





In cooperation with:





Collecting tropical forest field data to support high quality Open access Al generated large-scale Indicative HCS/HCV maps



- Already piloted in Ghana and Peru, now Indonesia in priority landscapes (Sumatra, Kalimantan, West Papua)
- **Organizational structure:**
 - HCSA organizes field plot data collection for validation with JKPP using participatory approach which respect the rights and ownership of local communities and landowners
 - ETH (EcoVision lab) computes model and provides updated HCS maps (10 m resolution)
 - Steering committee: Scientists from UGM, IPB, GIZ project (SASCI+), Bappenas
- For whom: Small-holder farmers, local/regional governments for sustainable agricultural / land use planning & supply chain management, forest protection
- Why AI? AI makes the HCS approach more efficient, less expensive, and adds the ability to scale across geographies and regions







Developing text datasets, language models and benchmarks for three regional languages in Indonesia



- Main partners: Prosa.ai
- For what: Focus on 3 local languages: Minangkabau, Balinese, and Buginese for inclusion of languages most widely spoken after Bahasa Indonesia, Javanese and Sundanese, while also considering lexical similarity (i.e. languages being very similar to each other)
- Output:

3 new open Al Training language datasets for developing or scaling Al applications

1 new available approach, guided by guidelines for the minimisation of bias and therefore the usability and accounting for gender diversity

1 methodology for incentivising text contributions (crowd-sourcing)

One Country, 700+ Languages: NLP Challenges for Underrepresented Languages and Dialects in Indonesia (Aji et al., ACL 2022)

Language	ISO	# Speakers
Indonesian	ind	198 M
Javanese	jav	84 M
Sundanese / Sunda	sun	34 M
Madurese / Madura	mad	7 M
Minangkabau	min	6 M
Buginese	bug	6 M
Betawi	bew	5 M
Acehnese / Aceh	ace	4 M
Banjar	bjn	4 M
Balinese	ban	3 M
Palembang Malay (Musi)	mus	3 M

Table 1: The number of speakers for Indonesian and top-10 most spoken local languages in Indonesia (Eberhard et al., 2021).



Figure 3: Map of Austronesian and Papuan languages in Indonesia.

Implementation of a peer learning and capacity building programme for policy makers from Indonesia on Artificial Intelligence (AI)

digital. global

Ethical Al workshop for policymakers by adapting <u>AAAPoMaNet handbook</u> and <u>National Al strategy</u>

Main Partners: <u>Harapura</u> & <u>Apta Works</u>

Outputs: Capacity Building and High Level Forum

Policy officials receive AI ethics training based on AI Guidelines Book adapted to Indonesian context including future oriented content, wide application in policies domain, ethics and policy regulation considerations, Indonesia approach for global standardization. Trained policymakers will join the Asia Africa Policy Makers Network (AAAPoMaNet) group to encourage intercontinental dialogue.

The objectives of the programme are:

- to equip policy makers with the Al knowledge they need to advance the responsible use and development of Al through sustainable and locally appropriate policy measures in Indonesia and
- to foster exchange and peer learning among Al policy makers from Indonesia.



