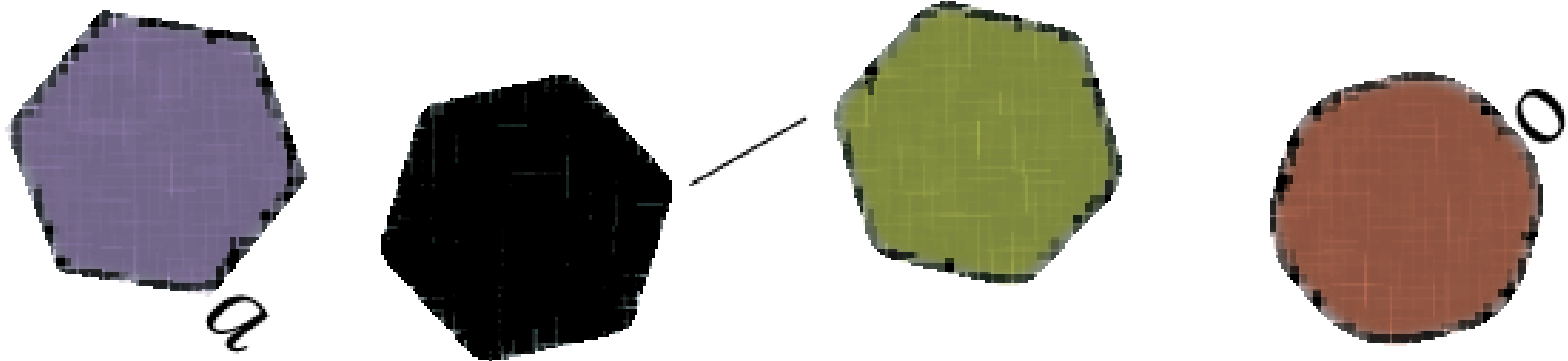# a Portfolio

Fajri Ilham Mughni

Research, Data, and Technology for Sustainable Change

Email: Fajriilhammughni@gmail.com

GitHub: Fajrimughni

Medium: @Fajrimughni

"passionate about connecting data, research, and social impact. With a background in Geological Engineering from ITB and certifications in Data Science, I specialize in transforming complex datasets into actionable insights. I have experience supporting multidisciplinary projects in environmental sustainability, inclusive development, and community-based research. I am committed to systematic thinking, continuous learning, and applying the latest technology to drive meaningful change. My work reflects a deep respect for both technical precision and human-centered approaches, aiming to bridge data with real-world challenges and opportunities.

Hi! I'm Fajri Mughni.
Born on Thursday, January 28, 1999.
The second of two siblings.
Interested in qualitative and quantitative data, spatial mapping, databases, and book discussions.

