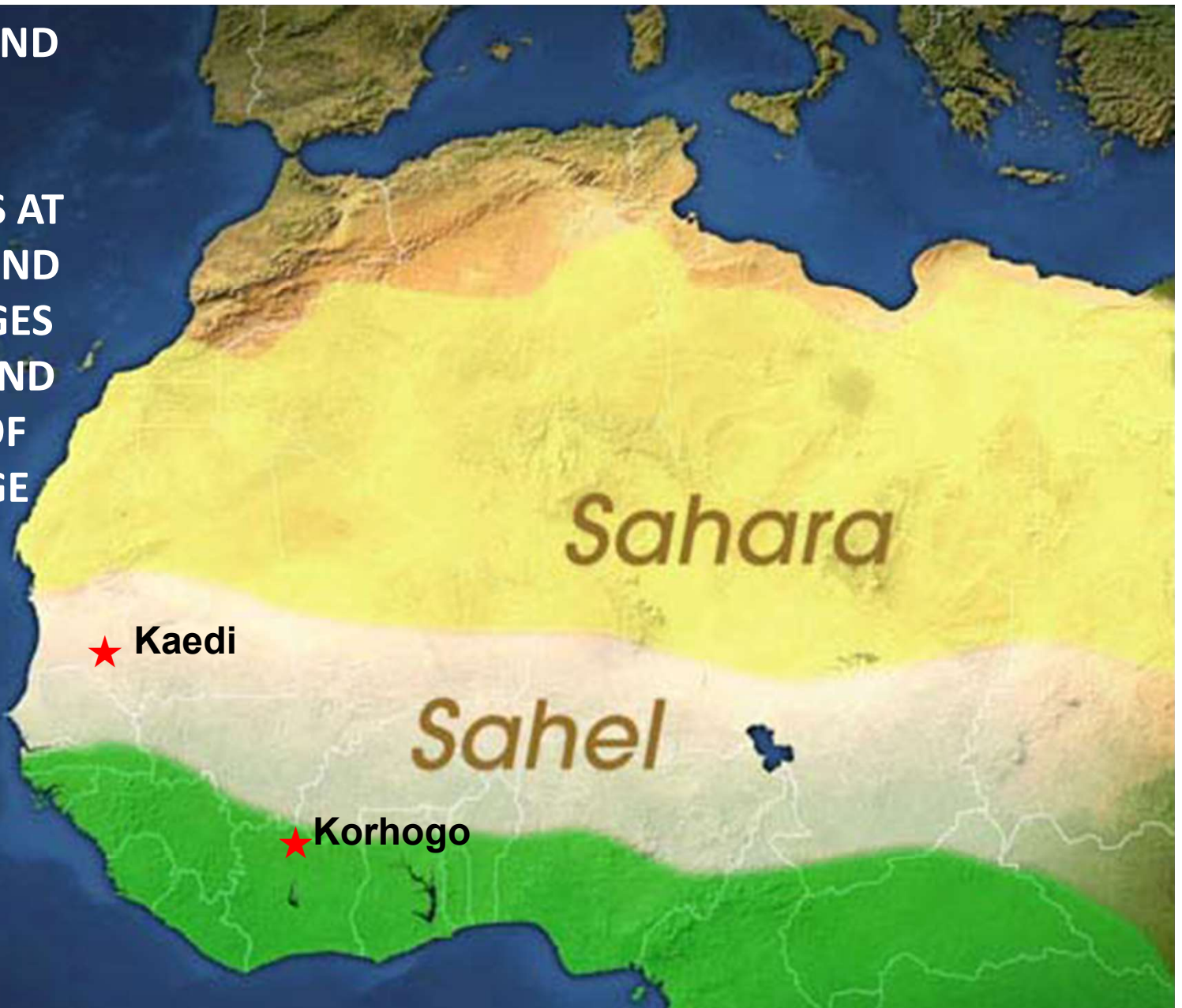


# GROUPE



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**VULNERABILITY AND  
RESILIENCE TO  
MALARIA AND  
SCHISTOSOMIASIS AT  
THE NORTHERN AND  
SOUTHERN FRINGES  
OF THE SAHEL BAND  
IN A CONTEXT OF  
CLIMATE CHANGE**



