

# 9<sup>th</sup> Asian Soil Partnership Meeting

## Progress on project sustainable soil management and soil health in Indonesia

Indonesian Center for Agricultural Land Resources Standard Testing  
Indonesian Agency of Agricultural Instrument Standardization  
Ministry of Agriculture



# Success progress on support the establishment of soil sustainable management and soil health

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- **Map of Soil Properties: Soil Organic Carbon (SOC) Map, Soil pH Map, Soil Clay Content Map, Soil CEC Map**
- **Soil Threats Map: Soil Salinity Map**
- **Development of national soil database, rearrangement and collecting of soil legacy data:**
  - Progress : Sumatra and Java Island
- **Indonesian National soil information system (INA SOIL AGRO)**

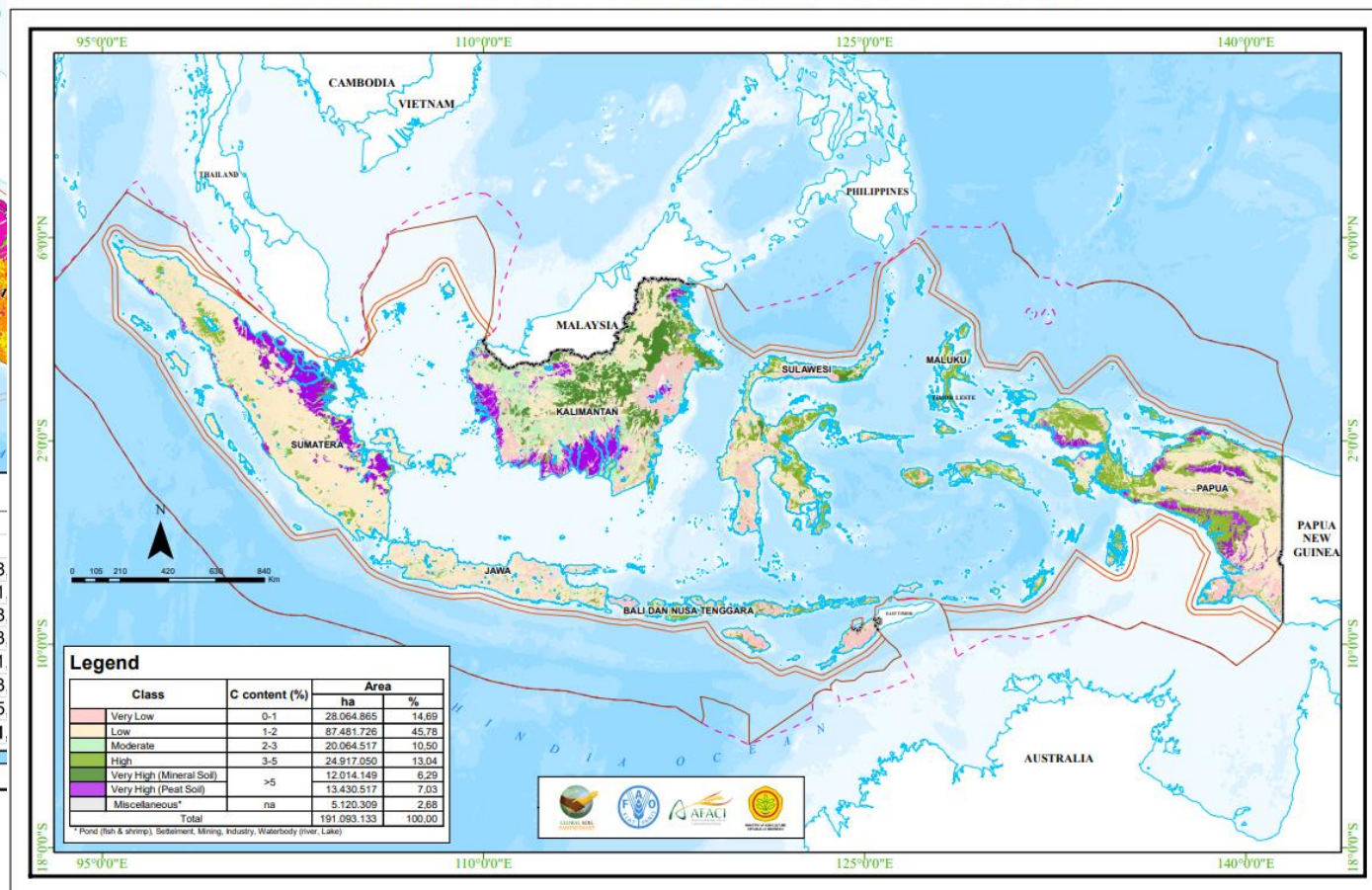
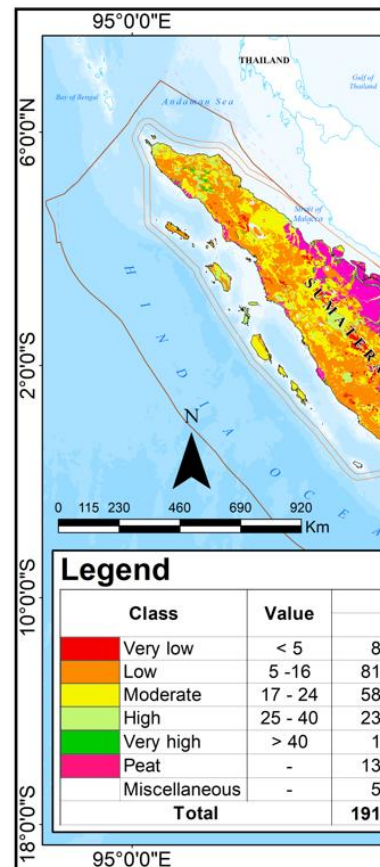
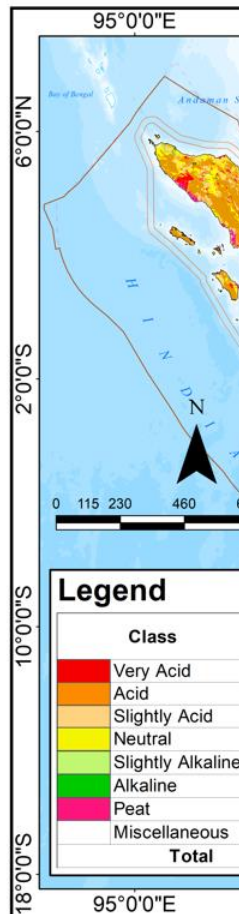
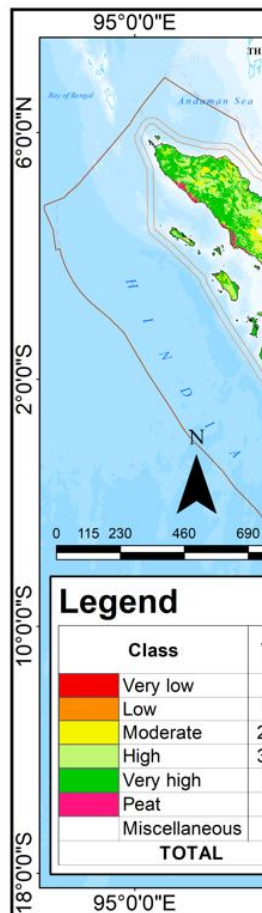
# Establishment of Soil Properties Map

