

BILL & MELINDA  
GATES foundation

# *Stocktaking of Agricultural Investments in Africa*

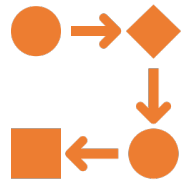
Update on Progress & Possibilities

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Lawrence Tweed



# Objectives



## Share Process & Progress

What? Why? How?

Initial Learnings



## Introduce Dashboard (Beta)

Utility

Potential Features



## Crowd Source Ideas from You

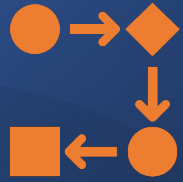
Improve Coordination

Use Cases

Data Points

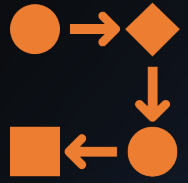
Dashboard Layout

Database Maintenance



# What Do We mean by “Stocktaking?”

- **Create a Record *Agricultural Dev Projects***
  - *Scope*
    - *Geography*
    - *Period (past, present, future)*
- **What Kinds of Data?**
  - Key Fields (Country, Project Name, Donor, Implementer, Funding, Dates)
  - Publicly Available / Voluntarily shared
- **Five V’s of Data**



# Why Take Stock of Agricultural Projects?



- **Novel**

- Big Picture
- Patterns / Trends

- **Informative**

- Empowers Stakeholders
- Where are we moving the dial
- Identify Duplicate Efforts
- Helps Marshall Resources
- Fosters Innovation

- **Aligns w/ AU Mission**

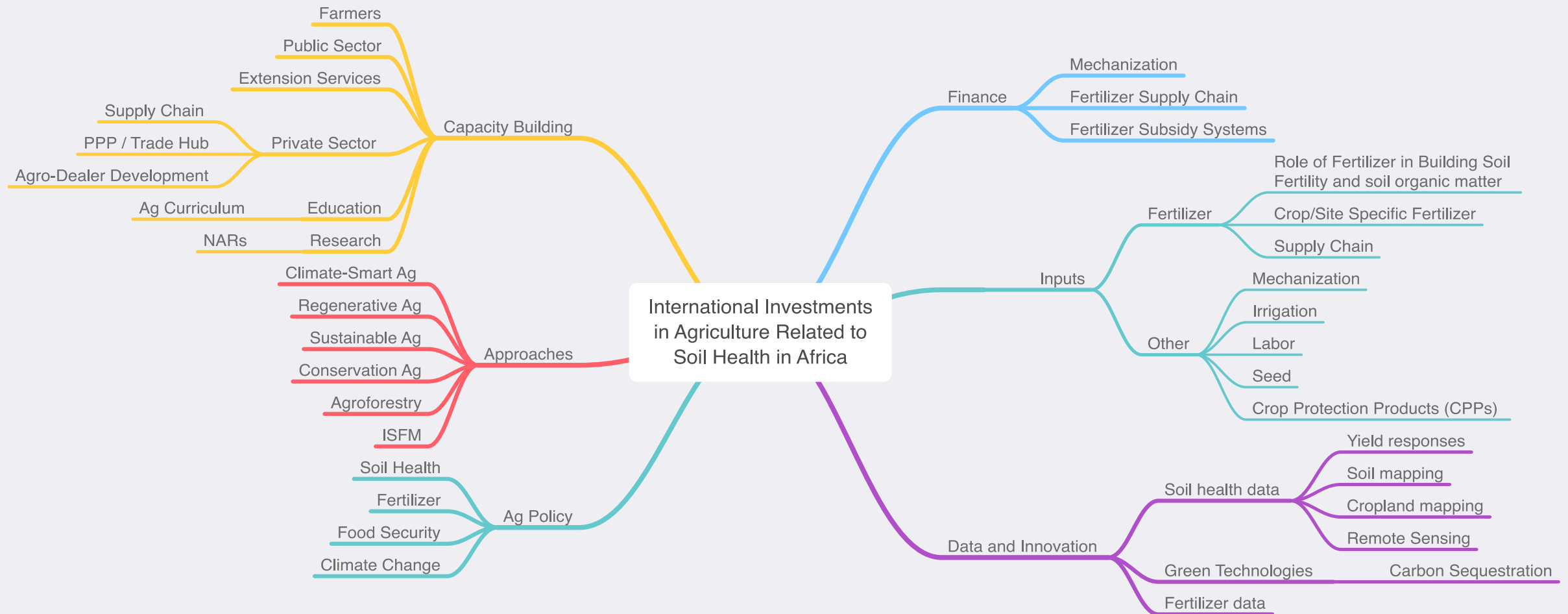
- Encourage Intl Cooperation
- Promote Sustainable Dev
- Promote cooperation in all fields of human activity