Graduated from ITB in April

I earned my Bachelor's degree in Geological Engineering from the Bandung Institute of Technology (ITB). I was recognized as a qualified finalist in the Business Plan Competition at PEC EXPO 1.0 Universitas Airlangga (2020) and received a Verbal Commendation at the Paragon Innovation Circle (2021). I am also an awardee of several prestigious scholarships, including Beasiswa Luar Biasa (BLB) ITB Batch 9, the PYC ITB Scholarship Award, and the Dato' Low Tuck Kwong Scholarship.
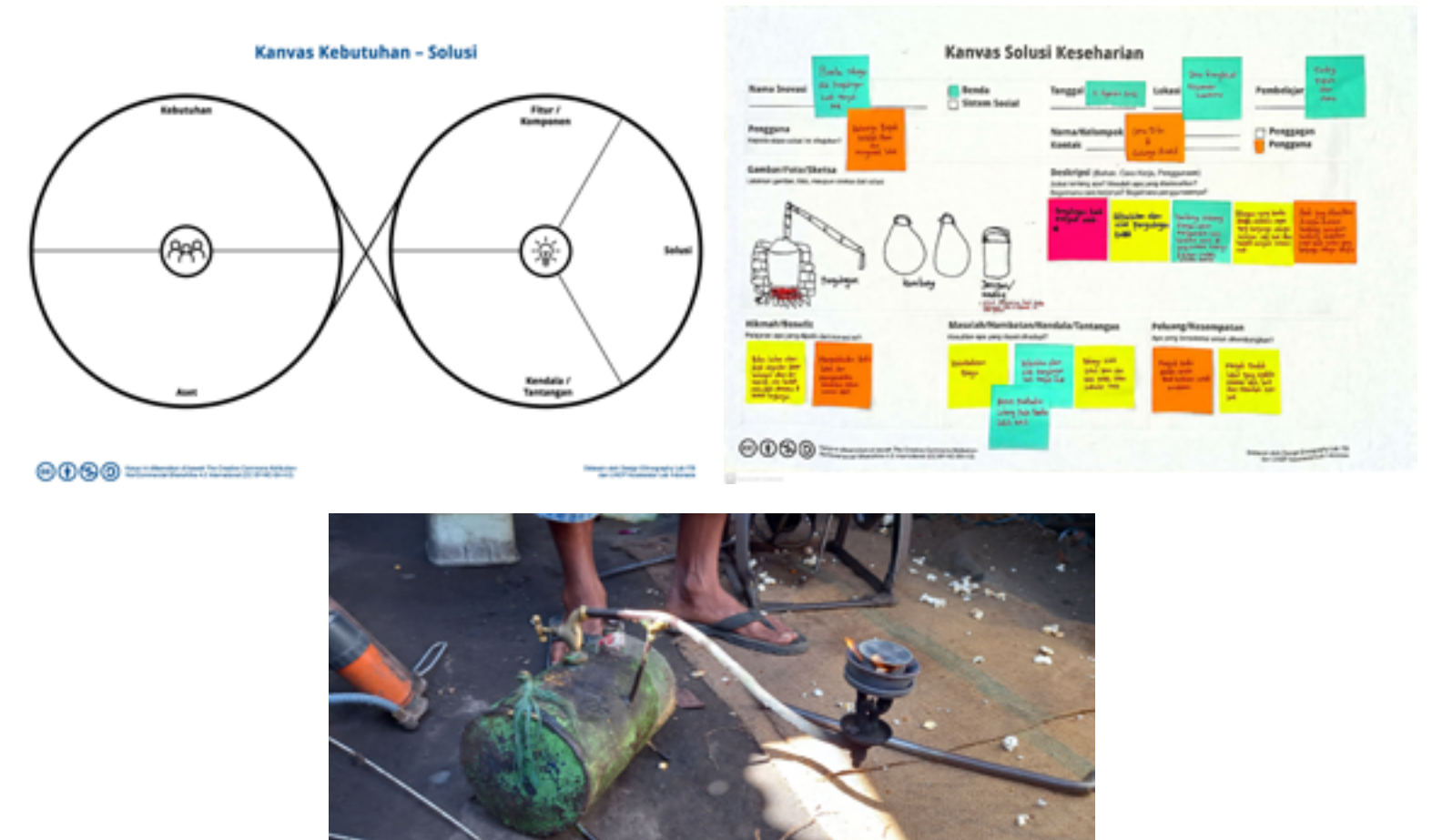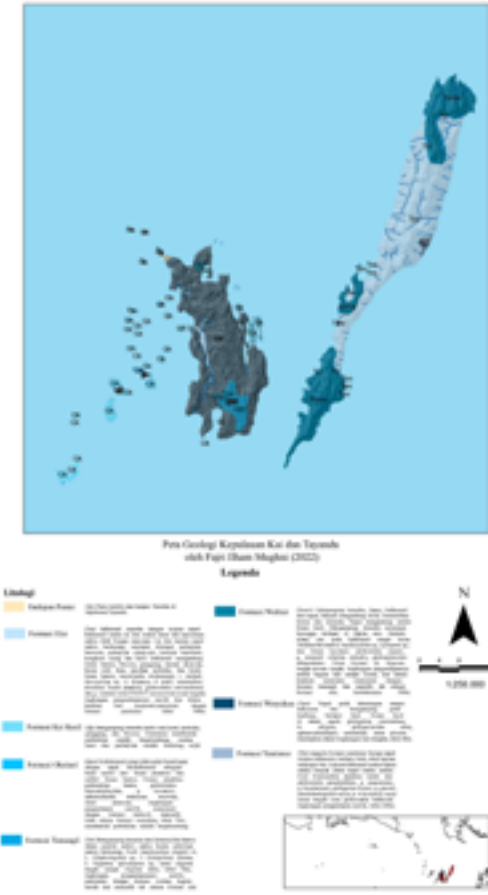
Completed a Data Science Bootcamp at Dibimbing.id