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Université des Sciences de Technologie et de Médecine



**TDR** For research on  
diseases of poverty  
UNICEF - UNDP - World Bank - WHO



**IDRC**  **CRDI**

# Some results: Scientific outputs

Gbalégba et al. *Parasites & Vectors* (2017) 10:353  
DOI 10.1186/s13071-017-2284-4

Parasites & Vectors

RESEARCH

Open Access



## Prevalence and seasonal transmission of *Schistosoma haematobium* infection among school-aged children in Kaedi town, southern Mauritania

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### Abstract

**Background:** Mauritania is at the fringe of transmission of human schistosomiasis, which mainly occurs in the southern and southeastern parts of the country. This study aimed to assess the influence of rainfall seasonality on the prevalence of *Schistosoma haematobium* infection among school-aged children in Kaedi, southern Mauritania.

**Methods:** Cross-sectional surveys (i.e. parasitological, malacological and observations on water-related human activities) were carried out in Kaedi between September 2014 and May 2015, during both the A and M seasons. A total of 2162 children aged 5–15 years provided a single urine sample that was subjected to diagnosis. Snails were sampled and checked for cercarial shedding. Water contact patterns of children were recorded by direct observation.



## Approvisionnement en eau potable, qualité de la ressource et risques sanitaires associés à Korhogo (Nord-Côte d'Ivoire)

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**Résumé.** L'accès à l'eau potable et à un cadre de vie sain dans les pays en développement est un grand défi et cette situation a été accentuée dans la ville de Korhogo (Côte d'Ivoire) par une forte variabilité climatique au cours de la décennie 2000-2010. Les objectifs de cette étude sont de (i) caractériser les différents modes d'accès à l'eau dans la ville de Korhogo, (ii) déterminer les facteurs environnementaux et sociosanitaires qui affectent la disponibilité et la qualité de l'eau et (iii) évaluer les risques sanitaires associés à l'utilisation de ces eaux. Deux enquêtes transversales par questionnaires couplées à deux enquêtes géographiques ont été conduites en 2010 auprès de 600 ménages, respectivement en saison sèche et pluvieuse. Une enquête sanitaire et des analyses d'échantillons d'eau de puits et de barrage ont été réalisées. L'analyse quantitative des risques microbiens (QMRA) a été utilisée pour quantifier le risque sanitaire associé à *Escherichia coli* et *Giardia lamblia*. Les résultats indiquent qu'à Korhogo, les eaux usées stagnantes et les dépôts sauvages d'ordures ménagères constituent des facteurs de risques potentiels de contamination des eaux de puits, qui représentent la principale source d'alimentation en eau potable des ménages respectivement 60 % et 65 % en

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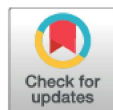
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RESEARCH ARTICLE

## Impact of climate variability on the transmission risk of malaria in northern Côte d'Ivoire

Richard K. M'Bra<sup>1,2,3,4\*</sup>, Brama Kone<sup>2,5</sup>, Dramane P. Soro<sup>1,2</sup>, Raymond T. A. S. N'krumah<sup>2,6</sup>, Nagnin Soro<sup>1</sup>, Jacques A. Ndiene<sup>7</sup>, Ibrahima Sy<sup>7</sup>, Pietro Ceccato<sup>8</sup>, Kristie L. Eb<sup>9</sup>, Jürg Utzinger<sup>3,4</sup>, Christian Schindler<sup>3,4</sup>, Guéladio Cissé<sup>3,4</sup>

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# Some results: Capacity building

