

Using real-time crowdsourcing to assess CoVID-related impact on Food Security

Lessons learnt from a Pilot in Nigeria

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- **Outline**

01.

Innovating for Actionable Data

02.





Assessing Threat to Food Security

03.

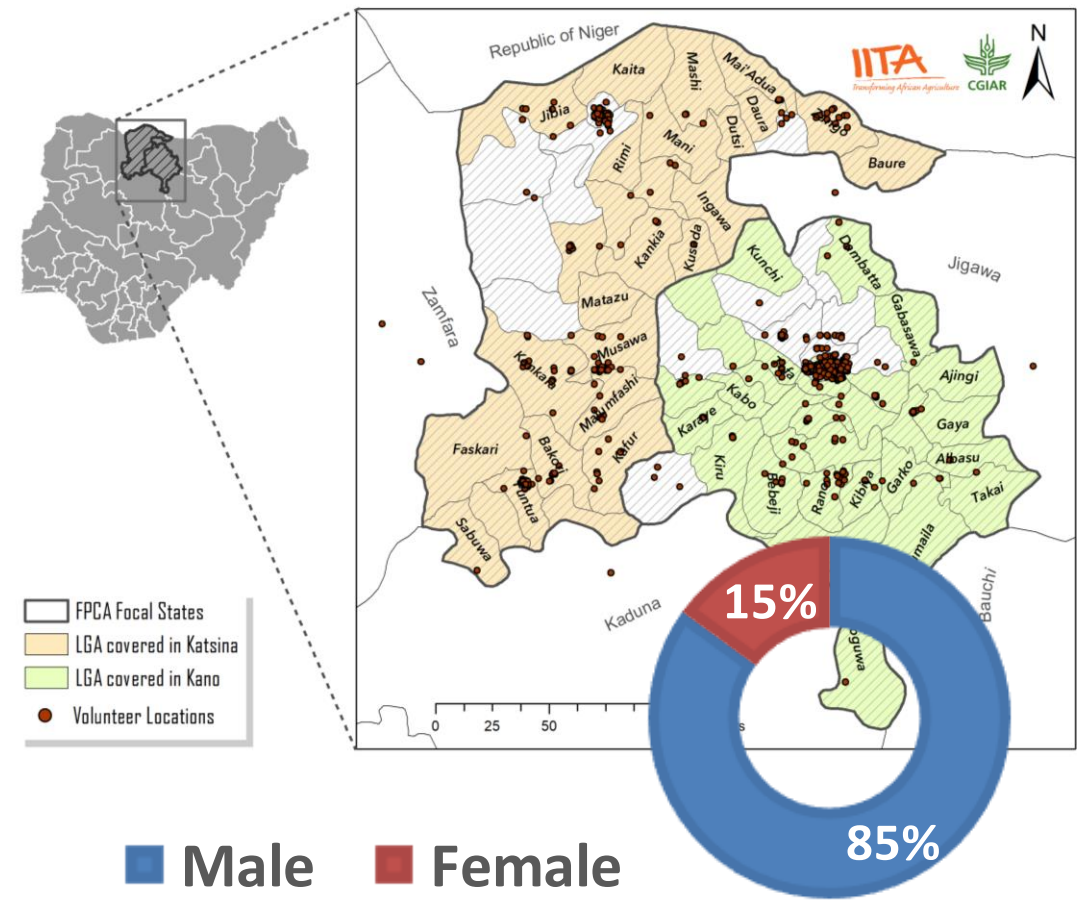
Lessons & Prospects

01.

