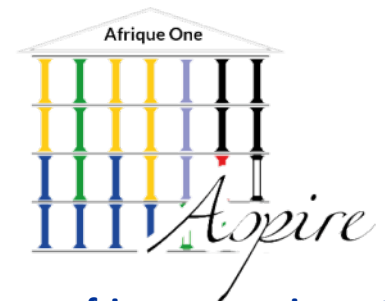




Community-based syndromic surveillance-response in Chad

Fayiz Abakar, PhD



www.afriqueoneaspire.net

Overview



➤ Context:

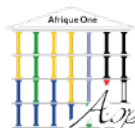
- Health and livestock systems in Chad
- Why community-based integrated surveillance-response ?
- Main research questions
- One health

➤ Framework

➤ Preliminary findings

➤ Next steps

➤ Concluding remarks



Context: Health and livestock system in Chad



- Pyramidal structure: central, intermediate (23 regional delegates) and peripheral (66% functional)
- Poor infrastructures, shortage of qualified personnel, poor appropriate planning
- Long distances between health centres and villages/camps
- Health indicators: High morbidity and mortality rates especially among vulnerable groups



Context: Health and livestock system in Chad



- Livestock represents 53% of rural GDP
- 80% of ruminants are managed through pastoral system characterised by mobility → resources degradation → conflicts between communities
- Animal health is a major concern: shortage of personnel and infrastructure
- Priority animal diseases: PPR, FMD, bovine TB, RVF, rabies, brucellosis, anthrax, CBPP, trypanosomiasis



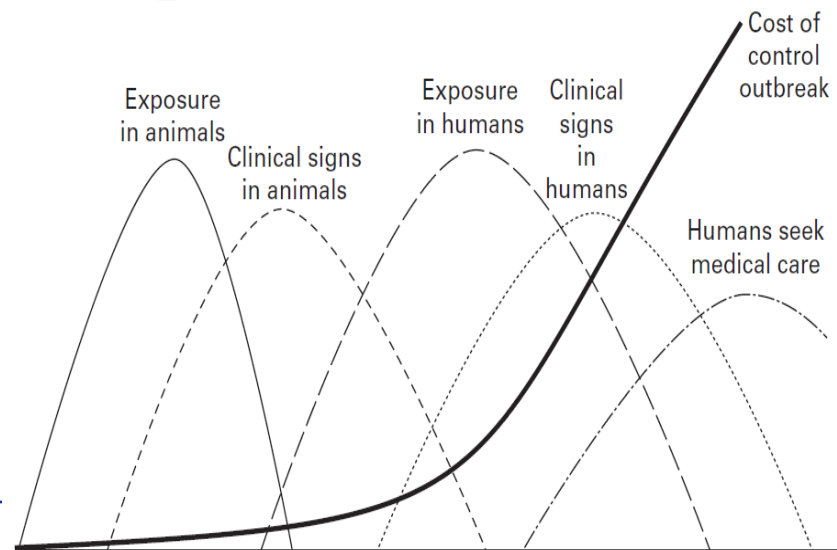
Context:

Why community-based integrated surveillance-response



- Early detection of emerging and endemic diseases is key element in health surveillance
- High risk of diseases spread and transmission through livestock and people's mobility (trades, transhumance, etc.)
- Most of zoonotic diseases outbreaks could be traced back to animals → To be controlled at early stages
- Lack of culturally adapted, low cost and near-real time surveillance-response systems