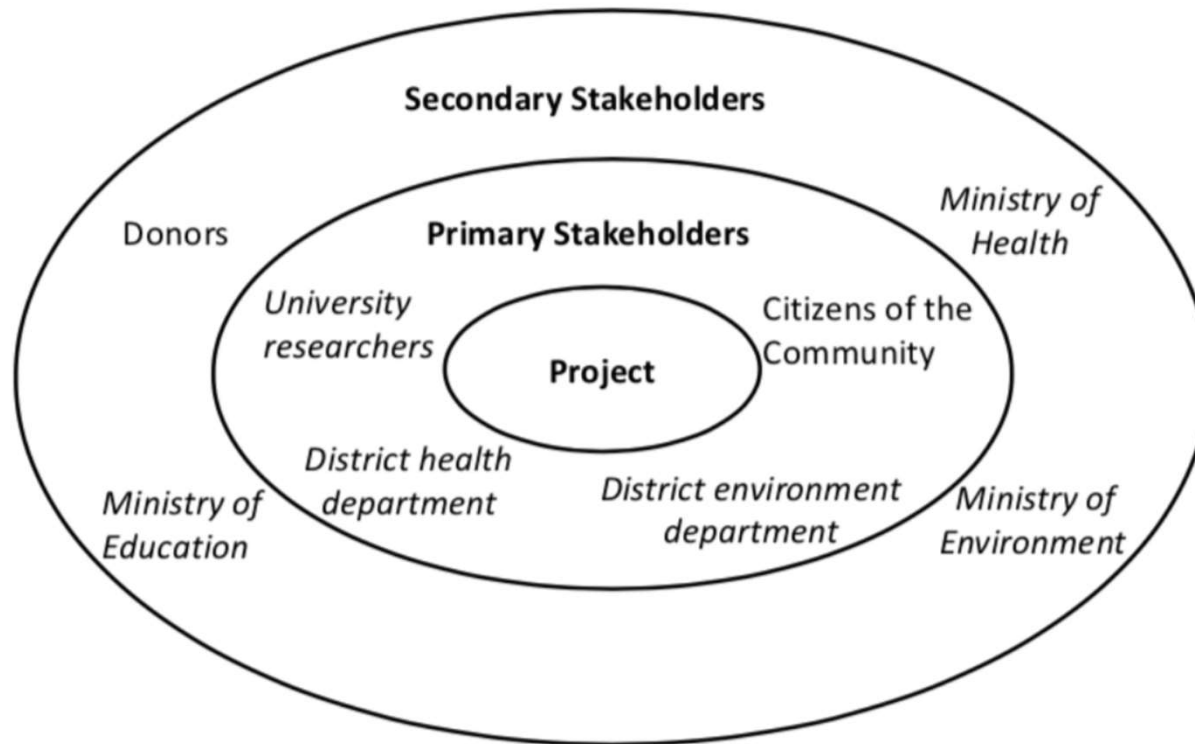


## 6. Knowledge and experiences sharing between involved NGOs

## 7. Empower of the townhall local healthiness commettee (Technical office of the townhall, ANASUR representative, National Institute of Hygiene representative, NGO ARK representative) and distribution of tricycles and other material for solid waste precollectors



# Figure 1. Hypothetical stakeholder map applicable to a health-environment linked intervention



# Figure 1. Hypothetical stakeholder map applicable to a health-environment linked intervention

Missing Partners:

Ministry in charge of Forest/Environnement

Ministry in charge of Animals/Agriculture

Ministry in charge of Finance

Ministry in charge of Animal Health



# FIGURE 2. COMPONENTS OF AN ADAPTIVE ONE HEALTH APPROACH

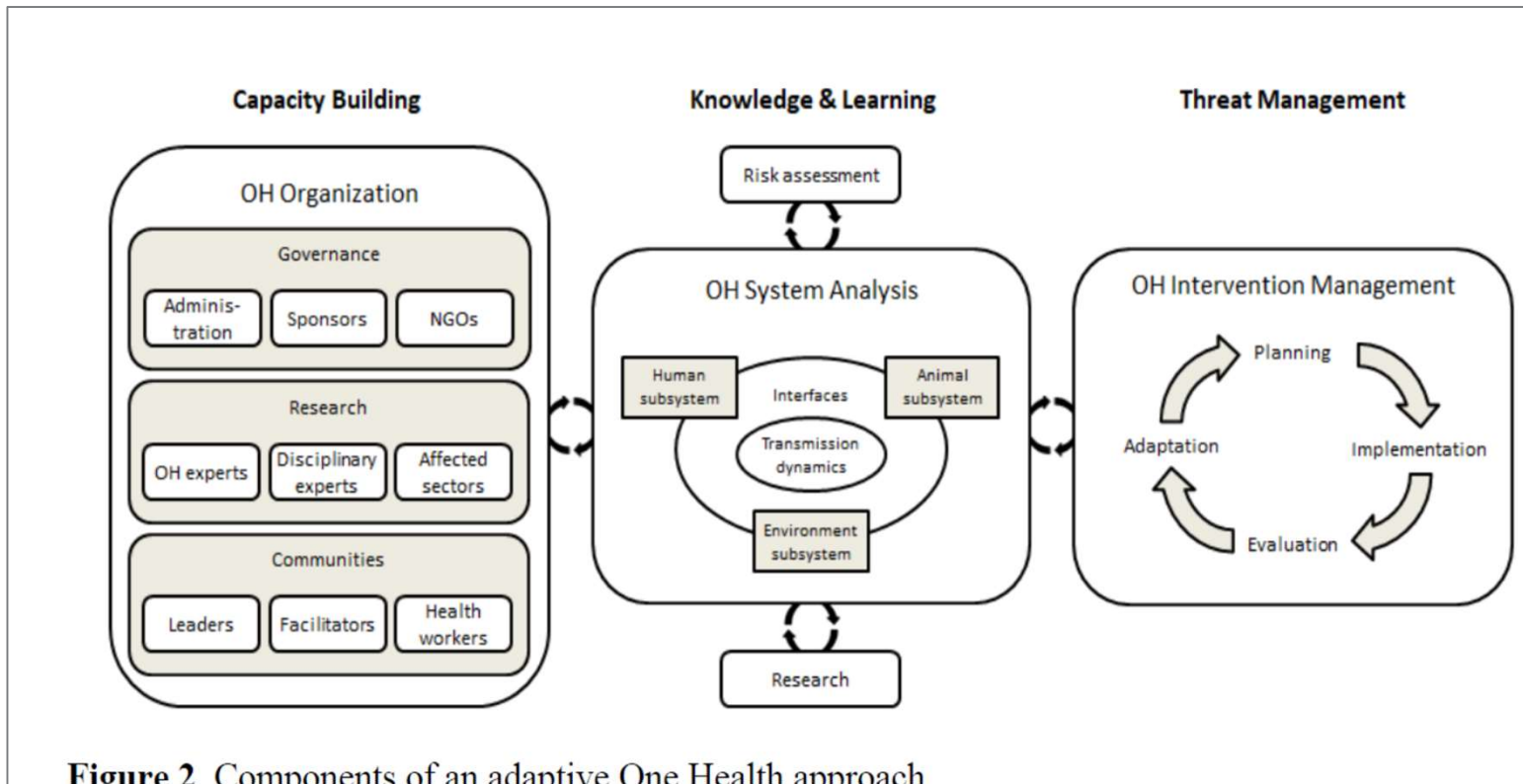


Figure 2. Components of an adaptive One Health approach



# CAPACITY BUILDING

## GOVERNANCE

Governments-Administration/Stakeholders ...

## INTERSECTORAL COLLABORATION

## RESEARCH

Human/Structural/Operational/Financial

## INTERVENTIONS

Human/Structural/Operational/Financial

COMMUNITIES - Enabling environment  
(Leaders, Facilitators, Health workers)

