In 2004, mapping showed all the 75 health districts (HDs) in Mali were endemic for lymphatic filariasis (LF). With support from USAID, all HDs achieved the criteria to stop MDA in 2020.

Mali has committed to submitting its LF elimination dossier by 2025. The completion of all transmission assessment surveys (TAS) is critical to reach this goal.

Faced with mounting insecurity in 2020 and a delayed TAS implementation schedule, the national LF program (PNEFL) developed a special strategy using local staff to perform TAS in insecure areas, as national staff could not safely travel to survey sites. This strategy was used to successfully conduct 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 attacks intensified in the central and southern regions:
- **2021**: 1,786 reported incidents in the southern regions, according to the International NGO Safety Organization.
- **March 2021**: A team from the National Eye Health Program was kidnapped in Koutiala HD, which borders Yoresso HD.

Only the technical directors of health centers (TDHCs) known in the targeted communities were allowed to move between villages without being threatened by terrorists.

In order to successfully conduct TAS3 in insecure areas in Sikasso and Segou regions from 2021 – 2022 and avoid delays, the PNEFL adapted the strategy used in 2020, capitalizing on the ability of TDHCs to safely travel between villages in Yoresso EU (Sikasso Region), Macina-Markala EU (Segou Region), and Niono EU (Segou Region).

### METHODS

**Prior to the Survey**
- **Evaluate the security situation in insecure EUs:**
  - The list of selected clusters was shared with regional health authorities, accessibility was determined, and replacements were suggested according to the selection criteria.
- **Determine the number of TDHCs needed to cover the 30 clusters in each EU.** Each TDHC constituted one team:
  - Yoresso EU = 15 TDHCs
  - Niono EU = 19 TDHCs
  - Macina-Markala EU = 22 TDHCs
- **Training**
  - Facilitated by a national level team and trainers over a three-day period in safer, neighbouring district city centers.
  - Training consisted of two phases: theoretical and practical
  - Theoretical training included a review of the approved protocol, the sampling process, and data collection. A video was shown on the use of filariasis test strips (FTS). TDHCs were trained on COVID-19 barrier measures.

**During the Survey**
- **Data collection**
  - TDHCs collected data on paper forms and the PNEFL later entered the data in Excel. Electronic data collection (EDC) was avoided as terrorists and armed groups may have been suspicious of tablets and smartphones used for EDC.
  - TDHCs used their own motorcycles to travel between villages.
  - Each EU was surveyed in four days.
- **Remote Supervision through WhatsApp**
  - Supervision was conducted through a WhatsApp group consisting of PNEFL staff including the coordinator, NTD program staff from Helen Keller International, NTD focal points of the regions and districts targeted, and TDHCs (surveyors).
  - TDHCs provided a daily field activity report including pictures (invalid or positive FTS cards) and a short video posted by the team lead.

**RESULTS**

<table>
<thead>
<tr>
<th>EUs</th>
<th>Niono</th>
<th>Markala-Macina</th>
<th>Yoresso</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size (SSB)</td>
<td>1556</td>
<td>1684</td>
<td>1552</td>
</tr>
<tr>
<td># valid samples</td>
<td>1877</td>
<td>1822</td>
<td>1725</td>
</tr>
<tr>
<td># positive cases</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Critical cut-off values</td>
<td>18</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Interpretation</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
</tbody>
</table>

In all three EUs, the required minimum number of clusters and the targeted sample size were reached, with only two positive cases found (in Niono and Yoresso EUs). All three EUs passed, with the number of positive cases well below the threshold. No security incidents were reported.

### CONCLUSION

These new strategies enabled the PNEFL to safely implement TAS in otherwise inaccessible areas.

With these innovative strategies, the program will likely be able to maintain the timeline to eliminate LF despite the challenging security situation and be ready to submit the LF elimination dossier to the World Health Organization in 2025.

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