## MAP OF NATIONAL SOIL CLAY CONTENT

## MAP OF NATIONAL SOIL pH

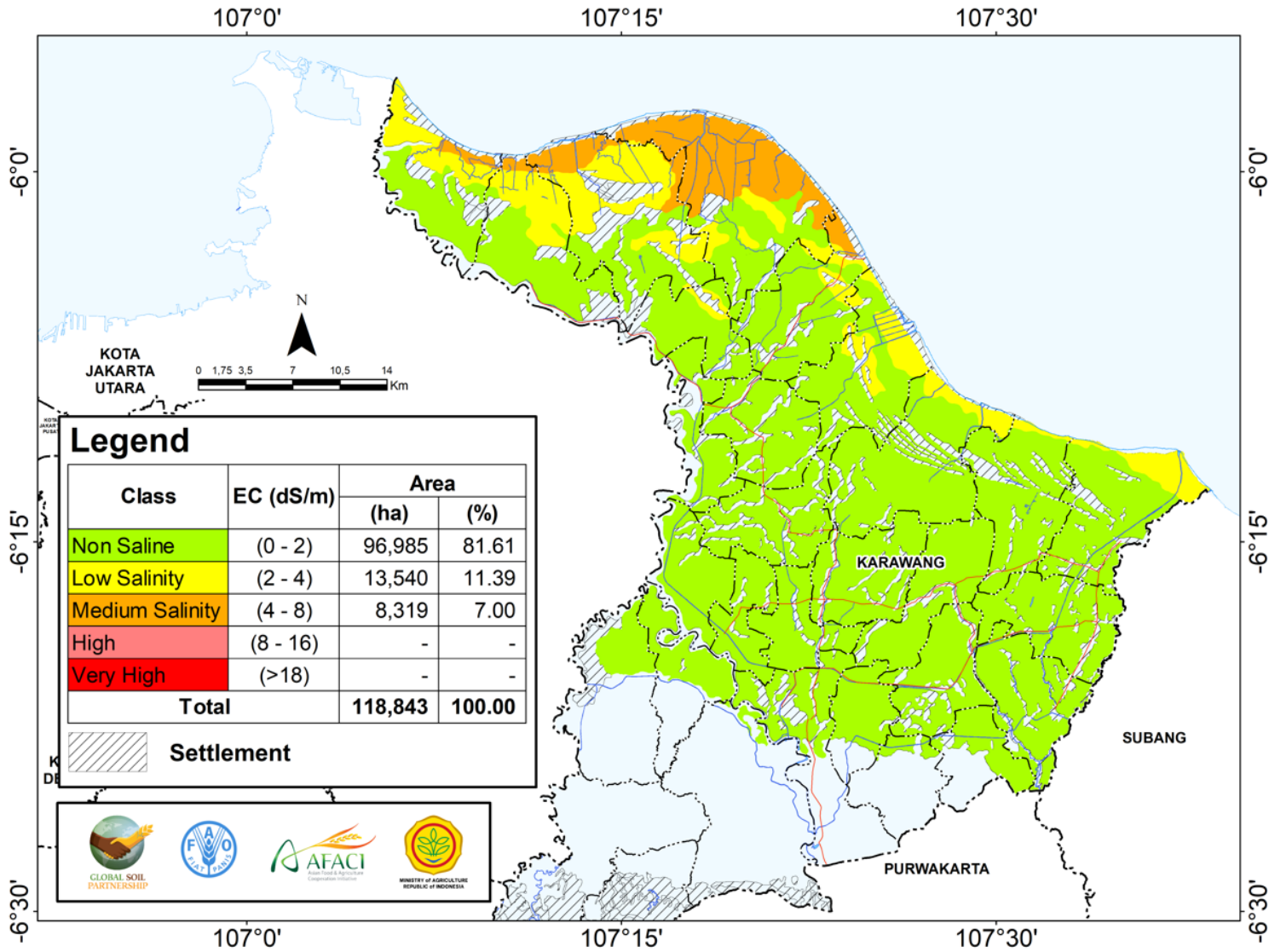
## MAP OF NATIONAL SOIL CATION EXCHANGE CAPACITY

## MAP OF SOIL ORGANIC CARBON DISTRIBUTION IN INDONESIA



# Establishment of Soil Threats

## Map of Soil Salinity in Karawang Regency, West Java, Indonesia



### Note:

Most of the soil in Karawang Regency is not saline. Low to medium salinity classes are found in marine-affected areas.

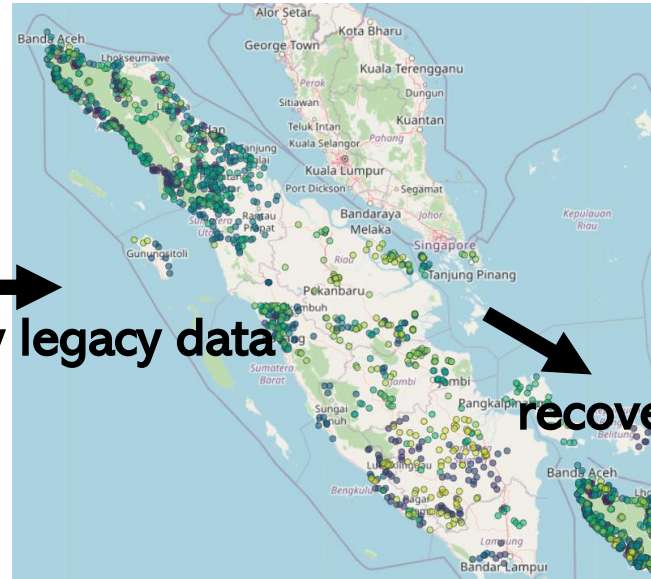
# Rearrange and Collecting of Soil Legacy Data To Build Soil Database

