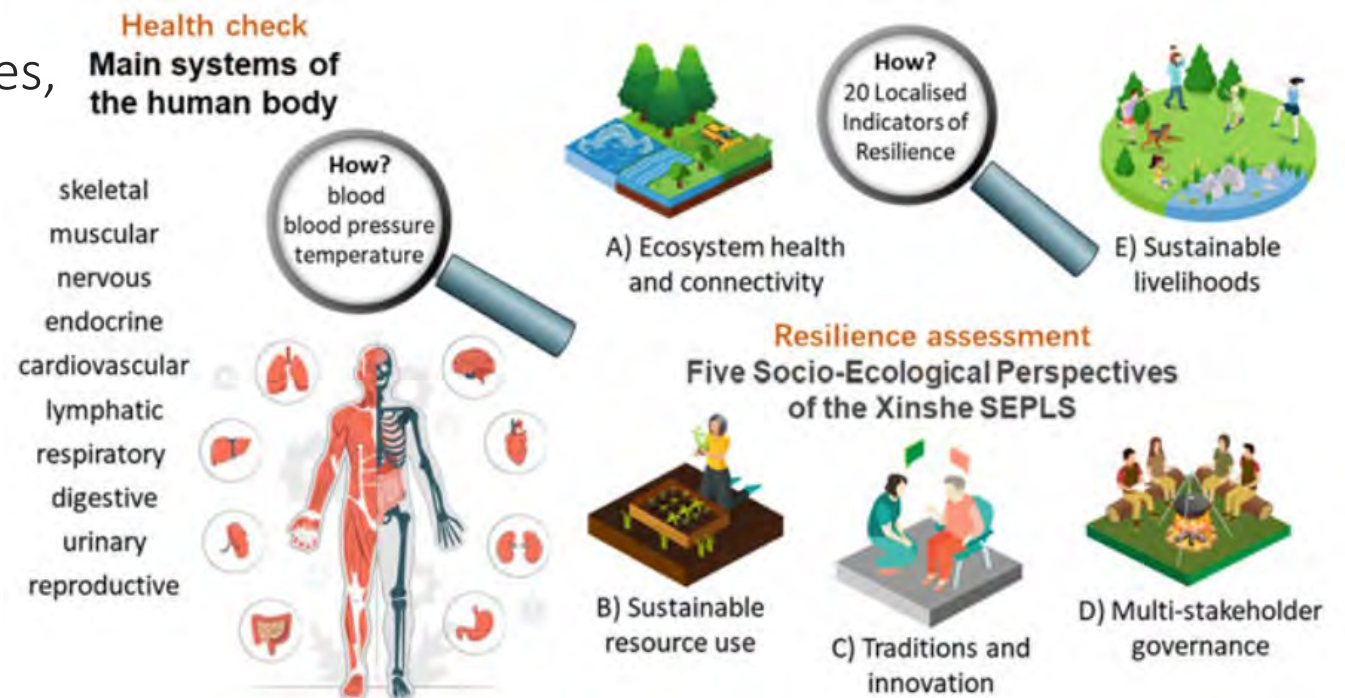
- Based on the Xinshe SEPLS experience
- **Locations/ Participants:** 8 SEPLS around Taiwan, supervised by 8 district offices of the Forestry Bureau; facilitated by NGOs and academia
- Diverse **ecosystem types** (shallow mountains, grasslands, wetlands, coastal, etc.), **socio-cultural backgrounds** (Indigenous, Hakka and Hokkien communities), **production activities** (paddy farming, fruit orchards, bamboo harvesting, apiculture, fisheries)



Photo credits: Society for Wildlife and Nature Co., Ltd;
Watch Nature Ecological Consultant Co., Ltd.

II. SDM 2020 Project: Resilience assessment in TPSI SEPLS: How? [RAWs]

- **Resilience assessment workshops (RAWs)** – a series of facilitated community-based activities aimed at evaluation of socio-ecological resilience in SEPLS for the purpose of providing a problem-oriented feedback to adaptive co-management processes in SEPLS (Lee et al., 2020; Sun et al., 2020)
- **RAWs = SEPLS health check: 5 perspectives, 20 indicators**



Source: Karimova et al., 2022

II. SDM 2020 Project: Resilience assessment in TPSI SEPLS: How? [Process]

✓ Publications + Learning materials (2020-2022):

- February 2021: Sun et al. (2020) publication in *Taiwan Forestry Journal*
- April 2021: Lee et al. (2021) *RAWs Practical Guidebook for communities and facilitators* + updated in April 2022

✓ Phase I (2021 – SDM phase): Training of trainers workshops & RAWs:

- April 2021: indoors and outdoors in Xinshe SEPLS (community-led)
- October 2021: online

✓ Phase II (2022 – post-SDM phase, ongoing): RAWs to ACM exchange workshops: ideas/ experiences/ next steps:

- April 2022: online
- October 2022: indoors and outdoors in Gangkou SEPLS (community-led)



Sun et al. (2020): Localised resilience indicators for adaptive management: building up resilient SEPLS in Xinshe Village, Hualien County; *Taiwan Forestry Journal*





- ✓ December 2020-October 2022:
Implementation of RAWs + follow-up ACM process in 8 SEPLS communities:
- Localising 20 indicators of resilience in SEPLS
 - Conducting workshops with community members
 - Communicating RAWs results to all relevant stakeholders
 - Designing next steps: action plans, applications for relevant projects and funding <...>

研習問題 (3)
各林管處 110-111 年韌性評估案例如何對應、貢獻和擴展於國土生態綠網計畫？

- 各林管處 110-111 年韌性評估案例與各「綠網分區」（即各林管處轄區）之「重點推動區域」、「綠網關注區」、「區域保育軸帶」的對應關聯性？
- 各林管處 110-111 年「重點推動區域」貢獻內容及推廣策略？
- 各林管處 110-111 年其他相關計畫與國土生態綠網計畫之關聯性？



II. SDM 2020 Project: Resilience assessment in TPSI SEPLS: What? [Risks and resources elicited by RAWs (some)]

A) Ecosystem health and connectivity



B) Sustainable resource use



C) Traditions and innovation



D) Multi-stakeholder governance



E) Sustainable livelihoods



Risks

Under-use of natural resources in SEPLS; ecosystem fragmentation

Threat from conventional agriculture; illegal resource use by outsiders

Loss of TEK, culture and skills; aging and outmigration in SEPLS

Lack of strong governance and communication mechanisms within many SEPLS

Post-production challenges in remote SEPLS: processing, labelling, marketing

Resources

Strengthening evidence-based + community-based biodiversity monitoring; identifying Satoyama species

High potential for eco-agriculture/ organic promotion zones and eco-incentives (PES); revival of native crop varieties

Gradual return of migrant youth (UJI); weaving of SEPLS production activities with arts and education

Interest and support from government agencies (projects, financing) + at a cross-sectoral basis; growing youth leadership in SEPLS

Development of new marketing skills and channels (online, SOGO stalls) + rural-urban connectivity (CES)

Part III: Policy uptake: Resilience assessment within the post-2020 transformative change framework for the Satoyama Initiative in Taiwan

III. Resilience assessment in TPSI SEPLS: Policy-relevant lessons of SDM 2020 Project

Our Successes

- ✓ The first ever **systematic, comprehensive, nationwide, simultaneous** assessment of resilience in Taiwan's SEPLS:
 - based on locally-sensitive indicators of resilience (unique for each SEPLS)
 - identified environmental and socio-economic risks and resources in TPSI SEPLS
 - mapped future ACM steps: sectors, stakeholders, projects, etc.
- ✓ Carried out/ supported **by the government agency** – the Forestry Bureau and its 8 district offices;
- ✓ Publications, training of trainers and experience sharing workshops: a new interactive and inclusive **peer-to-peer & SEPLS-to-SEPLS learning model**;
- ✓ A nationwide **capacity-building** effort, enhanced **collaboration** across TPSI network, strengthened **mentorship** role of TPSI regional exchange bases (TPSI-N, W, S, and E): > 150 direct and >8000 indirect beneficiaries
- ✓ Actively ongoing to date <...>



III. Resilience assessment in TPSI SEPLS: Policy-relevant lessons of SDM 2020 Project

Our Challenges: Where do we go from here?