Innovating for Actionable Data

-  Automated Weekly Data Flow
-  Contactless & Responsive Volunteers
-  Robust Datapoints (~1000 Data points/Month)
-  Scalability in time/space

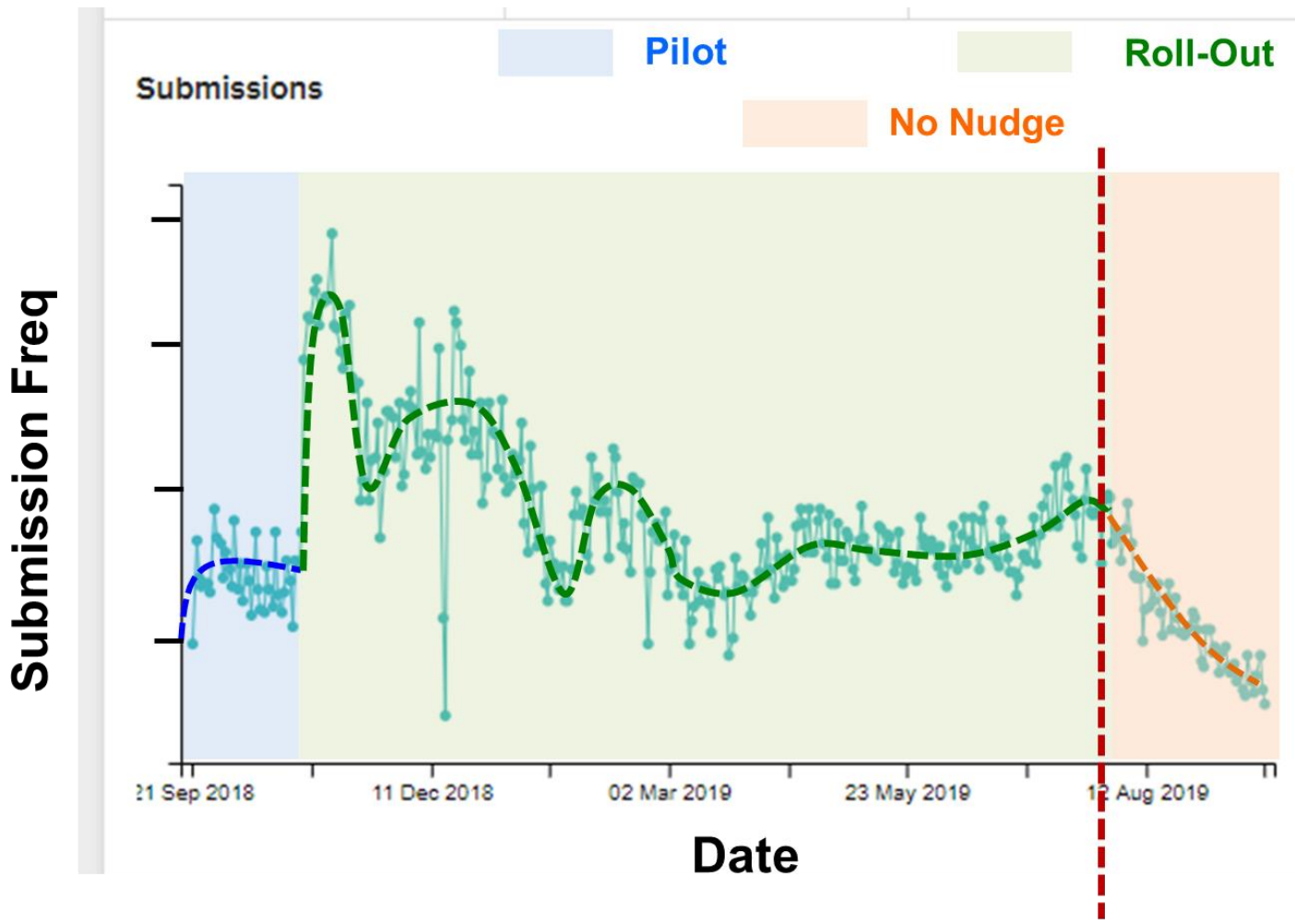
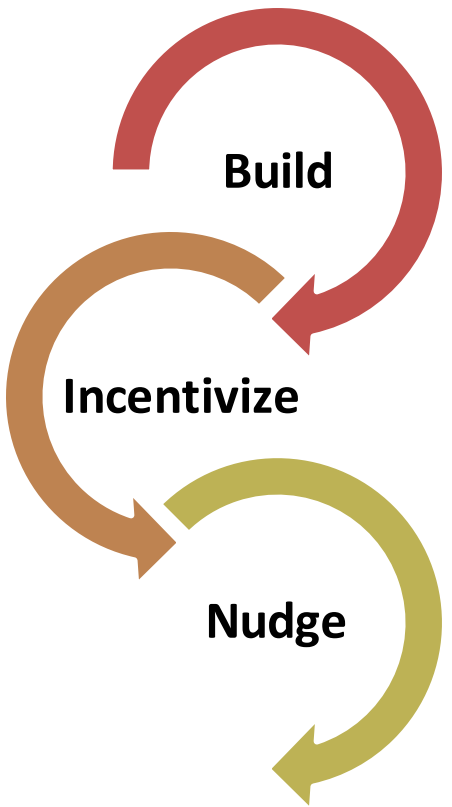
• **737 Volunteers**