## Sumatera's Soil Data



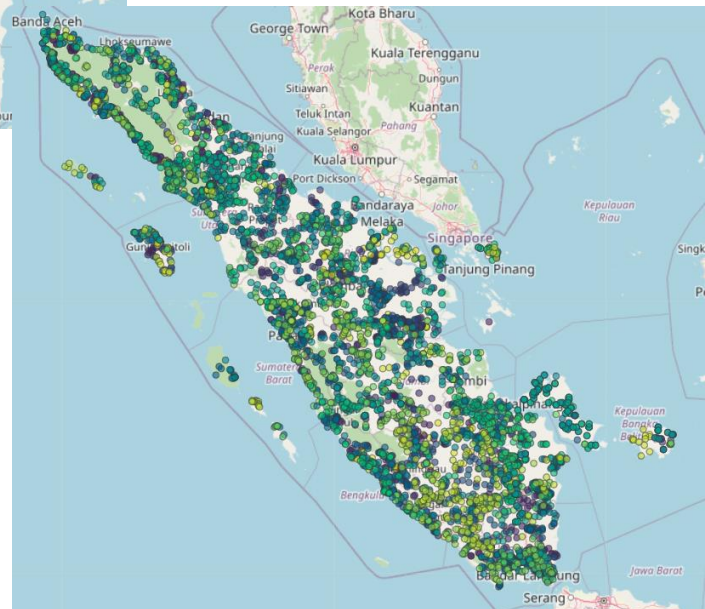
- observations point : **592**
- 2016 – 2019 Data

