

# TAS evaluations in Mali: Strategic innovations in insecure areas

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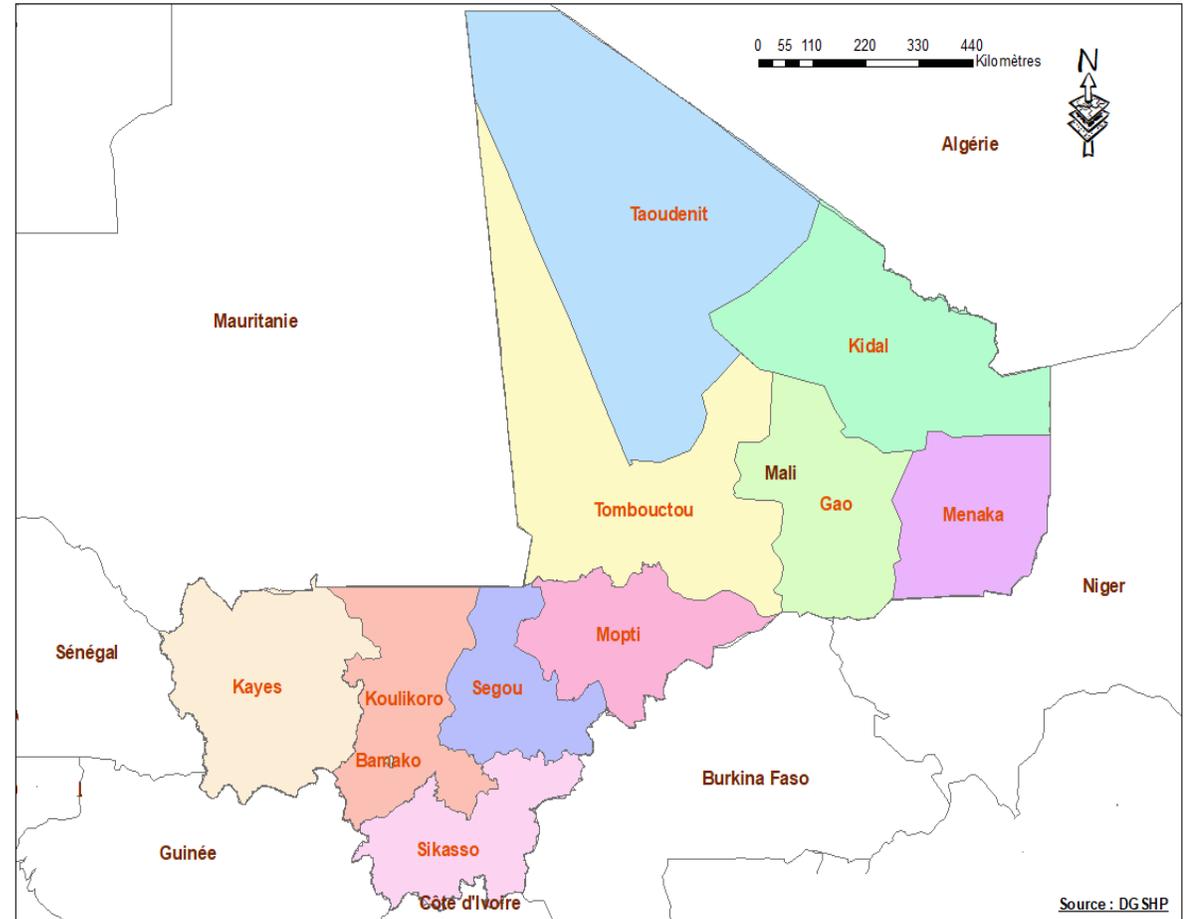
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# Mali overview