01.

Innovating for Actionable Data

B.I.N Crowd

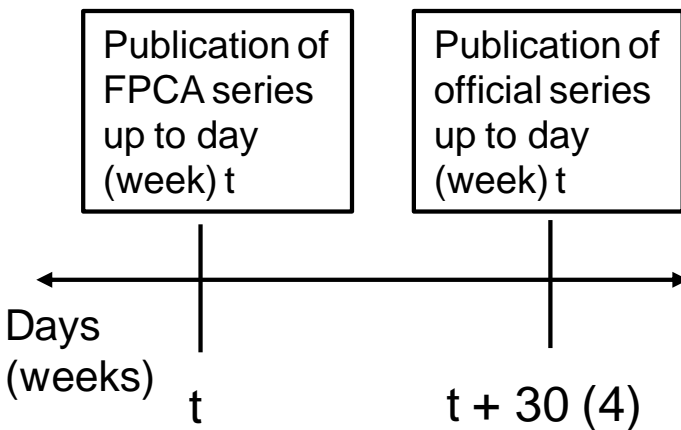


Lessons

01.

Innovating for Data...

- Automated validation algorithm in real time → **Web dashboard**
- Real-time vs. delayed/aggregated official data (**4 weeks/30 days average delay**)

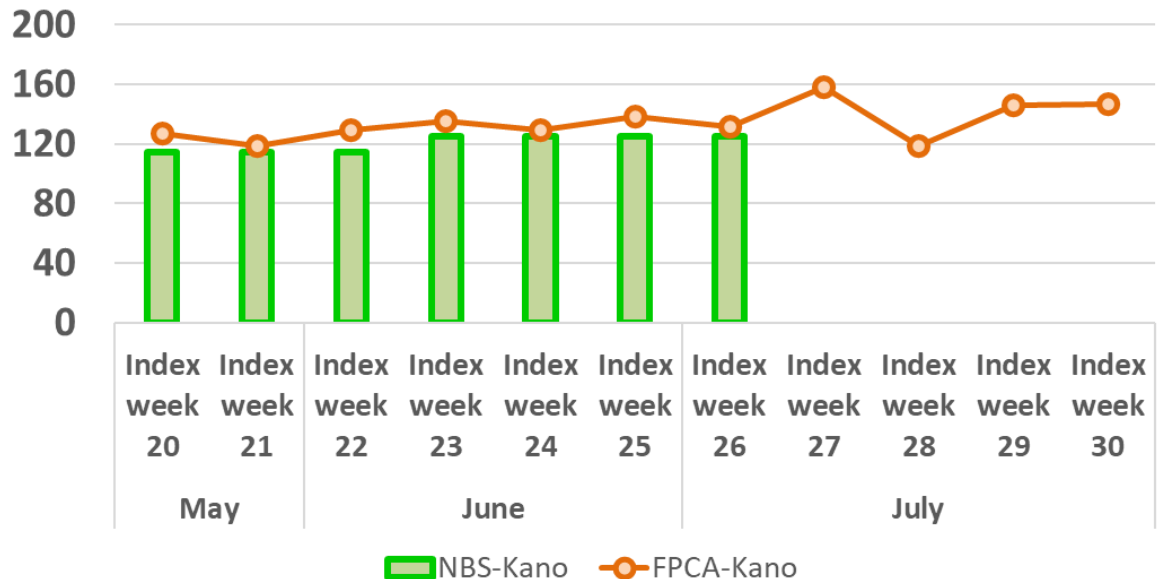