The World Bank, 2012

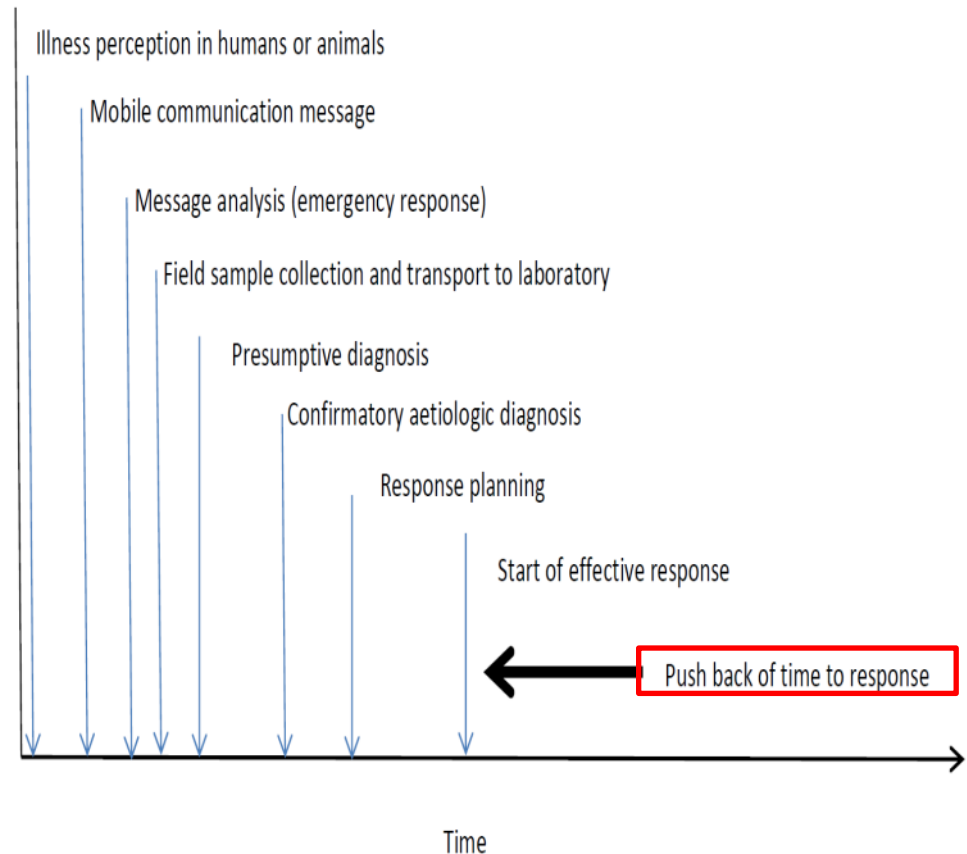


Context:

Main research questions



- ❑ What tools are necessary for joint human and animal diseases surveillance?
- ❑ How can community involvement improve zoonotic diseases surveillance?
- ❑ Cost benefits analysis of joint human-animal diseases surveillance?

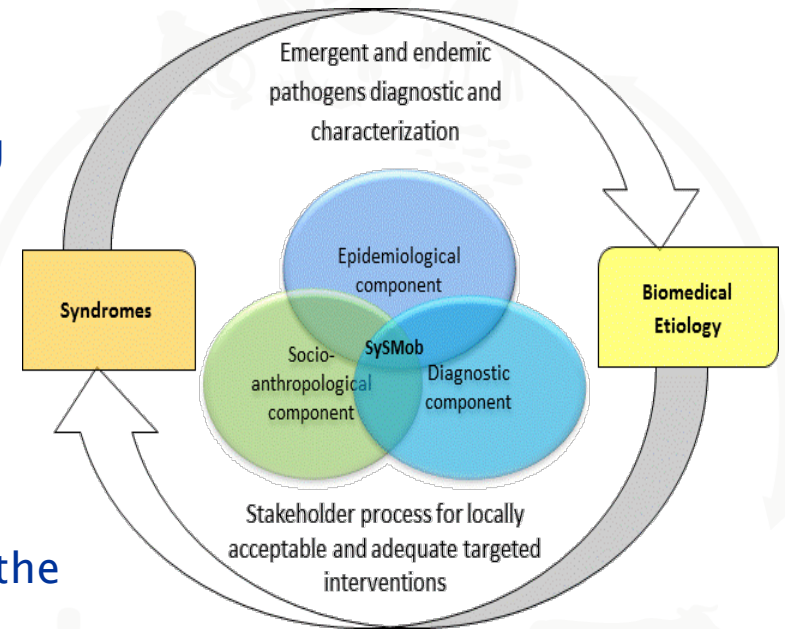


Context: A “One Health” approach



We propose a synergetic approach in health surveillance:

- Develop new tools for joint human and animal health surveillance systems
- Implication of the community in the reporting
- Link it to etiologic confirmation of freshly collected samples
- Focus on zoonotic diseases
- Make use of mobile technology to accelerate the reporting



Framework: Collaboration and approach



Framework and collaboration:

- PADS
- IRED-VPHI
- Afrique One ASPIRE

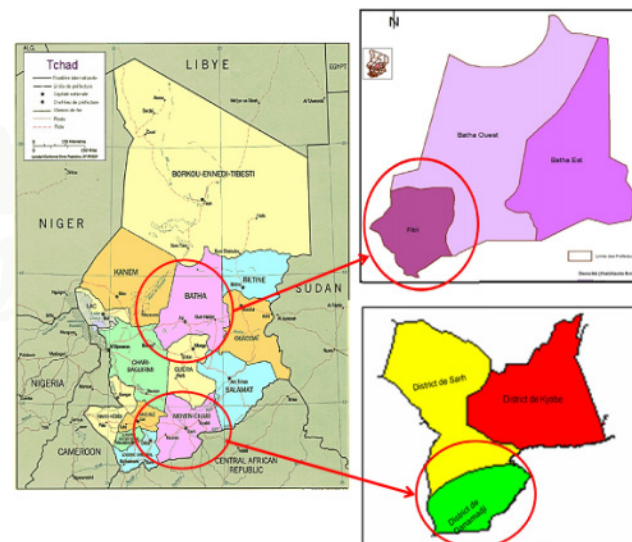
Approach:

a) Pilot phase to test the technical feasibility

b) Benchmark situation establishment

- Surveillance systems evaluation (data availability, time to detection, time to intervention)
- Prevalence of symptoms occurrence
- Prevalence of some zoonosis in humans and animals

c) Follow-up study in two health districts (3 health centres in each)



Preliminary findings: The pilot phase



Recruitment of community health workers (CHW) and animal
community health workers (ACHW)



