

Terms of Reference

Kick-off Workshop

Rembuk Peta: Mapathon Gotong Royong for Collaborative Land Use and Land Cover Mapping

Jakarta, 20-21 October 2026

Background

Sustainable landscape management, forest restoration, and avoided deforestation are important components of Indonesia's development agenda and climate commitments, as reflected in the Nationally Determined Contribution (NDC) and the 2030 FOLU Net Sink operational strategy. This agenda needs to be pursued by balancing the benefits of carbon sequestration, biodiversity conservation, and improved livelihoods for the communities living in and around these landscapes.

High-quality, widely accessible map data is one of the crucial requisites to the achievement of these targets, particularly for identifying priority areas and determining appropriate landscape use options and restoration efforts.

However, a key challenge often faced is the limited availability of data and the high level of expertise required, which can make access to land use and land cover maps somewhat exclusive. The Epistem initiative (Evolving Participatory Information System for Nature-based Climate Solutions) is built on the belief that collaboration is the bridge to the creation and wider dissemination of accurate map data. Through a partnership between the International Institute for Applied Systems Analysis (IIASA), the National Research and Innovation Agency (BRIN), Landscape Alliance, and the World Resources Institute (WRI) Indonesia, we believe that resilient nature-based climate solutions are rooted in the availability of practical mapping technologies that help strengthen connections among the people who directly manage the landscapes being mapped.

With strategic support from BRIN and partners across South Sumatra, South Sulawesi, and East Nusa Tenggara, Epistem is introducing an innovation ecosystem that includes Luma, an online participatory mapping tool; a "**rembuk peta**" (mapathon) mechanism for analysing land use and land cover; and a library of open-source mapping methodologies and reference data. This approach draws on global best practices to enable collaborative mapping that meets a wide range of thematic needs while producing up-to-date data.

Following the launch of Luma on National Awakening Day, the Epistem initiative will launch the **rembuk peta workshop series** with a **kick-off workshop** to map the landscapes while cultivating shared awareness to safeguard the future of Indonesia's ecosystems. This kick-off workshop aims to introduce the initial concept of the Epistem initiative's *rembuk peta* while

opening opportunities for stakeholders to help refine the concept and the implementation plans for future activities. The event will be divided into two parts. In the first part, the Epistem consortium will provide a technical introduction and facilitate collaborative discussions to build a common understanding of the goals, methods, and planned stages of the *rembuk peta* series. In the second part, the kick-off workshop will connect practitioners, government representatives, and local communities through collective mapping of land use and land cover. The event will conclude with a discussion to refine the concept and plans for upcoming *rembuk peta* activities, as well as potential contributions to the development and use of other components of the Epistem innovation ecosystem.

Objectives

This workshop aims to initiate the mapathon series and build a national collaborative network for land use and land cover mapping, in order to strengthen synergies in support of the success of Indonesia's landscape conservation agenda. The specific objectives of this activity include:

1. Introduce the concept of the *rembuk peta*, which uses an adaptive mapping approach and modular reference data to facilitate collaborative land use and land cover mapping process.
2. Build the initial collection of the modular reference data library through a joint interpretation method.
3. Introduce the Epistem initiative's collaborative mapping and *rembuk peta* implementation plans in the co-development of land use and land cover reference data that are integrated into mapping workflows.
4. Introduce and collect feedback on the planned series of upcoming *rembuk peta* activities, as well as potential participation and contributions from communities of practices.

Schedule and Venue

The workshop will be held on:

Day/date	: Tuesday & Wednesday, 20-21 October 2026
Venue	: tbc
URL	: https://epistem.io/RembukPeta
Time	: 09:00 – 16:30 WIB

Session Description

The workshop will begin with a series of presentations and plenary discussions on the first day, followed by joint interpretation activities on the second day:

1. Retracing the Epistem *Kopi Darat* Journey

Since its inception, the Epistem initiative has carried out consultation, capacity building, and co-creation processes that are packaged into a single, integrated activity. This

engaging and participatory activity is called “*kopi darat*” (face-to-face meetups) and has been conducted since 2025. To date, what began as a consultation on mapping tool needs has evolved into joint mapping activities using an online tool that was also built collaboratively. This session aims to look back at the mapping capabilities that Epistem users now possess, as a starting point for developing the next stage of the Epistem innovation ecosystem.