All Commodities

- IndianRice
- ThaiRice
- Wmaize
- Ymaize



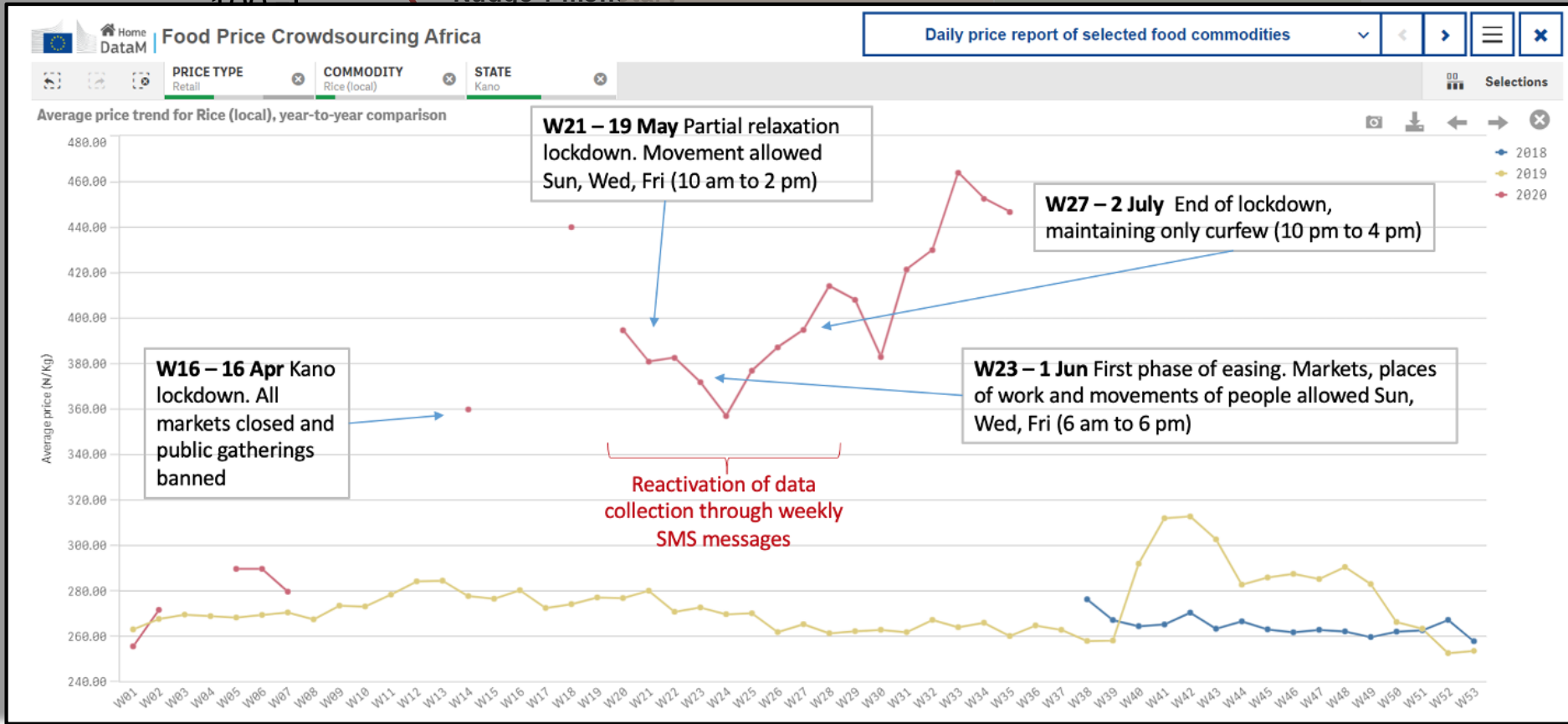
FPCA weekly price indices measuring the week-on-week change of prices between 2019 and 2020, **NBS monthly indices** measuring the month-on-month change between 2019 and 2020 for local rice price, retail



02.