Preliminary findings: The pilot phase



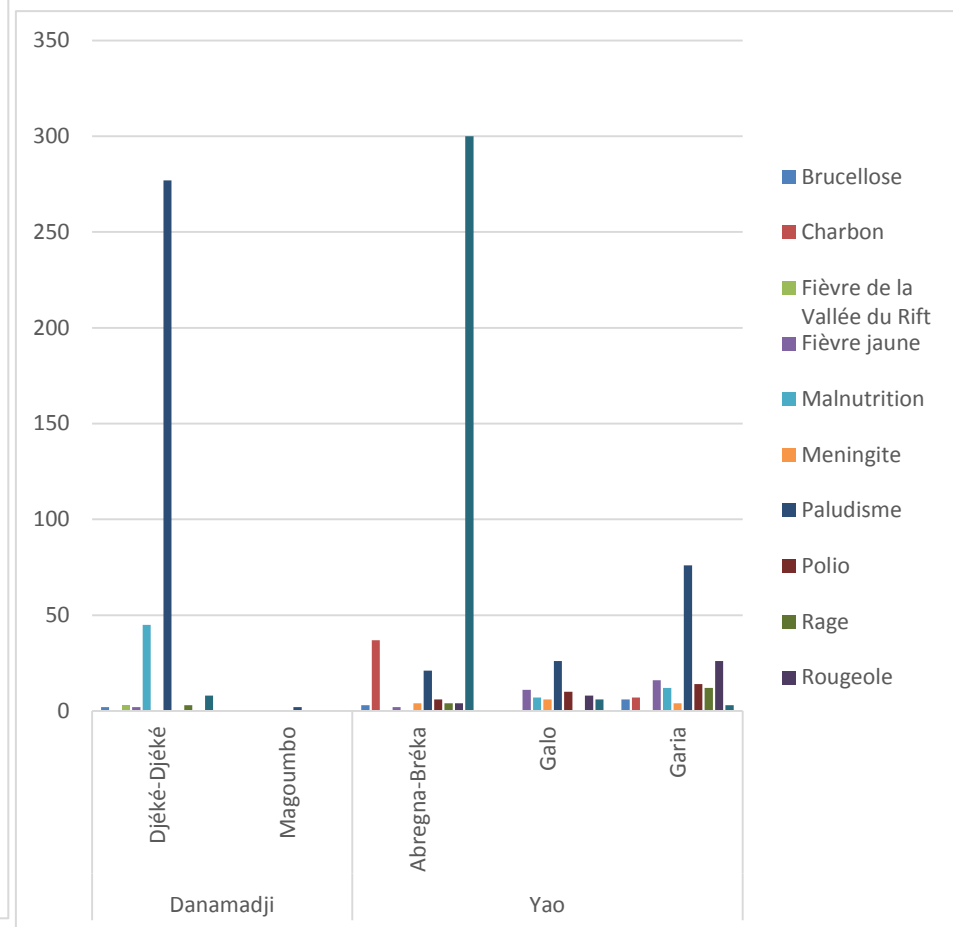
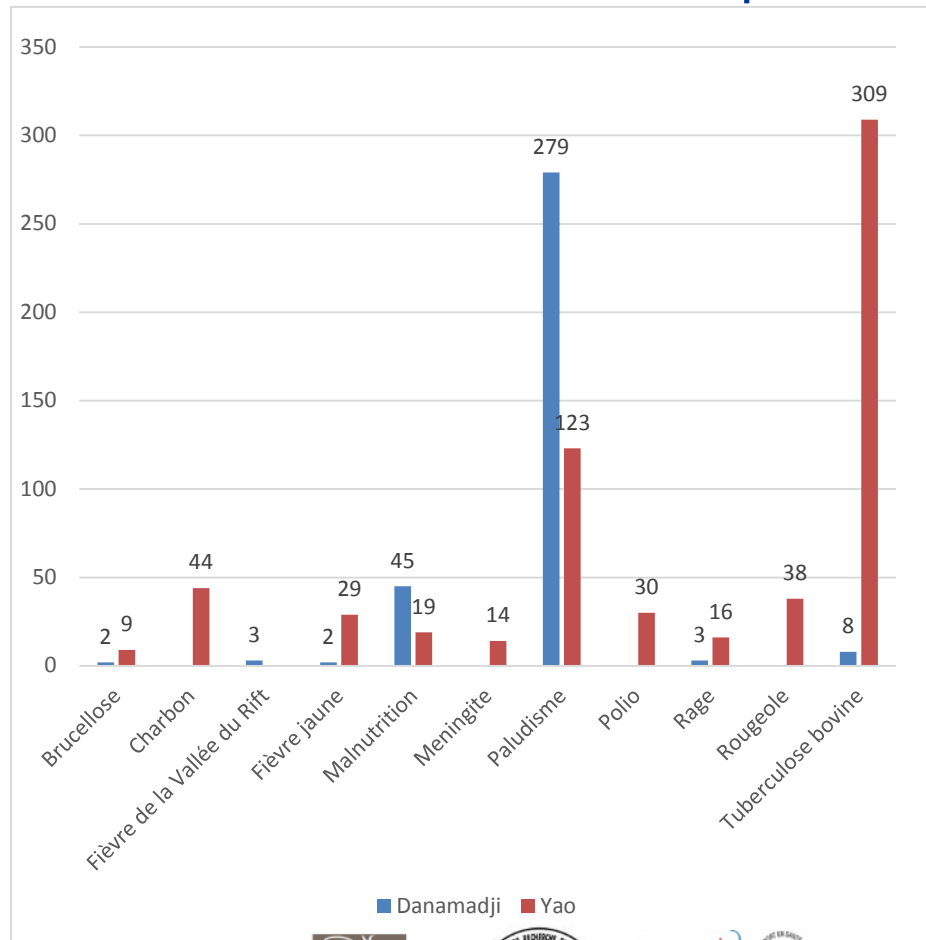
Training of CHW, ACHW and heads of health and vet centres/posts