2. *Rembuk Peta*: A *Gotong Royong* Solution for Land Use and Land Cover Data

This session will introduce the concept of the *rembuk peta* through three interactive stages. The first stage focuses on hands-on practice of the mapping process using field data according to specific thematic needs. The second stage aims to demonstrate the potential of a gotong royong approach among members of the Karsa Bentala community despite their differing mapping needs. The third stage introduces the mapathon innovation as a systematic approach that ensures the gotong royong process benefits the collective mapping needs of all users of the Epistem innovation ecosystem.

3. Towards Adaptive Land Use and Land Cover Mapping

Having launched the online tool Luma, which can already facilitate diverse mapping needs, the Epistem initiative will begin a mapping process that gradually places more emphasis on improving the quality of the map products generated. Improving map quality while maintaining the flexibility to meet mapping needs involves a trade-off that needs to be handled carefully. This session will present the stages of a development plan that addresses this trade-off by introducing flexibility in formulating different mapping classification schemes. The session will also involve workshop participants in building a shared understanding of classification schemes that can meet common needs.

4. Building Open Modular Reference Data

This session reviews various aspects of the use of reference data in the adaptive mapping of land use and land cover. In this session, the Epistem team will also introduce modular reference data along with the stages of building a shared data library. The session will also introduce tools that support the mapathon process through visual interpretation approaches as well as field data collection.

5. Building the Initial Collection of the Modular Reference Data Library

As the highlight of the event, the Epistem team and mapping practitioners from across the country as workshop participants, will carry out joint interpretation. This interpretation process will be conducted interactively to ignite the spirit of generating data for landscape sustainability. This joint interpretation session will produce the initial dataset that could be further capitalized for collaborative and adaptive mapping for all.

6. Building the National Mapathon Roadmap

This session will combine live surveys, group discussions, and plenary deliberation. The Epistem team will invite all workshop participants to help formulate the mapathon process will be carried out over the next two years. In this session, the Epistem team and workshop participants will review various topics ranging from the mechanisms of *rembuk peta* activities to the governance of mapathon implementation and the shared ownership

of the modular reference data that will be produced. The results of this session will serve as a reference for future *rembuk peta* activities.

Agenda

Tuesday, 20 October 2026

Time	Agenda
08:30 – 09:00	Registration
09:00 – 09:30	Opening and welcome remarks • Ping Yowargana (Senior Research Scholar, IIASA) • Asep Hidayat, M.Agr., Ph.D. (Head of Ecology Research Center, BRIN)
09:30 – 10:15	Retracing the Epistem <i>Kopi Darat</i> Journey • Harry Aksomo (Spatial Planning Specialist, Landscape Alliance) • Nurhayatun Nafsiyah (Knowledge Management, Landscape Alliance)
10:15 – 12:00	Rembuk Peta: A Gotong Royong Solution for Land Use and Land Cover Data • Andree Ekadinata (Indonesia Country Program Director, Landscape Alliance) • Dony Indarto (Land Use Planning for Multiple Ecosystem Services Researcher, Landscape Alliance) • Arga Pandiwijaya (Research Scholar, IIASA)
12:00 – 13:00	<i>Ishoma</i>
13:00 – 15:00	Towards Adaptive Land Use and Land Cover Mapping • Maria Adelia Widijanto (Researcher, IIASA) • Seruni Lestari (Environment and Land-Based Development Planning Researcher, Landscape Alliance)
15:00 – 16:00	Building Open Modular Reference Data • Agil A. Fahrezi (Remote Sensing Assistant, Landscape Alliance) • Adrian Dwiputra (Research Scholar, IIASA)
16:00 – 16:30	Closing

Wednesday, 21 October 2026

Time	Agenda
08:30 – 09:00	Registration
09:00 – 9:15	Opening and introduction • Ping Yowargana (Senior Research Scholar, IIASA)
09:15 – 12:00	Session 1 Building the Initial Collection of the Modular Reference Data Library • Arga Pandiwijaya (Research Scholar, IIASA)
12:00 – 13:00	<i>Ishoma</i>
13:00 – 14:15	Session 2 Building the Initial Collection of the Modular Reference Data Library • Dony Indarto (Land Use Planning for Multiple Ecosystem Services Researcher, Landscape Alliance)

14:15 – 16:15	Building a National Roadmap for <i>Rembuk Peta</i> • <i>Ping Yowargana (Senior Research Scholar, IIASA)</i>
16:15 – 16:30	Closing