I gained practical experience in Python programming, data analysis, machine learning, and data visualization. During the program, I worked on end-to-end projects that combined technical skills with real-world problem solving—ranging from clustering Indonesian food recipes to analyzing public discourse using natural language processing.
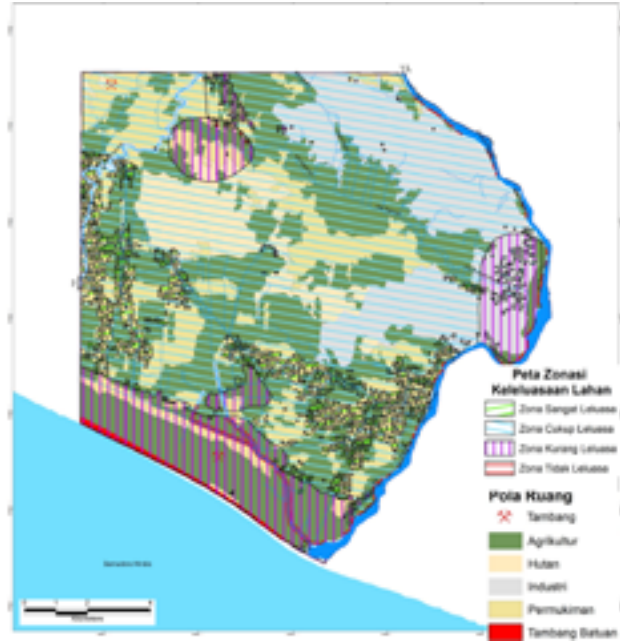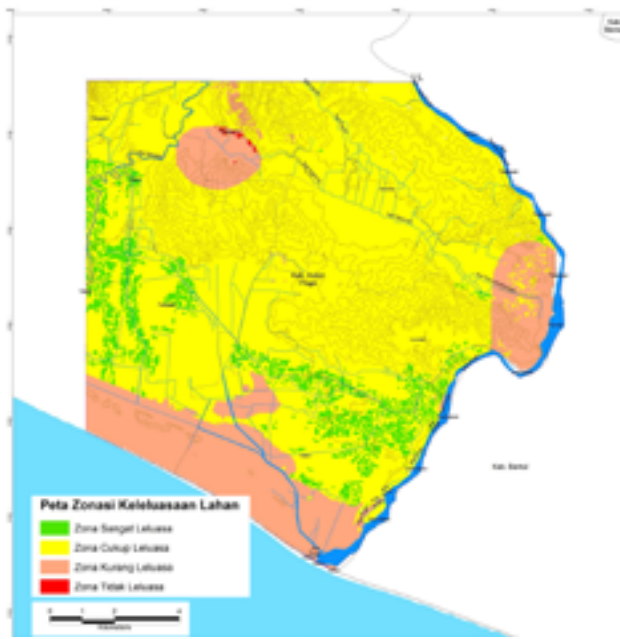
Project A
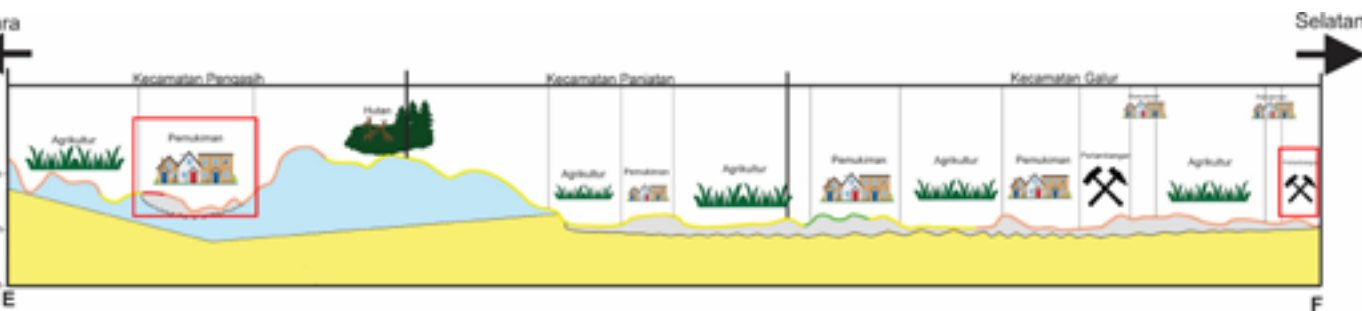**"Integrated Environmental Geology of DIY Province"**