Assessing [CoVID] Threat to Food Security

Daily Submission Rates



02.

Assessing Threat to Food Security

spatio-temporal food price monitoring



Linked to socio-economic indicators

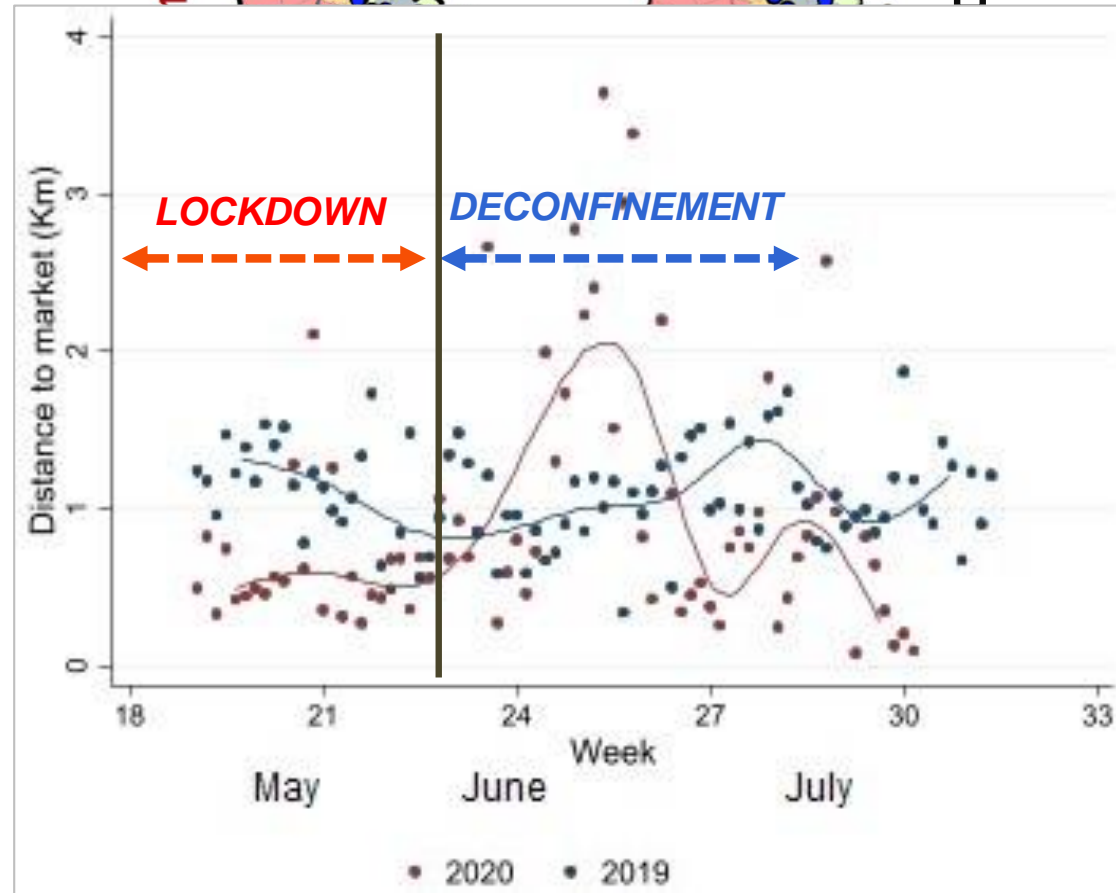
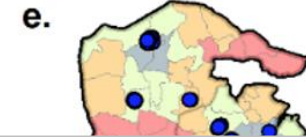


Unlock actionable intelligence on food [in]security

White Maize



Local Rice



- Mapping food security threats at different geographical levels based on price changes and socio-economic status

03.