# How did we take stock of Projects?

- 100s of webpages & Proj docs
- Talked w/ Data Scientists
- Established Scope & Parameters
- Developed Taxonomy
- Partnered w/ QED
- Scraped data from web (e.g. JICA)
- Integrated structured datasets from organizations

```
mirror_mod = modifier_ob.  
set mirror object to mirror  
mirror_mod.mirror_object  
operation == "MIRROR_X":  
mirror_mod.use_x = True  
mirror_mod.use_y = False  
mirror_mod.use_z = False  
operation == "MIRROR_Y":  
mirror_mod.use_x = False  
mirror_mod.use_y = True  
mirror_mod.use_z = False  
operation == "MIRROR_Z":  
mirror_mod.use_x = False  
mirror_mod.use_y = False  
mirror_mod.use_z = True  
  
#selection at the end -add  
mirror_ob.select= 1  
modifier_ob.select=1  
context.scene.objects.active  
("Selected" + str(modifier_ob.  
mirror_ob.select = 0  
= bpy.context.selected_object  
data.objects[one.name].select  
  
print("please select exactly  
  
-- OPERATOR CLASSES -----  
  
types.Operator):  
on X mirror to the selected  
object.mirror_mirror_x"  
mirror X"  
  
context):  
context.active_object is not
```

# Taxonomy of Agricultural Investments Related to Soil Health



# Initial Learnings & Challenges

There is no easily accessible, centralized database of agricultural projects.

Most information must be gathered piecemeal, by searching donor, implementer, government or other specific websites.

Search terms can vary depending on the donor, implementer, location or time that the project was implemented.

Most the data is unstructured making it much more difficult to collect, process, and analyze.

In the rare instances where data is structured (e.g. already in a spreadsheet and searchable) it often contains only a subset of what is being sought – thus requiring additional searching.

Even when searching within a single entity, project level information is often only uncovered obliquely.



# Introduce Dashboard (1 of 4)

Ag Dev  
Stocktaking  
g

Country

AU Region

Donor Name

Donor Type

Implementer

Implementer Type

Projects Started (by Year)

Projects Ended (by Year)

## Agricultural Development Stocktaking Dashboard

This dashboard illustrates agricultural investments in Africa carried out between 2015 and 2022 using development funding. Data was drawn from both public and direct sources pertaining to USAID, JICA, AFAP, APNI, IITA, and IFDC. The default focus countries are Burundi, Kenya, Morocco, Mozambique, and Nigeria. However, any and all African countries can be selected using the filters at the top.

To build a complete picture of agricultural investments across Africa, more participation and data sharing is needed from all donors, along with harmonization of data formats and standards.