Preliminary findings: The pilot phase



Some preliminary findings



Preliminary findings: Benchmark establishment



Prevalence of RVF, Q fever and
brucellosis:

- 1'030 animal samples
- 967 human blood samples

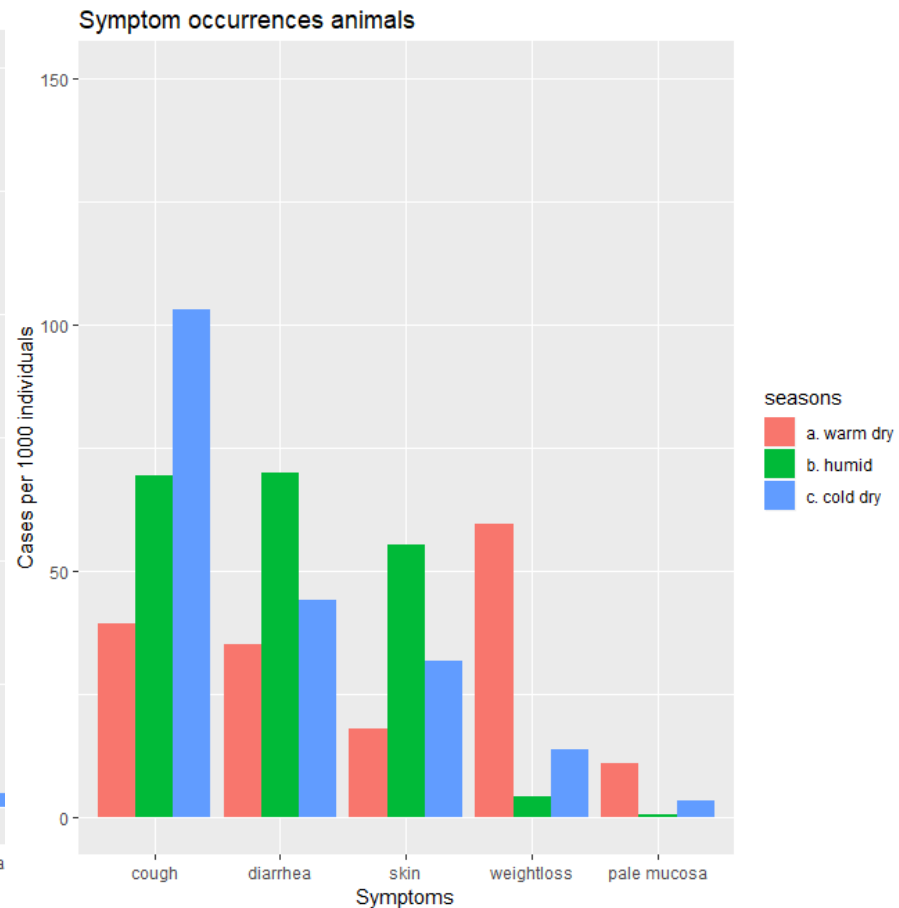
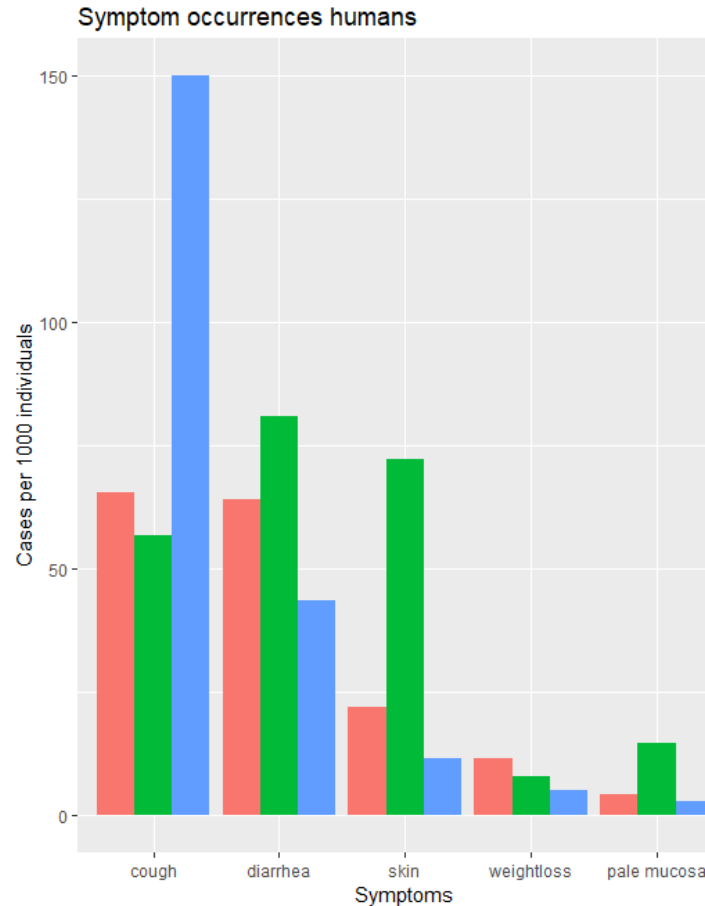
Symptoms occurrence in
humans and animals