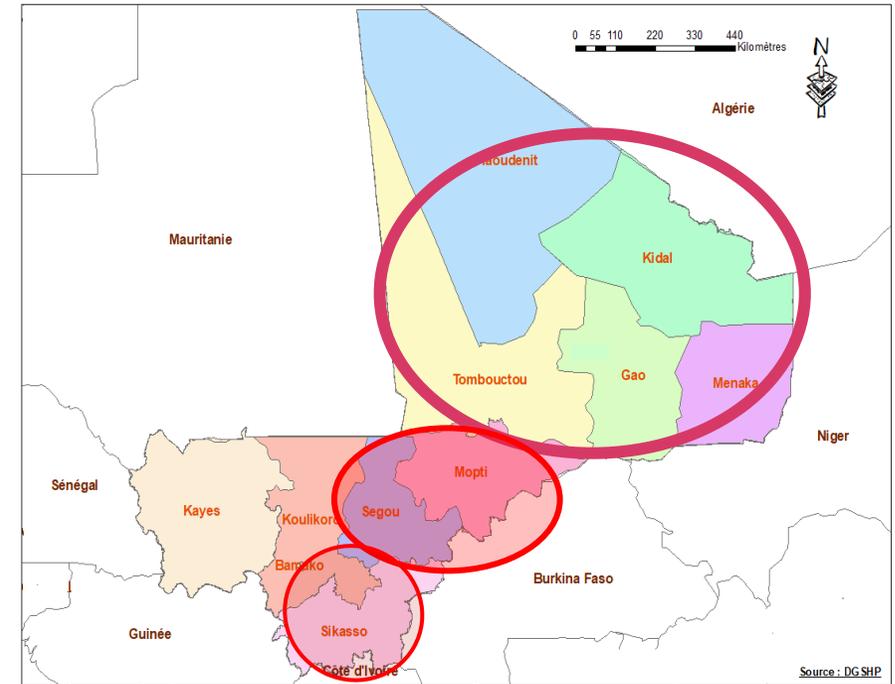
- Mali is in West Africa with seven neighboring countries
- Surface area: 1,241,238 km<sup>2</sup>
- Population in 2022: 22,751,415, inhabitants
- 10 administrative regions and the district of Bamako, 59 prefectures, and 703 rural and urban communes.
- 75 health districts (HDs)
- 1,581 community health centers



# Mali security overview



- **Insecurity types:** Robbery, irregular control/detention/kidnapping, threat, and armed group attack (Malian Armed Forces, Armed Opposition Group), Improvised Explosive Device
- **In 2021 : 1,786 incidents in the southern regions.**
  - In March 2021, kidnapping an entire National Eye Health Program team in the HDs of Koutiala, which borders the Yorosso HD.
- **In January 2022, 105 incidents noted in the central regions of Mali.**
  - Movement restrictions were put in place by Bambara hunters in the Macina district, which restricted the movement of users in their areas of influence (Macina, Kolongo, etc.) and the Segou district.



Since 2012, Mali has experienced insecurity in the northern regions, the central regions (Mopti and Segou) and recently in Sikasso regions.