456  
Projects

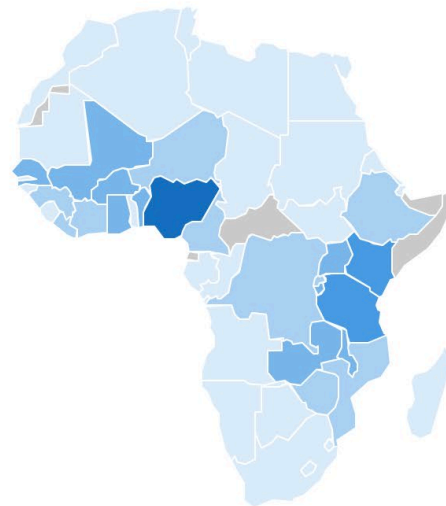
166  
Donors

54  
Countries

Wallace & Associates

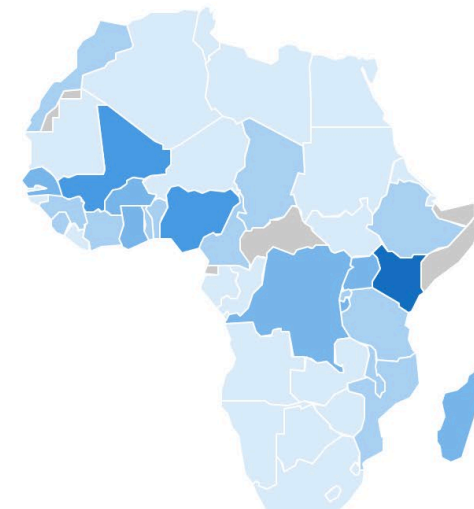
qed  
QUANTITATIVE ENGINEERING DESIGN

Number of distinct projects by country (map)



Sum of funding (USD) by country (map)

- \$5.7k - \$135...
- \$179.0M - \$4...
- \$496.4M - \$8...
- \$1.3B - \$1.4B
- \$1.8B +







# Dashboard (2 of 4)

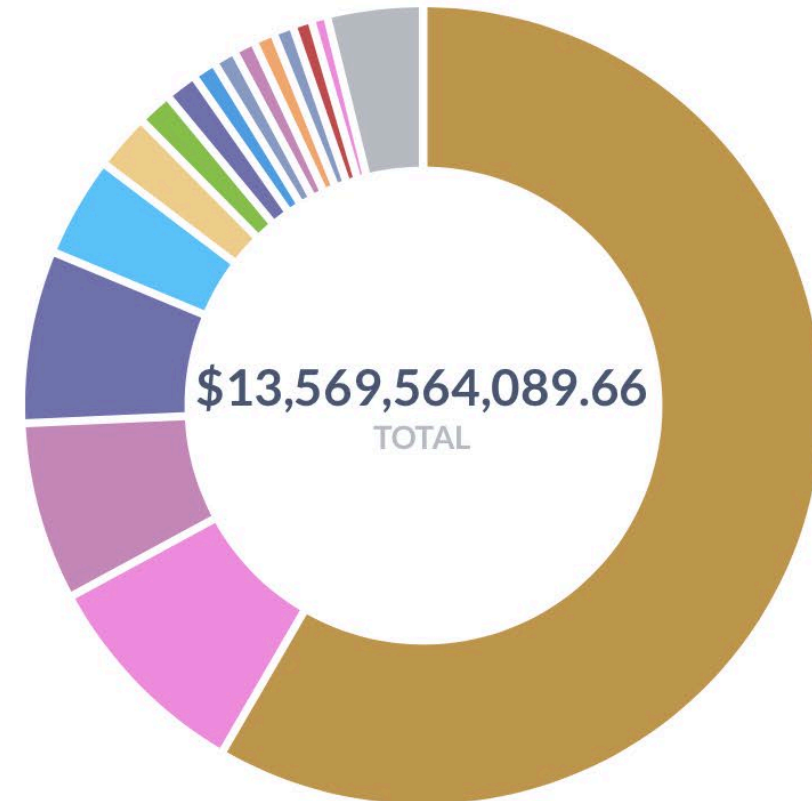
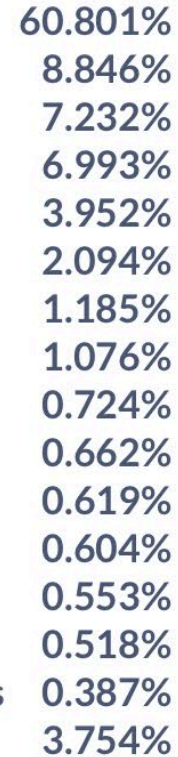
Sum of Funding (USD) by Country





