





# **CoW-An Innovative Partnership**











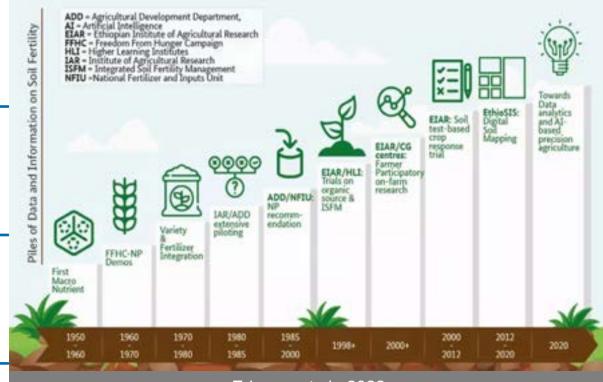
## The Issues

Soil and agronomy research in Ethiopia began over 60 years ago

The research approach was fragmented, and no comprehensive recommendation was possible- only blanket recommendations

The data generated from these researches were not FAIR (findable, Accessible, Interoperable, Reusable)

Therefore, any research question was followed by fresh data generation, which is time and resource-consuming



Erkossa et al., 2022



Attempts by individuals and groups like the Ethiopian Society of Soil Sciences to influence the government to create a central database system and data sharing policy failed



Awareness creation works continued until the workshop held on 1-2 February 2018 to demonstrate the value of big data analytics- which needs data access and sharing



One outcome of the workshop was the creation of a group of individuals interested in sharing data and promoting the idea by 30 individuals



The group had a series of engagements, created a TF to coordinate activities; and sub-teams (community of practices)- and the group later named itself the Coalition of the Willing (CoW)



The CoW has gradually grown in terms of number (150+) and scope (e.g. data analytics and modeling) (<u>http://ethioagridata.com/products.html</u>)

# CoW -an innovative partnership for data sharing & access



### Coalition of the Willing (CoW): team of experts willing to share data and/or support associated processes







Digital Green

#### **Some Achievements**

I. Enabled Data Findability & Accessibility



# 1.2 Data portals:

#### Legacy data:

40,000+ agronomy and crop responses to fertilizers 20,000+ soil profile data

#### Primary data:

500+ nutrient omission trials data collected Collection of data on crop response to N & underway National Soil Information Systems (NSIS)used to manage soil survey and characterization data (https://nsis.moa.gov.et/)

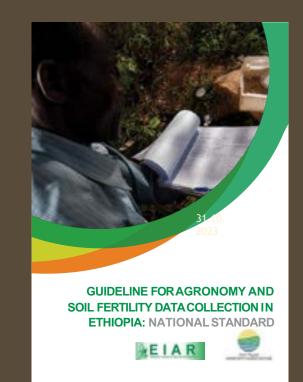
CoW/EIAR- used to manage crop response to fertilizers and agronomy data (https://datahub.eiar.gov.et/)

#### **Key Achievements**

#### I. Enabled Data Findability & Accessibility



6 guidelines developed
EIAR mainstreamed the guidelines in the NARS







EIAR

Water, Land and

A guide to standardized methods of analysis for soil, water, plant, and fertilizer resources for data documentation and knowledge sharing in Ethiopia

#### **Key Achievements**

#### I. Enabled Data Findability & Accessibility

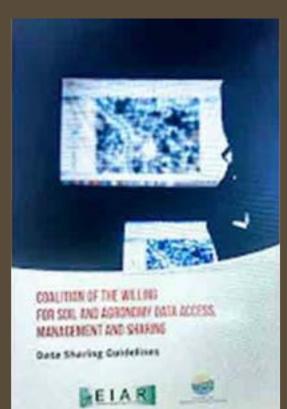


- CoW data sharing guidelines
- Soil and Agronomy Data Management, Use and Sharing (Directive no- 974/2023)