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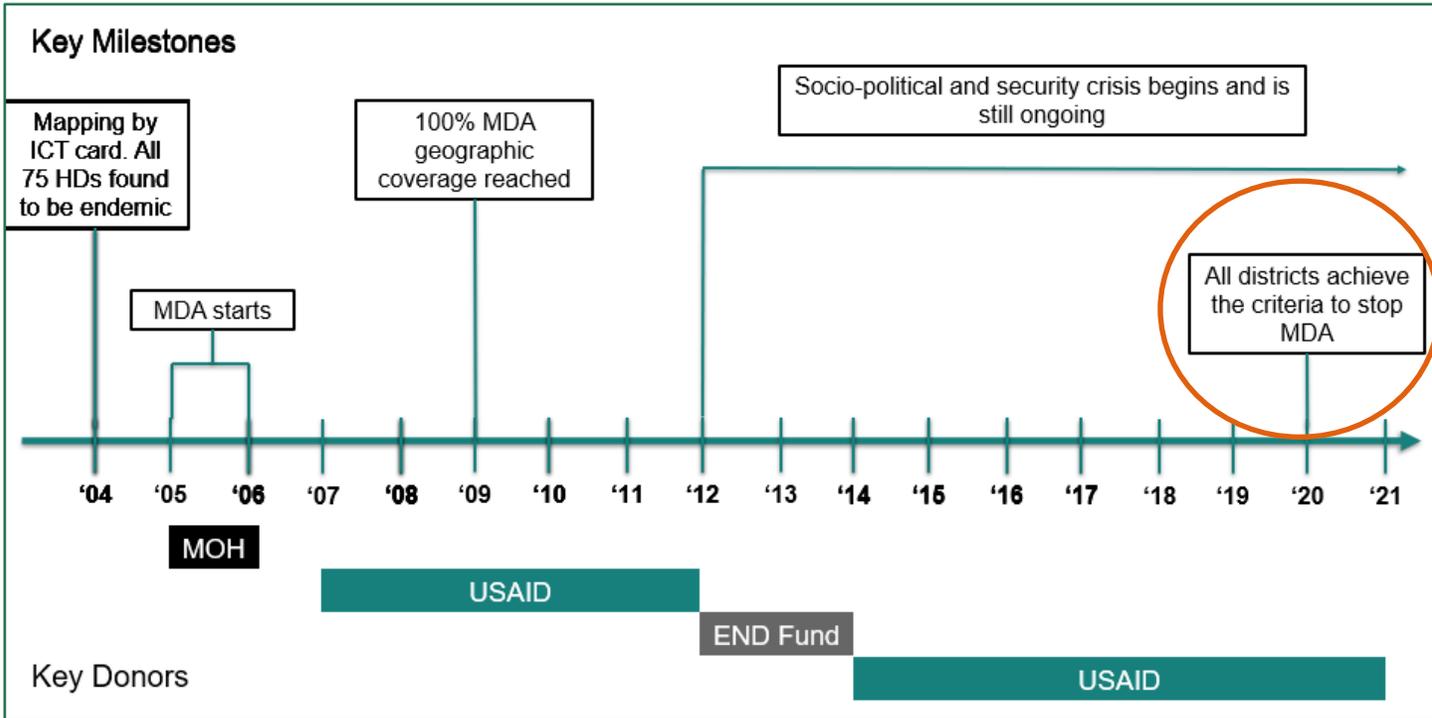
# National Lymphatic Filariasis Elimination Program

- National Lymphatic Filariasis Elimination Program created in 2004 after mapping by ICT card (entire country is endemic to LF)
- Overall goal : Eliminate Lymphatic Filariasis as a public health problem in Mali by the end of 2020 (at the time of the program's creation)
- Mains strategies used are :
  - Mass distribution of ivermectin and albendazole to target populations aged 5 years and above (80%) in endemic districts;
  - Monitoring the impact of treatment and active surveillance of transmission (TAS);
  - Management of morbidity cases (lymphedema and hydrocele)
- LF epidemiological situation (2021)

Survey Type	# of Districts (out of 75)	Status
Pre-TAS	75	75 HDs passed
TAS1	75	75 HDs passed
TAS2	42	42 HDs passed
TAS3	16	16 HDs passed

# Lymphatic Filariasis in Mali

## Progress

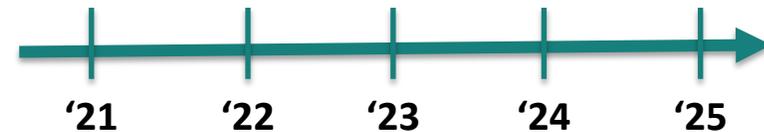


## Challenges

Mali has committed to submitting its LF elimination dossier by 2025

Complete TAS in Sikasso, Segou, Mopti, and northern regions, despite insecurity

Due to the security situation, the last TAS1 survey in Mali was completed in 2020, 8 years after the first TAS1 survey was conducted in 2012. Mali should have completed all TAS1 surveys by 2016.