# Dashboard (3 of 4)

Sum of Funding (USD) by Donors

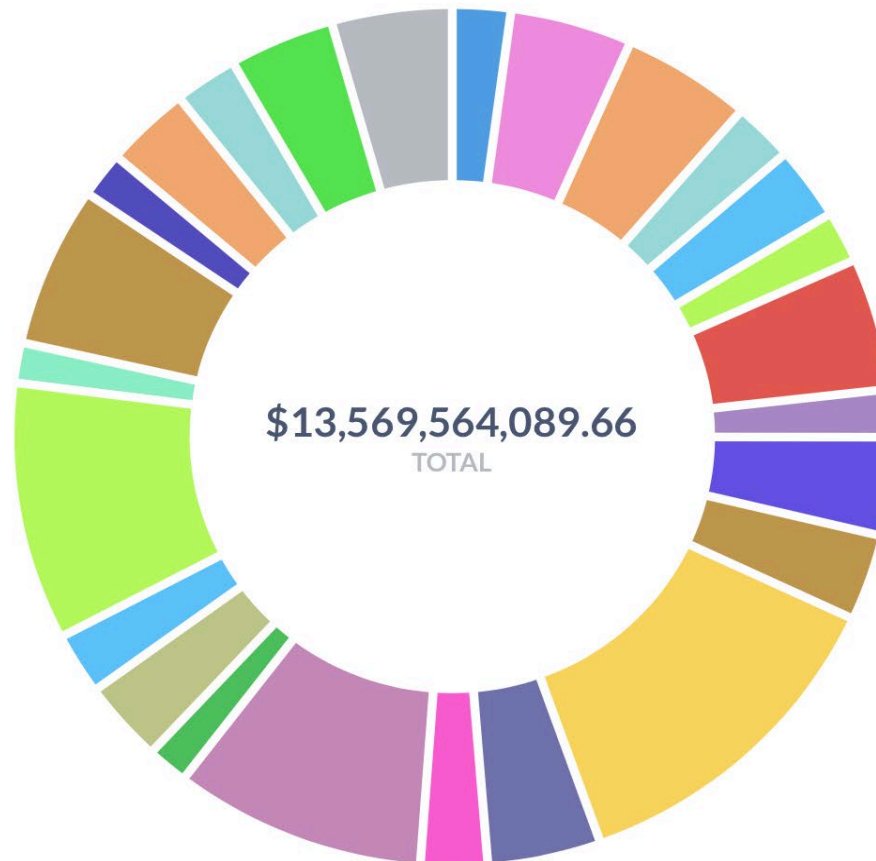




# Dashboard (4 of 4)

Sum of Funding (USD) per Country as Percentage

Benin	1.99%
Burkina Faso	4.51%
Burundi	4.80%
Cameroon	2.11%
Chad	2.67%
Côte d'Ivoire	1.76%
DR Congo	5.03%
Ethiopia	1.62%
Ghana	3.66%
Guinea	3.18%
Kenya	13.26%
Madagascar	4.17%
Malawi	2.34%
Mali	9.64%
Morocco	1.33%
Mozambique	3.00%
Multiple Countries	2.19%
Nigeria	10.11%
Rwanda	1.32%
Senegal	6.18%
Sierra Leone	1.55%
Tanzania	3.07%
Togo	2.21%
Uganda	3.85%
Other	4.45%



**187**  
Implementers

**82**  
Number of missing funding info...





# Crowd Source Ideas & Possibilities From You

Would a continent-wide database of agricultural projects be useful?

What other potential use cases could be explored?  
e.g. Maputo? FDI? Yields?

What other key datapoints could be incorporated?

- E.g. Project components?  
Soil-Health Relevancy Index?

How could future data-collection be more structured and complete?

What entity would be a good steward for Database/Dashboard?

Should we create a “soil health” relevancy index to more effectively categorize projects?

**Thank You**

**THE END**