Lessons and Prospects

CoVID (threat)
impact on price
and access
tracked

Evidence

Crowdsourced
data
complements
national data in
temporal,
spatial richness

Value

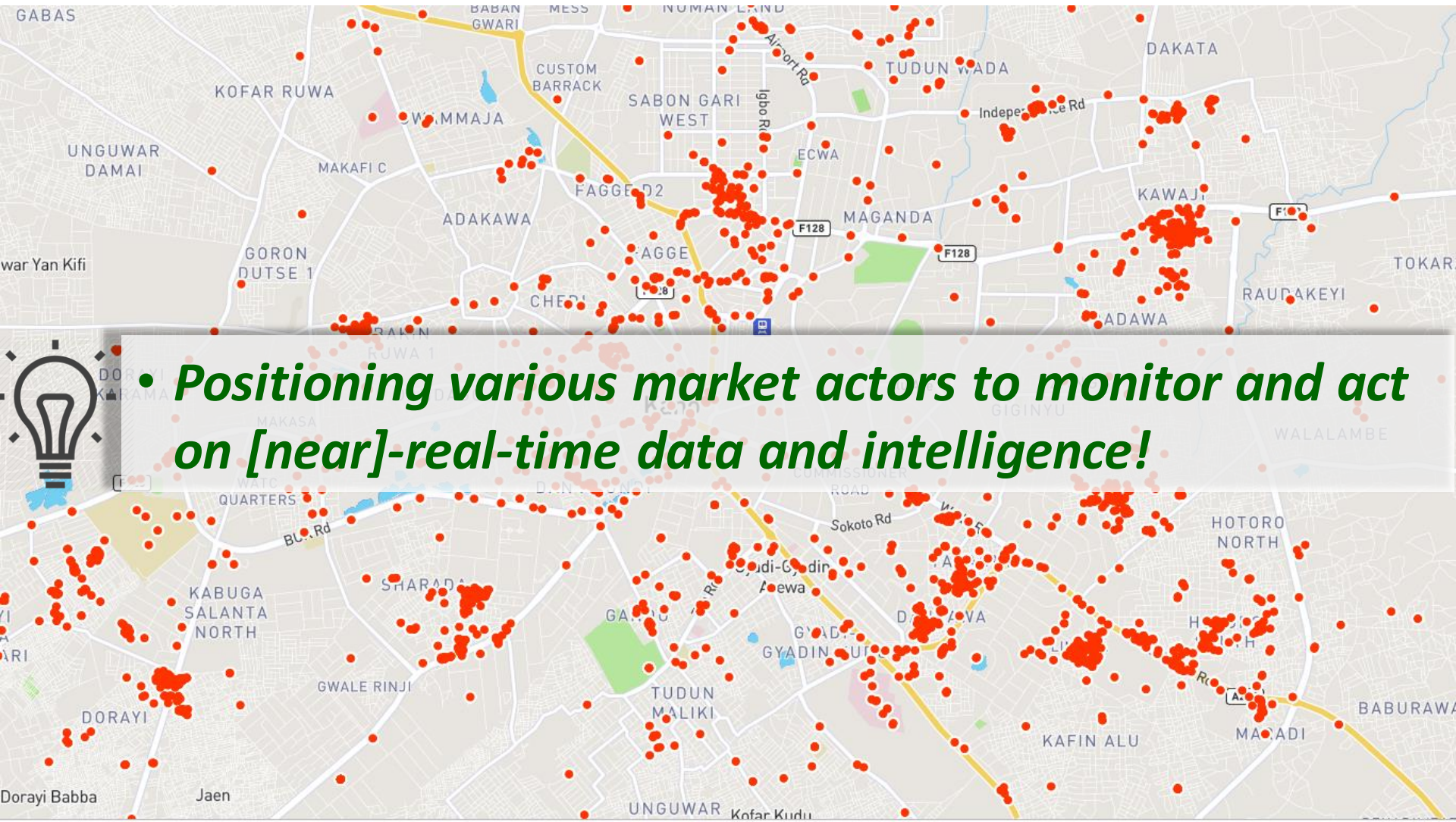
Successful
Crowdsourcing
=
 $Crowd * System * X_{ij}$