recovery legacy data



- observations point : **1202**
- Some of 1970 - 1990 Data, and 2011 – 2019 Data

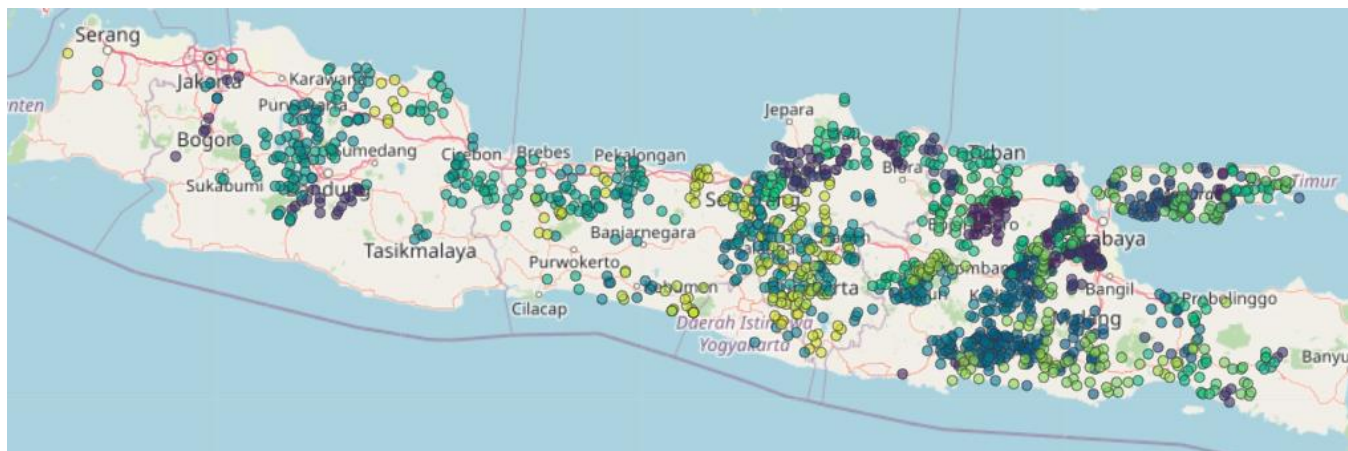
recovery legacy data



- observations point : **5738**
- Data from ~ 1970 until 2022

# Collecting Legacy Soil Data

## Java's Soil Data

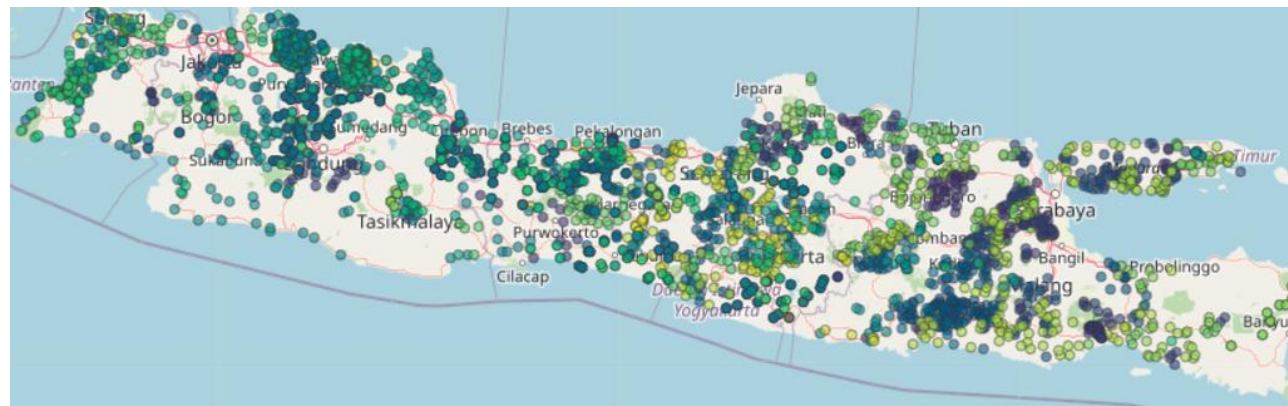


- observations point :  
**1454**
- 2016 – 2019 Data



recovery legacy data

- observations point :  
**3398**
- 1970 – 2022 Data

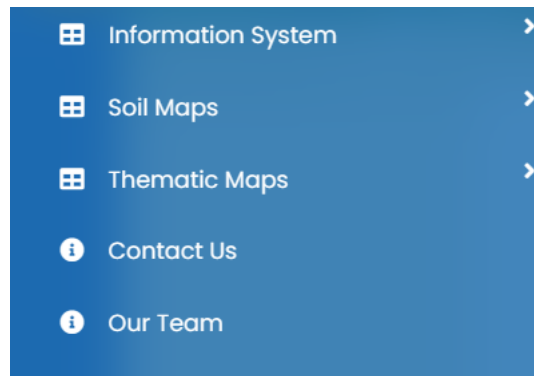


# Establishment of National Soil Information System

## National Soil Information System (INA SOIL AGRO)



[awr.litbang.pertanian.go.id](http://awr.litbang.pertanian.go.id)



Menu :

- Information System (SISCrop, Crop Calendar)
- Soil Map
- Thematic Map



support bilingual



# Way Forward

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## Project to support Soil Sustainable Management and Soil Health in Indonesia in 2024 – 2026 (AFACI Soil+)

- Addition of new soil profile database to strengthen Indonesian National soil information system
- Continue updating the national soil legacy data
- Develop soil map at national soil partnership, regency soil partnership to support implementation of SSM, improved soil productivity associated with ecosystem functions/services
- Mineral Soil Property Mapping and Peatland mapping with Digital Soil Mapping (DSM) method to support sustainable soil management
- Adapt the soil health index framework to align with national conditions and parameters
- Awareness campaigns and Contribute to EduSOILS webinars to increase stakeholder understanding of soil health and disseminate soil-related knowledge
- Website development of national soil information system



# Way Forward

## Project Standardization to support Soil Sustainable Management and Soil Health in Indonesia

- As Standardization Institution in Indonesia for the Agricultural Land Resources Sector. We focused on developed standard that can be implemented by the farmers to support the sustainable land management. The success story, such as developing National Standard (SNI) No. 9245 about *Land Management for Floods Type B Tidal Swampland Using Surjan System*.
- This standard promote about land management to support sustainable soil management in swampland with the specific traditional method 'Surjan' system.
- **Expected to develop the output from the AFACI Project (method or product) into the standard document that can implement by the farmers in Indonesia**



SNI 9245:2024

Penataan lahan rawa pasang surut tipe luapan B dengan sistem surjan



**THANK YOU**



**TERIMAKASIH**