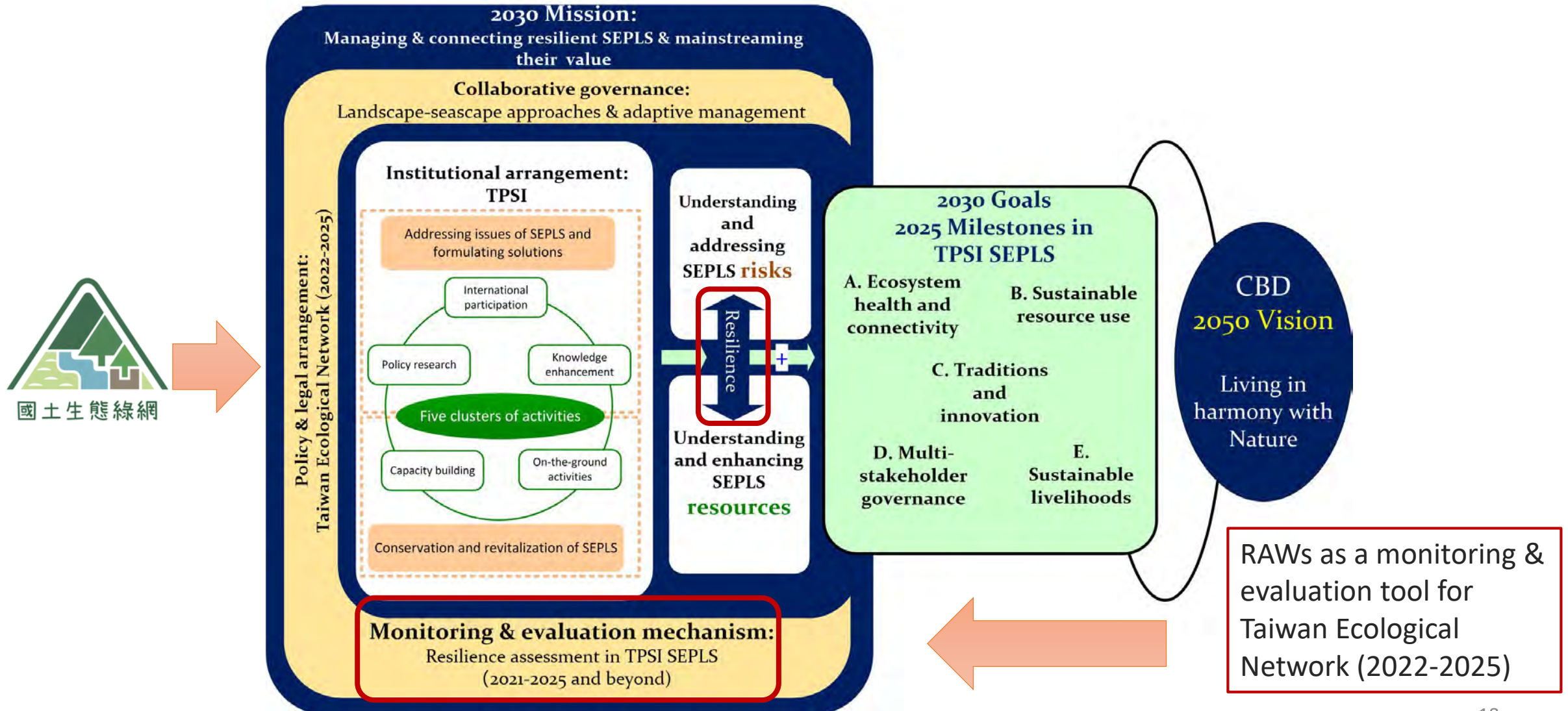
- **[Local scale]** How to sustain RAWs successes/ results for effective ACM processes at a SEPLS scale?
- **[National scale]** How to feed in RAWs successes/ results into national policy – Taiwan Ecological Network – for island-wide revitalisation of SEPLS?
- **[Regional/ Global scale]** How to make our experiences with RAWs useful, applicable and replicable in other SEPLS in the Asia-Pacific and other regions?

In other words: What is the transformative potential of TPSI RAWs?



Source: Karimova and Lee, 2022

III. Post-2020 transformative change framework for the Satoyama Initiative in Taiwan (Lee et al., 2021)



III. Resilience assessment in TPSI SEPLS and Taiwan Ecological Network: **Post-2020 policy uptake opportunities**



✓ 2022-2025: RAWs as the main M&E tool for Taiwan's SEPLS:

- follow-up RAWs in 8 initial SEPLS communities
- baseline RAWs in 8 more SEPLS communities
- SEPLS-to-SEPLS experience exchange/ potential self-assessment

} by 2025, 16 SEPLS in total

✓ Ensuring socio-ecological coherence and connectivity:

- SEPLS + priority biodiversity areas + conservation corridors = cross-mapping

✓ Creating a digital database for knowledge sharing and uptake:

- 20 localised indicators in 16 SEPLS
- identified + compared risks & resources
- experiences with RAWs-to-ACM

✓ Cross-scale and cross-sectoral cooperation of government agencies:

- within the Forestry Bureau network (working stations, district offices, headquarters)
- within one ministry: the Council of Agriculture
- across several ministries: with water resources, economic, transportation, cultural and other agencies

Thank you for your kind attention!



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Our gratitude to the local people in eight TPSI SEPLS communities, four TSPI regional exchange bases and eight district offices of the Forestry Bureau – our key Project partners

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