# Context

- ❑ Faced with mounting insecurity in 2020, the national LF program (PNEFL) used a special strategy to successfully conduct transmission assessment surveys (TAS1) and TAS2 in 8 evaluation units (EUs) in Mopti and the northern regions, led by regional staff with TAS experience who could safely travel between villages in these areas.
- ❑ In 2021/2022, the security situation further deteriorated, and the nature of the attacks intensified in the central and southern regions
  - Only the technical directors of health centers (TDHCs) known in the targeted communities were allowed to move between villages without being threatened by terrorists
  - The PNEFL adapted the strategy used in 2020, accounting for the ability of DTCHs to safely travel between villages for TAS3 in 2021/2022 (Yorosso, Macina-Markala and Niono EUs)



# Objective

- Describe innovative strategies to successfully conduct TAS3 in insecure areas 2021-2022



# Method 1/3

- Evaluate the current security situation in areas : +++
  - Engage with local health authorities: send list of clusters to Regional Health Directorates  
Identify clusters accessible by local staff (Technical Director of Health Centers or other staff)
  - Identify clusters: **red** (no go) and suggest back up clusters according the protocol and change criteria
  
- Determine the number of DTCs that can cover the 30 clusters for each EU
  
- Training :
  - The quality of the survey depends on the effective training of TDHCs
  - Trainers : PNEFL Coordinator, staff of LF research team from the Faculty of Medicine in Bamako and technical assistance from Helen Keller's NTD team.
  - Conducted in two phases (theoretical and practical) for 3 days



# Method 2/3

- **Theoretical stage (1 day) focused on :**
  - Presentation of the approved protocol (sampling process, collection technique)
  - Video on the packaging and use of FTS cards
  - Presentation of SOP
  - Reminder to respect the barrier measures against COVID-19.
- **Practical stage (2 days) in room and field/village emphasizes on :**
  - Demonstrations of use of the FTS card : reading time (10mn), FTS tests interpretations (positive, negative and invalid), conditions to resume FTS test
  - Community-based approach
  - Household listing, method for selecting households to be surveyed (SSB)
  - filling of data collection forms and specially WHO response forms in case of invalid FTS cards
  - Filling of Exchange of experiences by field investigators

**Each TDHC must practice on at least 20 children during this practical phase on the field**



# Method 3/3

## □ Data collect

- Electronic data collection is avoided due to insecurity.
- Data collection is done directly on data sheets and then entered into Excel

## □ Remote supervision by WhatsApp

- WhatsApp group members: LF Program staff including the coordinator, NTDs program staff of Helen Keller, NTD focal points of the regions and districts targeted, TDHCs (surveyors)
- Every day, field activities report, pictures (invalid or positive FTS cards), short video are posted by the team lead



# Results

## Segou and Sikasso regions

EUs	Niono	Markala-Macina	Yorosso
Sample size (SSB)	1556	1684	1552
# valid samples	1877	1822	1725
# positive cases	1	0	1
Critical threshold	18	20	18
Interpretation	Pass	Pass	Pass

In all three EUs, 30 clusters were surveyed, and the required samples were reached, with 1 positive case in each of the EUs of Yorosso and Niono for a threshold of 18 in both cases

# Conclusion

- ❑ The development of these new strategies has allowed for the implementation of TAS in otherwise inaccessible areas.
- ❑ With these innovative strategies, the program will likely be able to eliminate LF despite the challenging security situation and be ready to submit the LF dossier elimination in 2025.





Thank you



# Morbidity management in security compromised settings in North and Central-North regions affected by insecurity in Burkina Faso: analysis of obstacles and identification of health system resilience factors