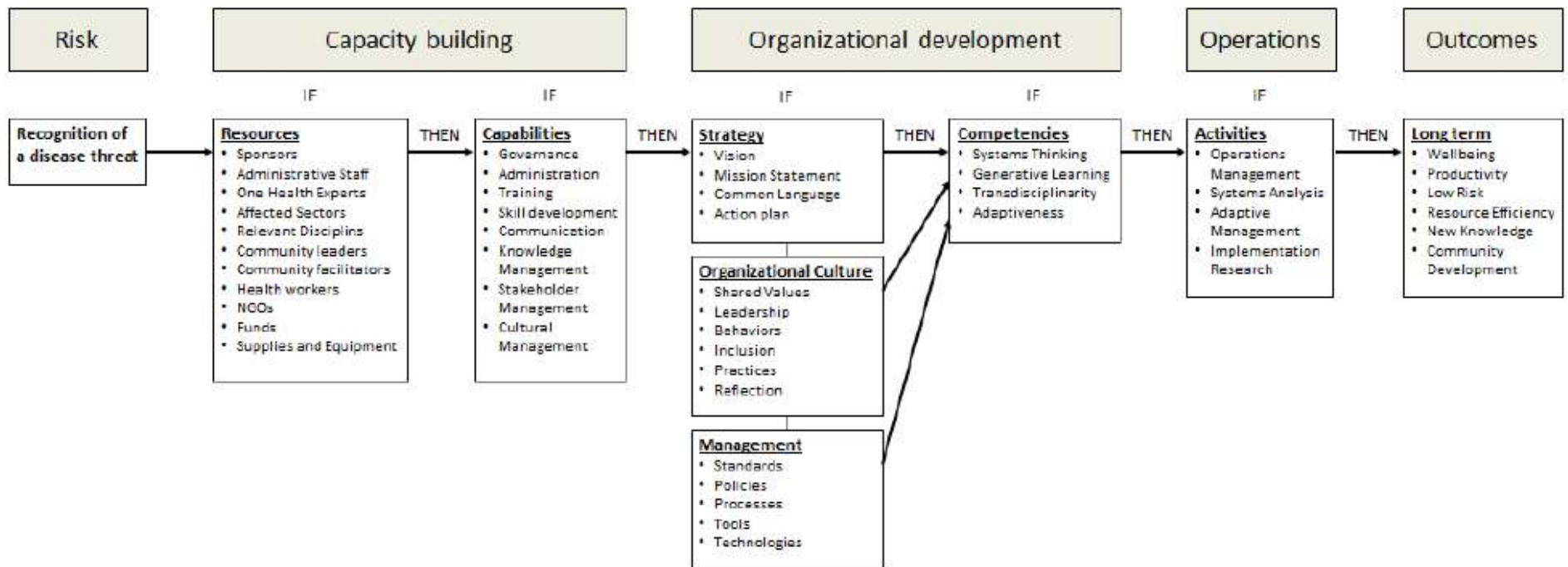
## IN CÔTE D'IVOIRE:

- ❖ **A one health plateforme** just created (decree, april 2019), under the leadership of the prime minister with:
  - Political steering committee,
  - Multisectorial coodination technical committee
  - Permanent secretary
  - Joint task team (JTT)
- ❖ **National working group on Health and Environment** (Decision, Ministry of Health, May 2019): Update of the JTT (Joint Task Team, Libreville Declaration)



- ❖ Need to update the One Health JTT with potential missing institutional partners to stand also for LD JTT
- ❖ Need of training and capacity building of all new technical parties
- ❖ SANA done in the frame of LD. Need to update considering OneHealth initiative
- ❖ NPJA to be done in connection with the new one health initiative. New knowledge on VBD gathered in previous projects to consider.
- ❖ ongoing onehealth (AfriqueOne)/Ecohealth research (TDR/IDRC, ...) and capacity building activities to integrate formally in the national OneHealth initiative.
- ❖ Ongoing other National/international initiatives (Climhealth, CHEMOBS,...) to consider in knowledge (creation and sharing) and learning component





- ❖ Capabilities: Governance include administration
- ❖ Strategy: not forget advocacy and sensitization/health promotion
- ❖ Competencies: Gender and social equity effectiveness, Community participation specialist, economic valuation specialist (cost/benefit analysis)
- ❖ Activities: cost/benefit analysis
- ❖ Outcomes: sustainability (SDGs achievement, Ecosystem integrity,...)

# ONEHEALTH BASED CAPACITIES

Multisectoral= Animal+Human+Enviroment in OH approach

MULTISECTORAL  
DECISION MAKING /  
GOVERNANCE

MULTISECTORAL  
KNOWLEDGE  
DISSEMINATION

MULTISECTORAL  
RESSOURCES  
MOBILIZATION

MULTISECTORAL  
OPRONALIZATION,

MULTISECTORAL  
IMPACT EVALUTION  
M&E,

## GOVERNANCE CAPACITY BUILDING CAPACITIES

## RESSOURCE CAPACITY BUILDING CAPACITIES

HUMAN

STRUCTURAL

OPERATIONAL

FINANCIAL

## RESEARCH / INTERVENTIONS



*Thank  
you*

*Thank  
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