Criteria

Decision
Support Tool
—
Data
integration

Use

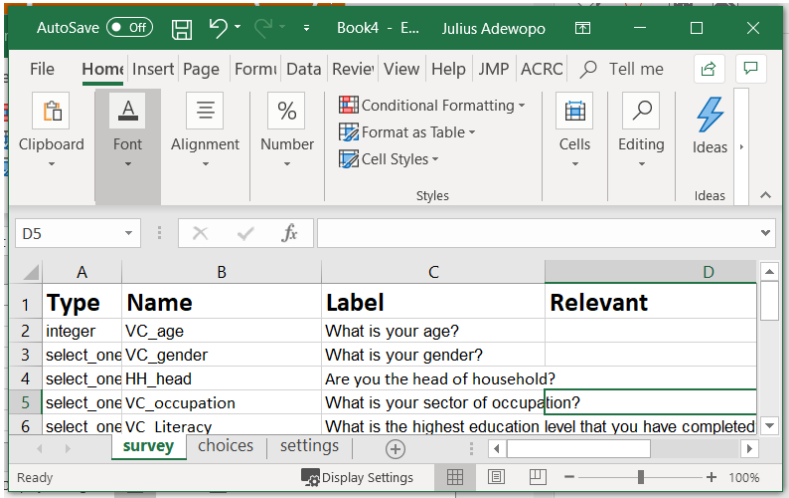
- Final Note



01. • **Annex**

System-oriented Solution

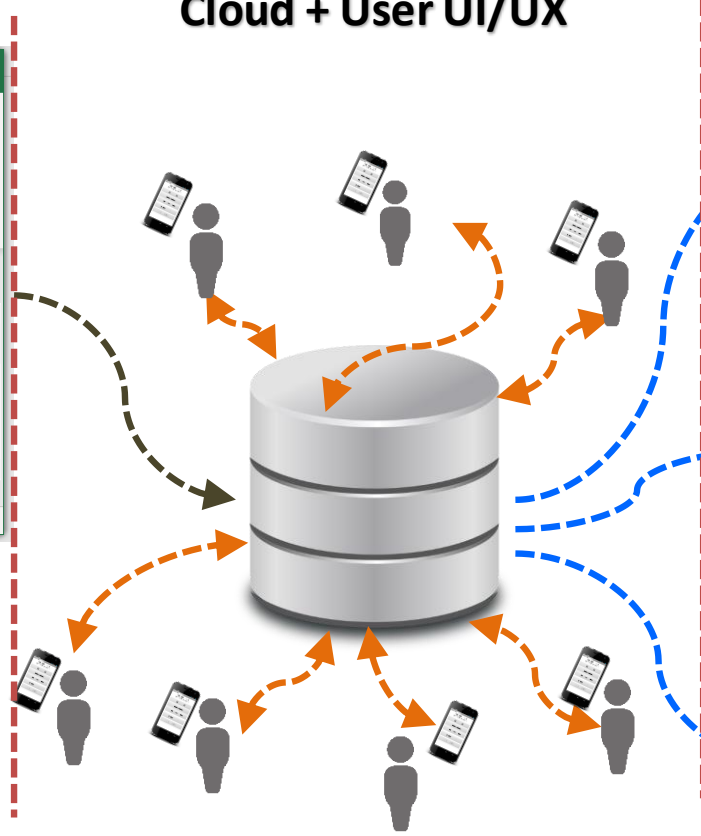
Input | Admin UI



+

Researchers

Cloud + User UI/UX



Outputs



 **Volunteer Crowd**

- Annex