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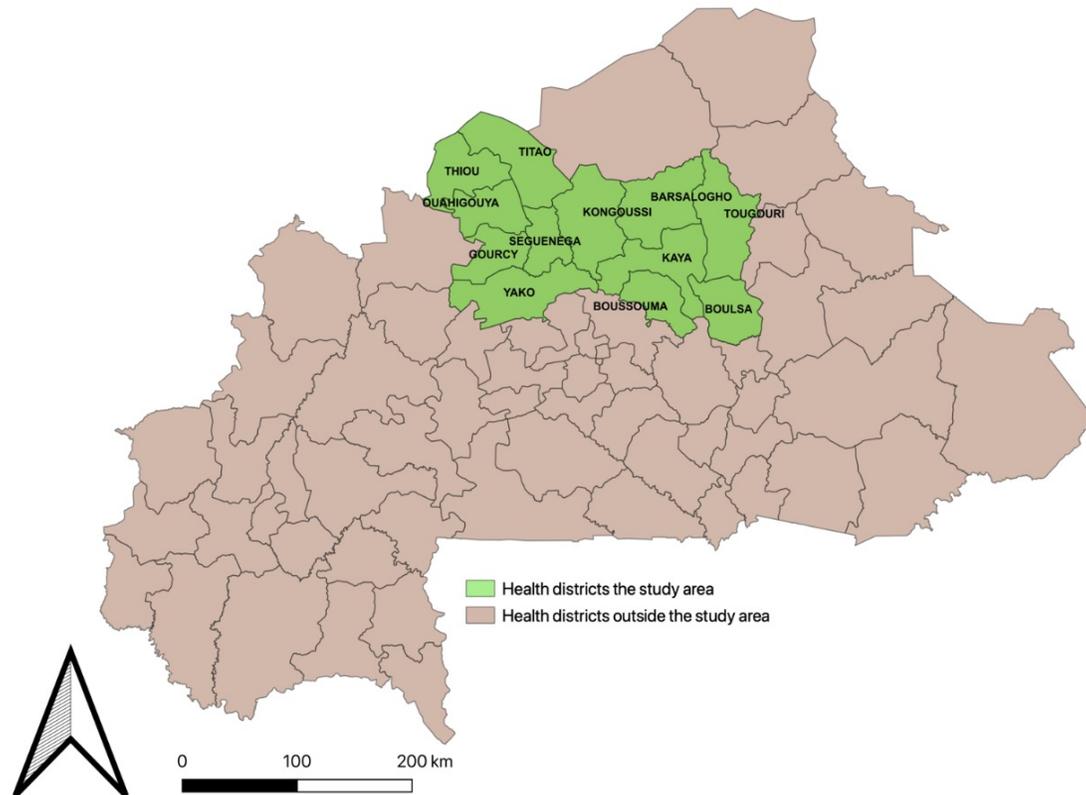


# Background

- Burkina Faso has been facing an unprecedented security crisis since 2016 with a sudden increase in violence.
- As of April 30, 2022, there were **1,902,150** internally displaced persons.
- **98** health facilities are completely closed, and 138 others have minimal operations
- Several hundred displaced health workers. Nearly **1 million people** have no or limited access to health services.
- Patients' referral from health facilities to hospitals is very difficult due to attacks and kidnapping of ambulances by armed groups and the restrictions on population movements.
- The Centre-North, North, Sahel, Boucle du Mouhoun, East, Cascades, and Centre-East regions are the most affected.
- The situation has become a key obstacle to access to MMDP services by internally displaced persons. This situation threatens the considerable achievements of the national NTD program.



# Objectives, Methodology, and Study Area



- The study assessed the status and analyzed the **obstacles to MMDP services** (for Lymphoedema, hydrocele, and trichiasis) and determined the **health system resilience factors** in the Center North and North regions.
- It was a **Mixed-methods prospective study** using a multi-tiered evaluation approach, including literature review, active case search, health facility assessment, key informants and patients' interviews, and stakeholders' consultations.
- **The Confirmation of cases** was performed by clinical officers.



# Surveyed population and cases identified

- In total, 555 health workers were surveyed including 308 (55%) males and 247 (45%) females.
- 1031 trichiasis (585 females), 245 hydroceles, and 125 lymphoedema (51 females) were recorded during the survey. Most cases were seen in the Center North, North, Boulsa, Kongoussi, Gourcy, and Segouenega.