Over a one-month offline field mapping in 2022, pre- and post-mapping databases and lithological maps were produced to support geological assessment across 15 sites. Collaboration with social, soil, and geography mappers was conducted to update and refine the regional land system classification.

Project C
"Immersion & MSME Collaboration – Larantuka"

I was involved as an Environmental Geologist Intern at PATGTL – Ministry of Energy and Mineral Resources (Feb–Jun 2022), supporting the "Integrated Environmental Geology of DIY Province" project. I assisted with land use change analysis (1997–2023) using GIS and satellite imagery, and contributed to a city development evaluation in Kulon Progo using the AHP method.

Project B
"Land System Analysis for Development Planning"
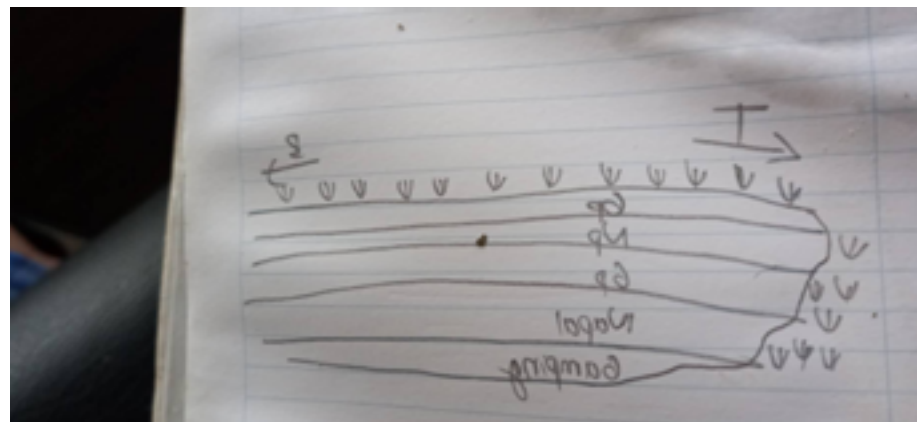
Co-developed game tools and training materials with UNDP Accelerator Lab and Design Ethnography Lab, leading to a successful MSME immersion project that strengthened local collaboration networks.

