



Southern African Centre for Infectious Disease Surveillance

## **USING SMART PHONES OCCUPIED WITH INTELLIGENT MOBILE AND WEB APPS FOR ELECTRONIC SYSTEM OF DISEASE SURVEILLANCE IN TANZANIA**

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## > context

Current complexities of disease surveillance as it embraces One Health approaches

Clinical

Demographical

Ecological

Climatological

Only clinical cases are systematically captured by IDSR in Tanzania

# > Community One Health Security



First to notice clinical symptom, ecological change or any health risk/threat. Thus are best median for **Timely Reporting & Contain Outbreak**

## > challenge

- Detect outbreaks faster by,

Capturing data  
at source,

Multiple  
sources

Rapidly

Easy to  
distribute  
Digital form

- Integrating and/or combining these datasets
- Modeling and making sense out of this data



## > Approach

EpiHack: Brainstorm public health challenges and design fit for purpose tools to address them



# > Prototypes developed

- Collect health events rapidly
- Provide feedback to data collectors
- Visualize and Analyze data
- Perform Contact Tracing



  
afyadata

  
skoll global  
threats fund

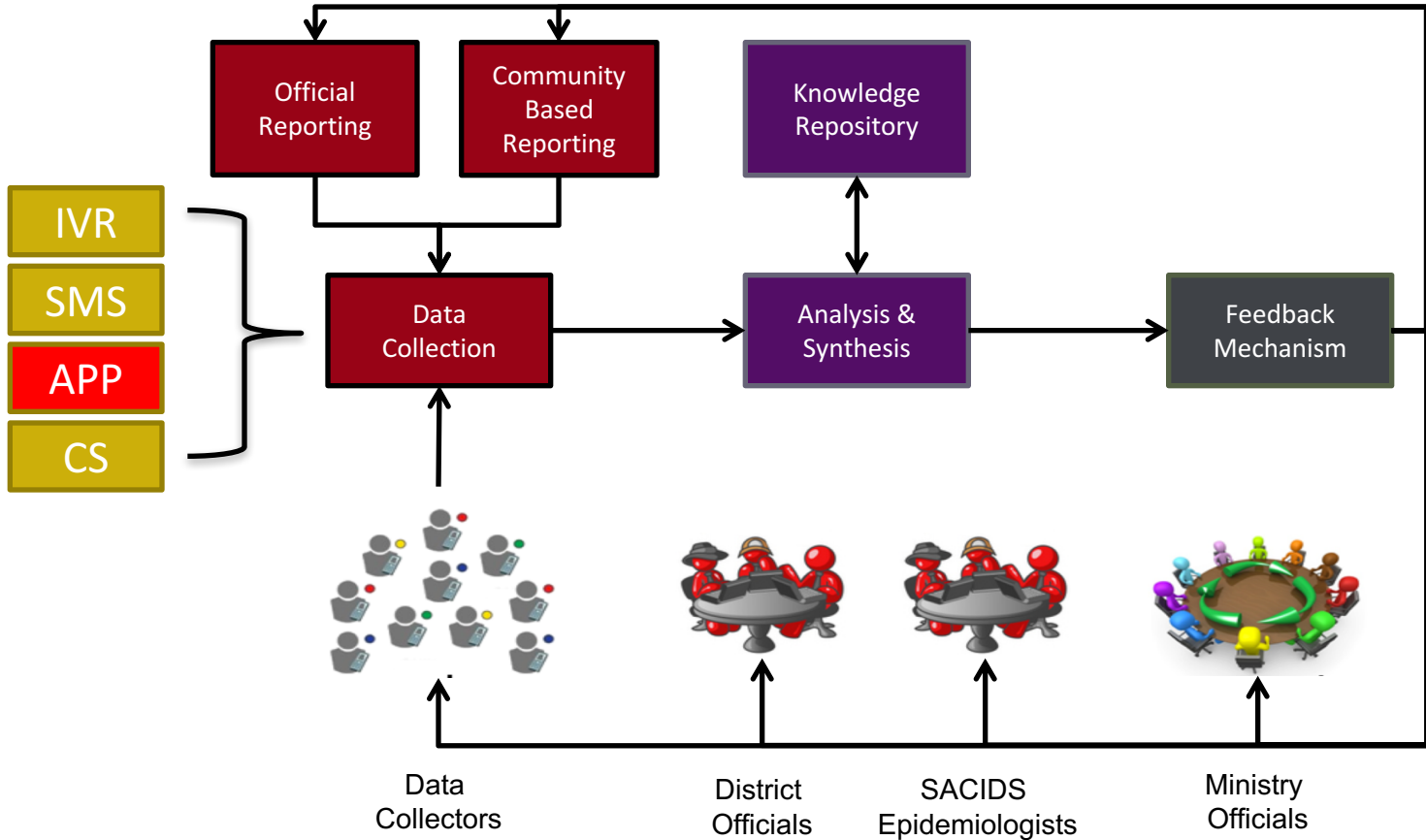
IDRC  CRDI

# > AfyaData for Community One Health Security



- Training
- Collecting Data
- Reviewing

# > Integrated approach: capture, reporting & feedback

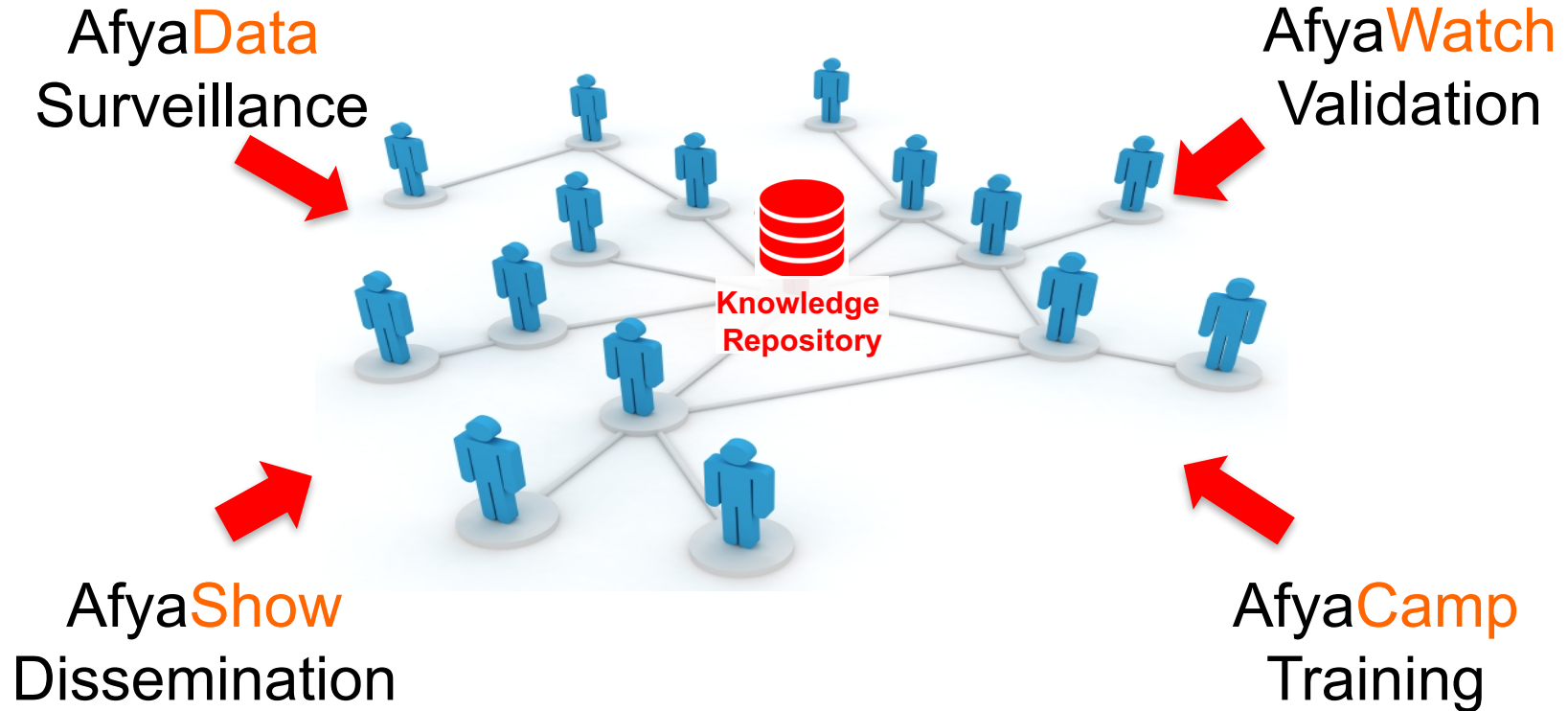


## > some events identified

- A mysterious disease that killed a large number of goats and sheep (confirmed as PPR/CCPP diseases)
- impetigo-like outbreak in school children
- suspected rabies cases in cattle (confirmed to be East Coast fever infections)
- climate change-induced behavior change in baboons feeding on livestock and humans.



# Working towards: Community as health sensors



> thank you

Acknowledge support from



Outbreaks are inevitable, pandemics optional