Zone	HYDROCELE			LYMPHOEDEMES			TT		
	F	M	Total	F	M	Total	F	M	Total
<b>NORTH CENTER</b>	NA	124	124	41	66	107	301	188	489
<b>BARSALOGHO</b>	NA	15	15	3	8	11	12	19	31
<b>BOULSA</b>	NA	60	60	32	37	69	31	18	49
<b>BOUSSOUMA</b>	NA	6	6	0	0	0	52	43	95
<b>KAYA</b>	NA	22	22	0	0	0	26	15	41
<b>KONGOSSI</b>	NA	21	21	6	1	7	175	91	266
<b>TOUGOURI</b>	NA	0	0	0	20	20	5	2	7
<b>NORTH</b>	NA	121	121	10	8	18	284	258	542
<b>GOURCY</b>	NA	28	28	7	3	10	50	52	102
<b>OUAHIGOUYA</b>	NA	15	15	0	0	0	41	26	67
<b>SEGUENEGA</b>	NA	16	16	3	3	6	117	129	246
<b>THIOU</b>	NA	16	16	0	0	0	21	14	35
<b>TITAO</b>	NA	0	0	0	2	2	4	3	7
<b>YAKO</b>	NA	46	46	0	0	0	51	34	85
<b>Total</b>	<b>NA</b>	<b>243</b>	<b>245</b>	<b>51</b>	<b>74</b>	<b>125</b>	<b>585</b>	<b>446</b>	<b>1031</b>





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# Results (1)

- **The health workers trained** and available for morbidity management were **73.8%** for hydrocele, **11.4%** for lymphoedema, and **25%** for trichiasis.
- **For Lymphoedema management: 80%** of the 119 health facilities (HFs) provide care; **20%** have treatment protocols available. However, **only 16%** had the necessary equipment and **8%** of health workers reported being trained correctly.
  - Of the health centers surveyed, **15% (18 HFs)** were temporarily or permanently closed due to insecurity in both regions. **23%** of the staff in these non-functioning HFs were redeployed to other health centers.
  - **6 of the 12 districts** reported that the security crisis had had a negative impact on their supplies. Due to the insecurity, **20%** of the HFs had recurrent shortages in the supply of health products, and 19 HFs (16%) experienced a break in supply.



# Results (2)

- **The challenges reported by the HFs** were more critical for lymphoedema management than hydrocele surgery. The main issues for both hydrocele and lymphoedema were: i) the lack of training (**33%**), ii) the lack of drugs and supplies (**22%**), and iii) the lack of human resources (**14%**). The high cost for hydrocele surgery was reported in **8** HFs.
- The findings in hydrocele surgery were also observed in **TT management**.
- The socio-anthropological survey conducted during the study has provided suggestions to overcome the challenges with TT case identification, especially the need to involve all the stakeholders, including patients, community leaders, community health workers, administrative officials, and NGOs.
- **Two critical impacts** related to the security crisis were reported:
  - patients' refusal to attend clinical care out of fear (17%)
  - the risk of ambulance kidnapping (14%).



# Results (3)

- Health workers' suggestions for improving hydrocele identification and surgery:
  1. Improve staff training
  2. Increase human resources
  3. Raise awareness
  4. Improve supervision and communication support
  5. Reduce costs of treatments
  6. Implement a long-term program
  7. Engage the communities
- Health workers' suggestions for improving lymphoedema case management:
  1. Fully equip and increase accessibility to health facilities (at least those still open),
  2. Provide social and economic support, tools, equipment, and medicines to patients, and make case management free of charge
  3. Ensure that community health workers can advise and accompany patients to health facilities
  4. In the health facilities, set a day for services specific to lymphedema case management;
  5. Make home visits and provide case management tools to community health workers;
  6. Increase public awareness to avoid stigmatization of lymphedema patients.



# Conclusion and Way Forward

- Due to the worsening security situation, the government has implemented and enforced: (i) curfews and (ii) the ban on large motorcycles (over 125 cc) and tricycles from 6:30 p.m. to 6:00 a.m. Although these decisions are critical to decreasing terrorist attacks, they also negatively impact patients who can access health centers only during the day.
- There is an urgent need to adapt morbidity management to the prolonged insecurity context and advocate for sustainable funding especially for case detection and training for health workers, to maintain and reinforce clinical services.
- Although the health system shows signs of resilience with several health facilities still providing care to patients despite the unstable situation, donors' financial assistance and technical support from partners remain indispensable to clear the morbidities backlogs and eliminate NTDs in Burkina Faso.



# THANK YOU

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