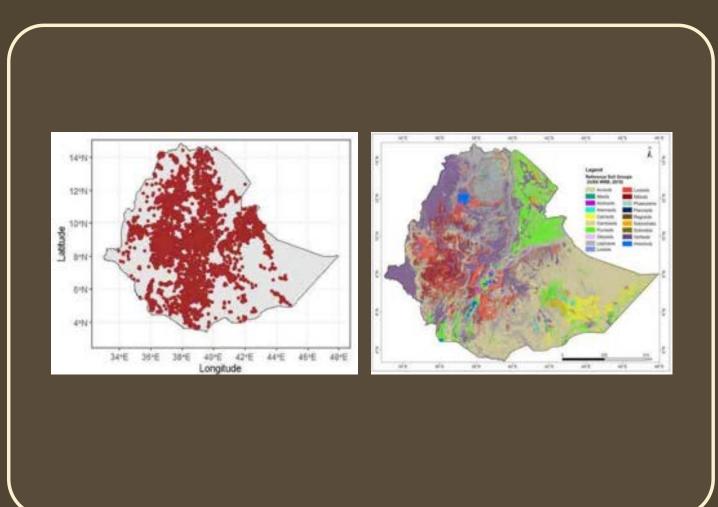


Directive No 974/2023 Land Agronomy Data Management. Use and Sharing Directiv

> 31.10. 2023



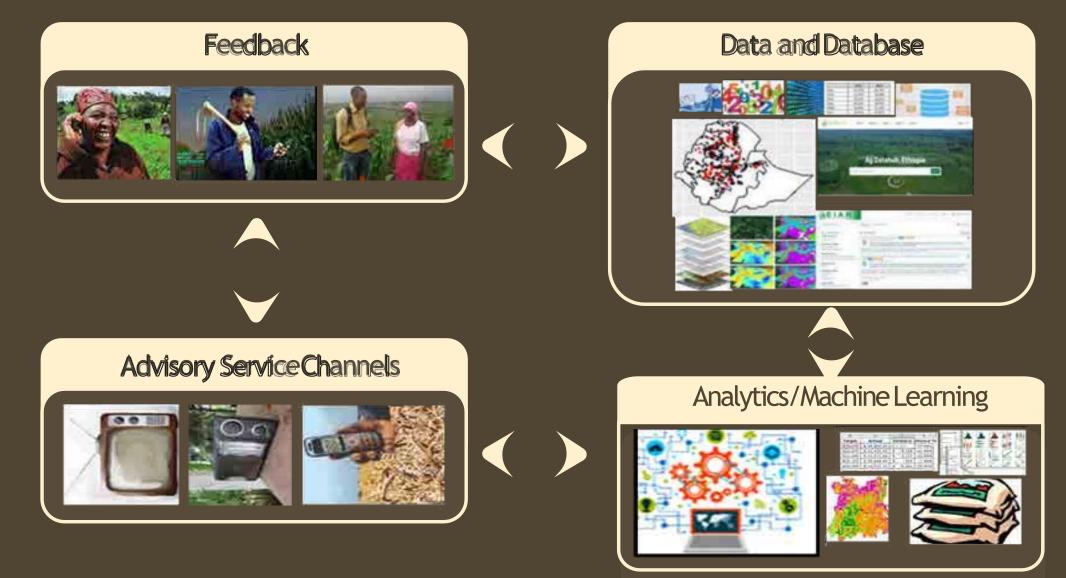
#### Advanced-Data Use & Content Development



#### Developed a high-resolution digital soil map

#### Ethiopian soil Atlas developed (pending official launch)

#### Advanced-Data Use & Content Development



Workflow for development, validation and piloting of fertilizer DST

#### Advanced-Data Use & Content Development





Facilitated and supported the development of a Fertilizer Decision SupportTool (DST)

Validated on 280 farmer fields: wheat grain yield gain of up to 24% (1.04 t ha-1) compared to blanket recommendation



Disseminated to over 10,000 farmers in 2022 and ca. 42% applied



Wheat grain yield gain: up to 38% by farmers

# Key lessons for scaling the approach



Willingness is a key to a successful partnership



Willingness requires a clear understanding of the purpose



Awareness creation, transparency and committed and enthusiastic facilitator(s) are crucial



Incentives (e.g. capacity building) for participants



Accommodating aspirations, interests, objectives and goals of participants



Flexibility in the pathways to achieving goals/objectives



Resource allocation should be responsive to needs . Thank you for your attention

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