Food Security Index (IKP) in Jayawijaya

Studi Participants in West Sumba and Jayawijaya
Total: 106

Remotely supported research on indigenous communities and persons with disabilities by collecting secondary data on food security, disasters, health, and conflict. In-depth interviews with academics, CSOs, and disability organizations were conducted and transcribed to enrich the study findings.
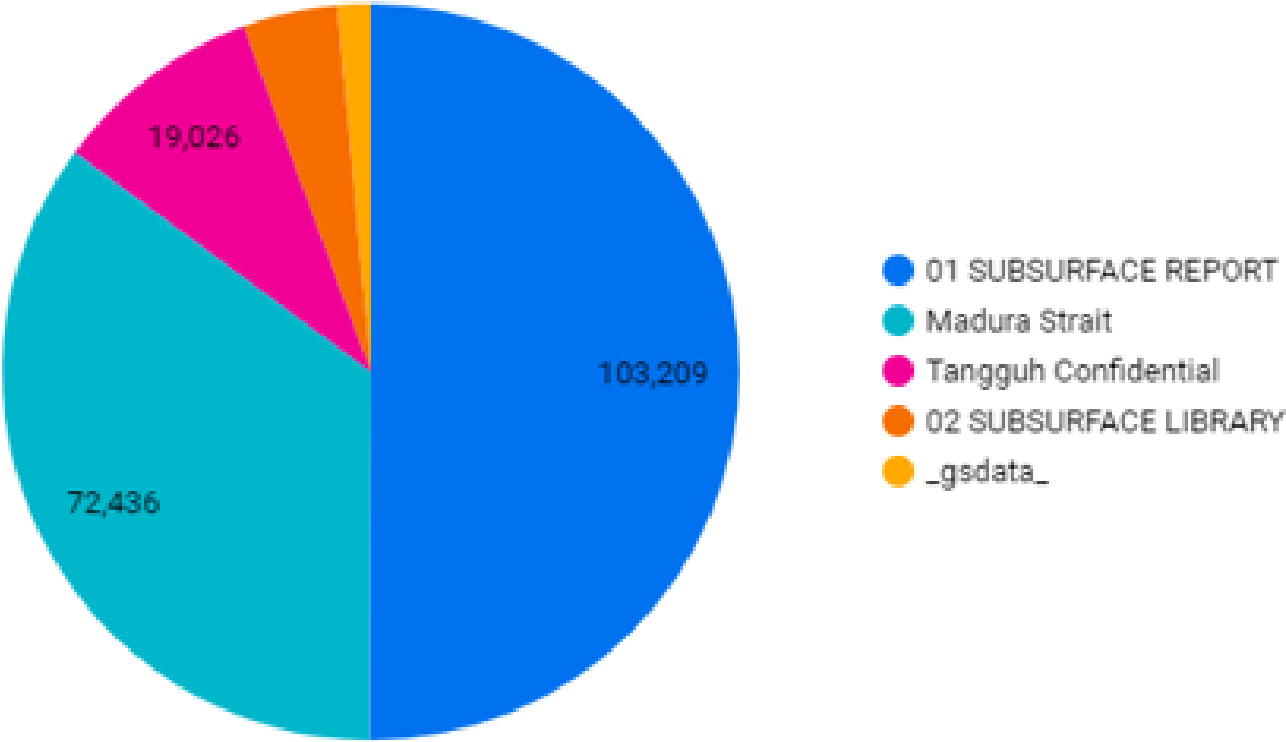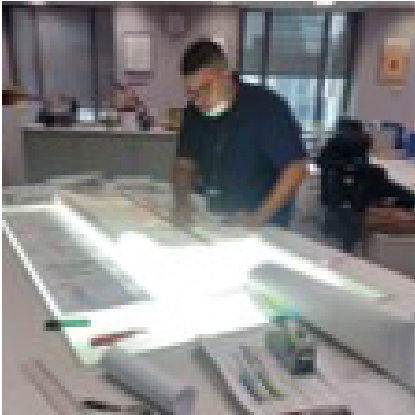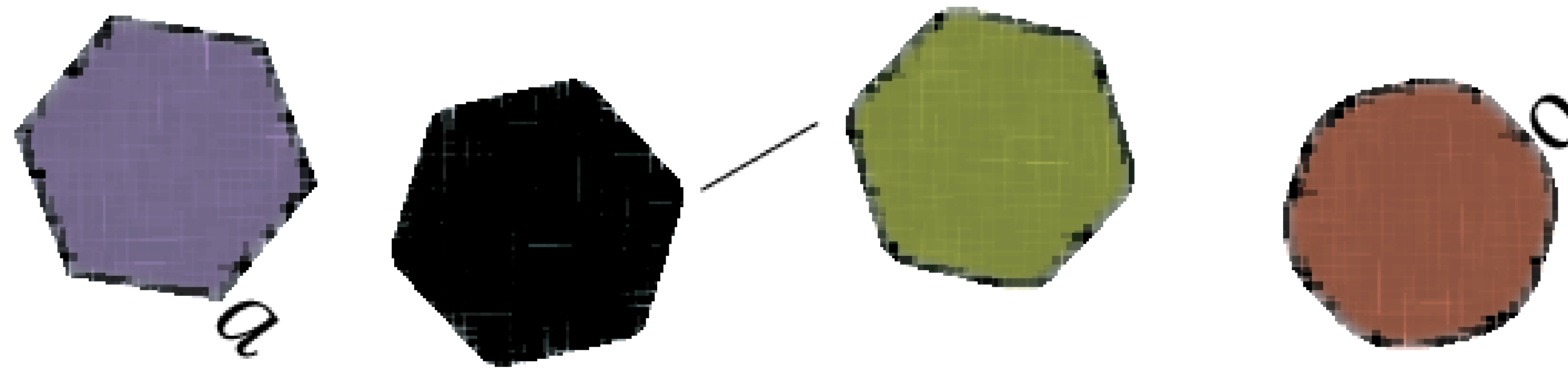
Project E
"Integrated Data Management System for Digital & Physical Archives"