Preliminary findings: Benchmark establishment



Simultaneously observed symptoms according to seasons in humans and animals



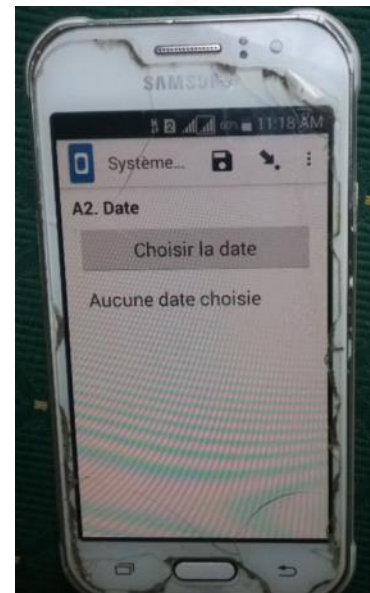
Next steps



A follow-up phase: 3 health centres in each health district

- Training of key actors of the system
- Samples collection and transportation

Intervention guide development based on technological solutions using Kobo ToolBox



Next steps



https://kobo.humanitarianresponse.info/#/forms/amnkQZ3APRcuAYSWcGECmp/data/table

KoBoToolbox

Système de remontée des données de la surveillance syndromique par téléphonie mobile dans les DS de Danamadji et de Yao au Tchad

2 submissions

NEW

Deployed 6

Draft 14

Archived 1

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Map

SUMMARY FORM DATA SETTINGS

1 - 2 of 2 results.

A1. No. D'iden...	A2. Date	A3. Nom de la...	A4. Nom du c...	A5. Nom du l'...	A6. Texte du ...	A7. No. d'iden...	A8. Nom de la...	A9. Nom du vl...
1	2018-11-03	Yao	CS de Yao	HASSANE	Paludisme	99524315	Pierre	Yoyo

KoBoToolbox

Système de remontée des données de la surveillance syndromique par téléphonie mobile dans les DS de Danamadji et de Yao au Tchad

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SUMMARY FORM DATA SETTINGS

A5. Nom du enquêteur

TYPE: "TEXT", 1 out of 2 respondents answered this question. (1 were without data.)

Value	Frequency	Percentage
HASSANE	1	50

A6. Texte du message

TYPE: "TEXT", 1 out of 2 respondents answered this question. (1 were without data.)

Value	Frequency	Percentage
Paludisme	1	50

Concluding remarks



- Involvement of health systems officials in the process
- Establishment of a clear threshold for intervention
- Need for intervention funds (**surveillance needs response!**)
- Internet and mobile network coverage

Acknowledgement



Funders