Project D
"Remote Research for LNOB Indigenous Study – Sumba & Papua"

Designed and implemented an integrated data management system combining NAS (Network Attached Storage) infrastructure with structured workflows for organizing, securing, and retrieving both digital and hardcopy technical data. The system enhanced traceability, minimized data redundancy, and ensured consistent archiving standards across teams.
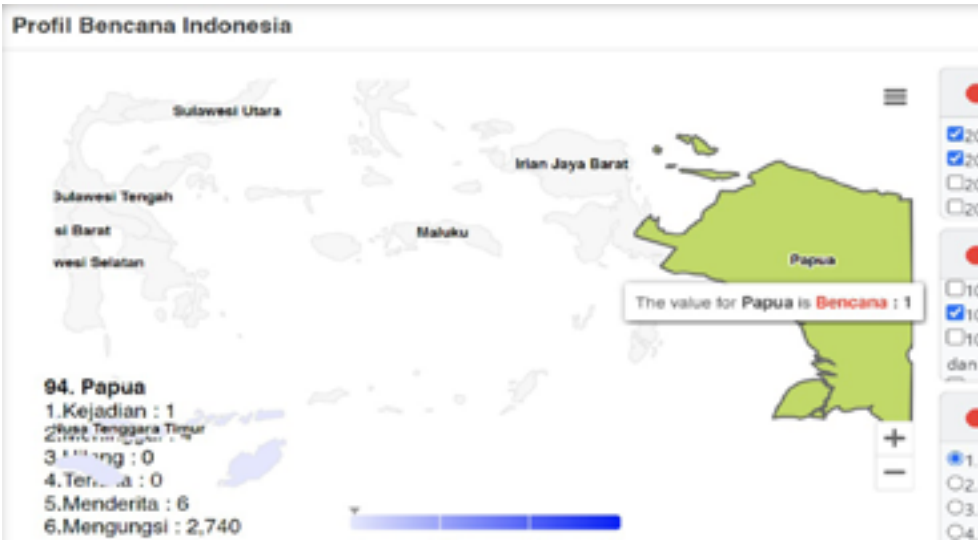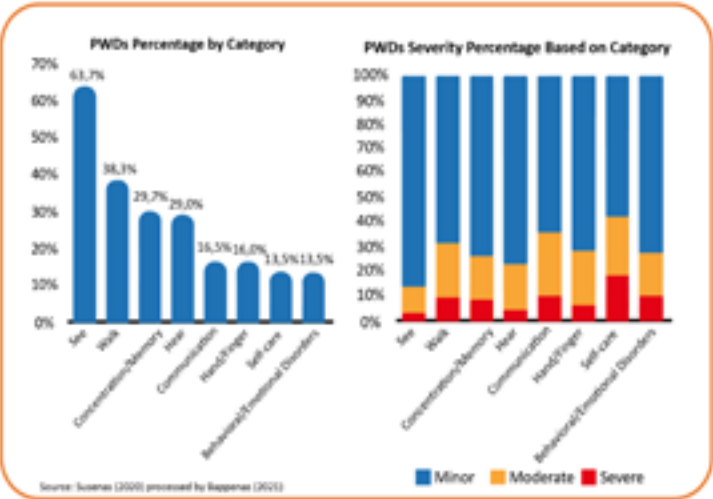
And the journey has just begun