



Abstract #3117

Presentation #1102

Authors: Maria Chikawe^{1,2}, Maria Rebollo⁵, Andreas Nshala^{1,3}, Cecilia Uisso¹, Paul Kazyoba², Kathryn Crowley⁴ Mwelecele N Malecela² and Upendo Mwingira^{1,2}

Author affiliations: ¹Tanzania Neglected Tropical Disease Control Program· ²National Institute for Medical Research· ³IMA World Health; ⁴RTI International; ⁵NTD support center Atlanta

Background

Despite positive strides made in the control of lymphatic filariasis (LF), the disease continues to cause morbidity and mortality in Tanzania. In order to inform planning for targeted and effective mass drug administration (MDA), the national neglected diseases program (TNTDCP) conducted remapping in 2015. The last LF mapping had been conducted more than ten years earlier. The purpose of the re-mapping surveys was to assess LF prevalence levels and to identify any LF transmission hotspots in areas where MDA had not been implemented before.

Materials and Methods

The 2015 LF remapping exercise was conducted in nine regions covering 63 districts in the Lake, Western and Northern zones in Tanzania, with support from USAID through the ENVISION Project and from the Task Force for Global Health. The 2015 LF re-mapping exercise adopted a new method developed by WHO, and it was piloted in Tanzania and Ethiopia.

Re-evaluation sites

The re-evaluation exercise aimed to determine the current prevalence of circulating filarial antigen (CFA) in 63 districts not covered by the MDA.

The LF re-mapping exercise was conducted in Geita, Mwanza, Simiyu, Kilimanjaro, Arusha, Kagera, Mara, Shinyanga and Kigoma regions.

Study Design

This was a randomized 30-cluster school survey design, in which 30 primary schools were randomly selected from each district.

Each child was tested using the immunochromatographic card test (ICT) for LF.

Sampling of Schools and children

- 30 primary schools were randomly selected from a complete list obtained from each district using SSB developed by TFGH.
- An average of 16 children aged 9-10 years were selected using the random number list produced by SSB in each selected school.
- The total sample size per district was 480 children aged 9-14 years sampled from 30 primary schools.
- A total of 1,770 primary schools were randomly sampled and 29,054 students aged ≥ 10 yrs old were tested for LF.
- Additional schools were pre-selected for use in case the sample was not met after assessing the 30 schools.
- The ICT tests were conducted on site and results given after 10 minutes.

Steps towards Elimination: Re-evaluation of Lymphatic Filariasis Prevalence in Tanzania

Results

The LF-remapping exercise was implemented in three phases.

PHASE I: Covered 10 districts namely; Arusha, Monduli, Karagwe, Muleba, Hai, Moshi, Moshi, Same, Musoma and Bariadi.

PHASE II: Covered 26 districts namely; Arusha, Karatu, Longido, Ngorongoro, Chato, Geita, Geita, Mbogwe, Bukombe, Nyang'wale, Hai, Rombo, Mwanza, Ilemela, Magu, Kwimba, Nyamagana, Misungwi, Ukerewe, Sengerema, Maswa, Meatu, Busega, Bariadi and Itilima.

PHASE III: Covered 23 districts namely; Bukoba, Misenyi, Bukoba, Ngara, Kyerwa, Biharamulo, Shinyanga, Kishapu, Shinyanga, Kahama, Msalala, Ushetu, Kibondo, Kakonko, Kigoma, Ujiji, Uvinza, Musoma, Butiama, Bunda, Tarime, Rorya and Serengeti.

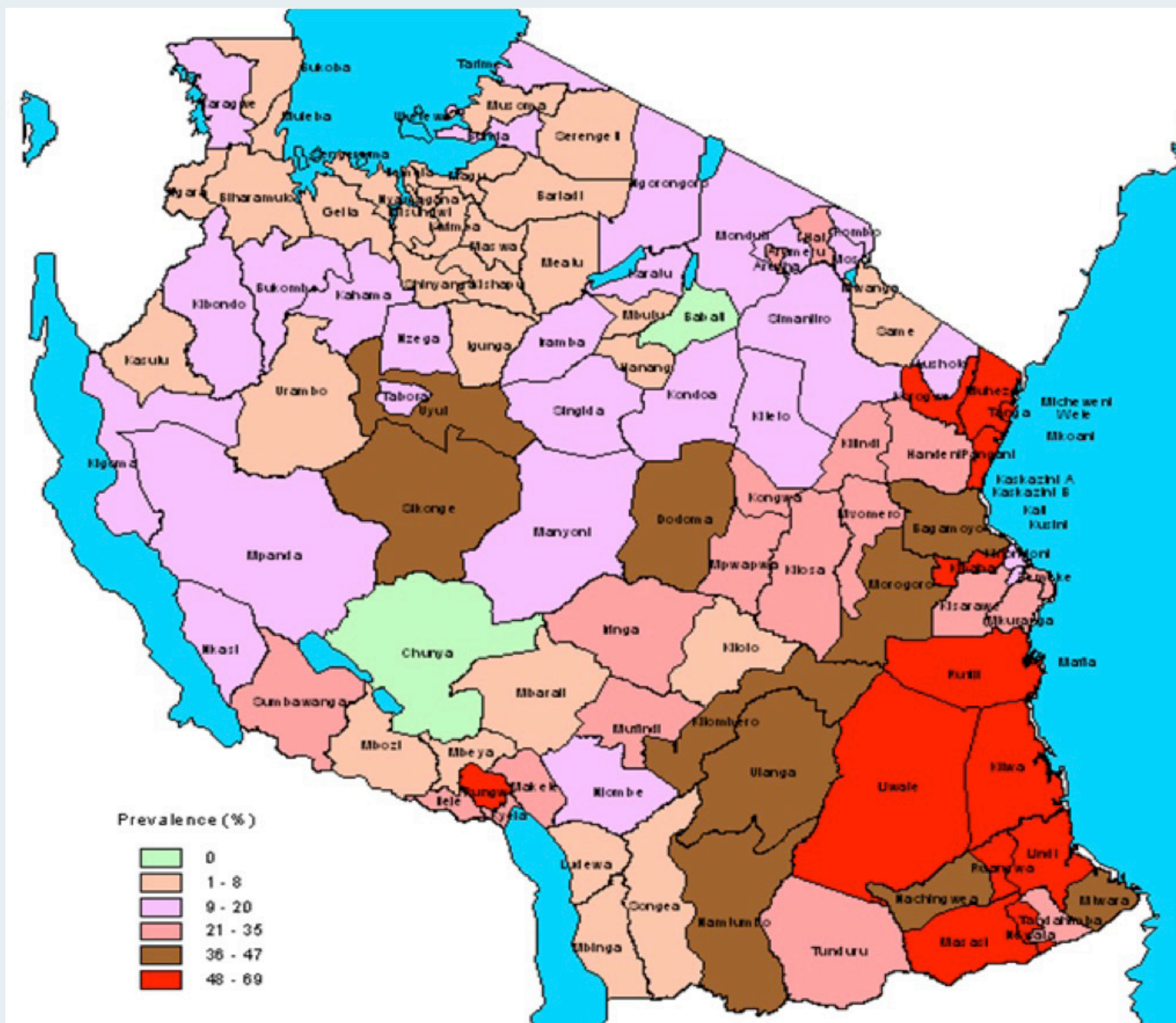


Figure 1: Screening children and data recording for the positive and/or negative LF microfilaria parasites

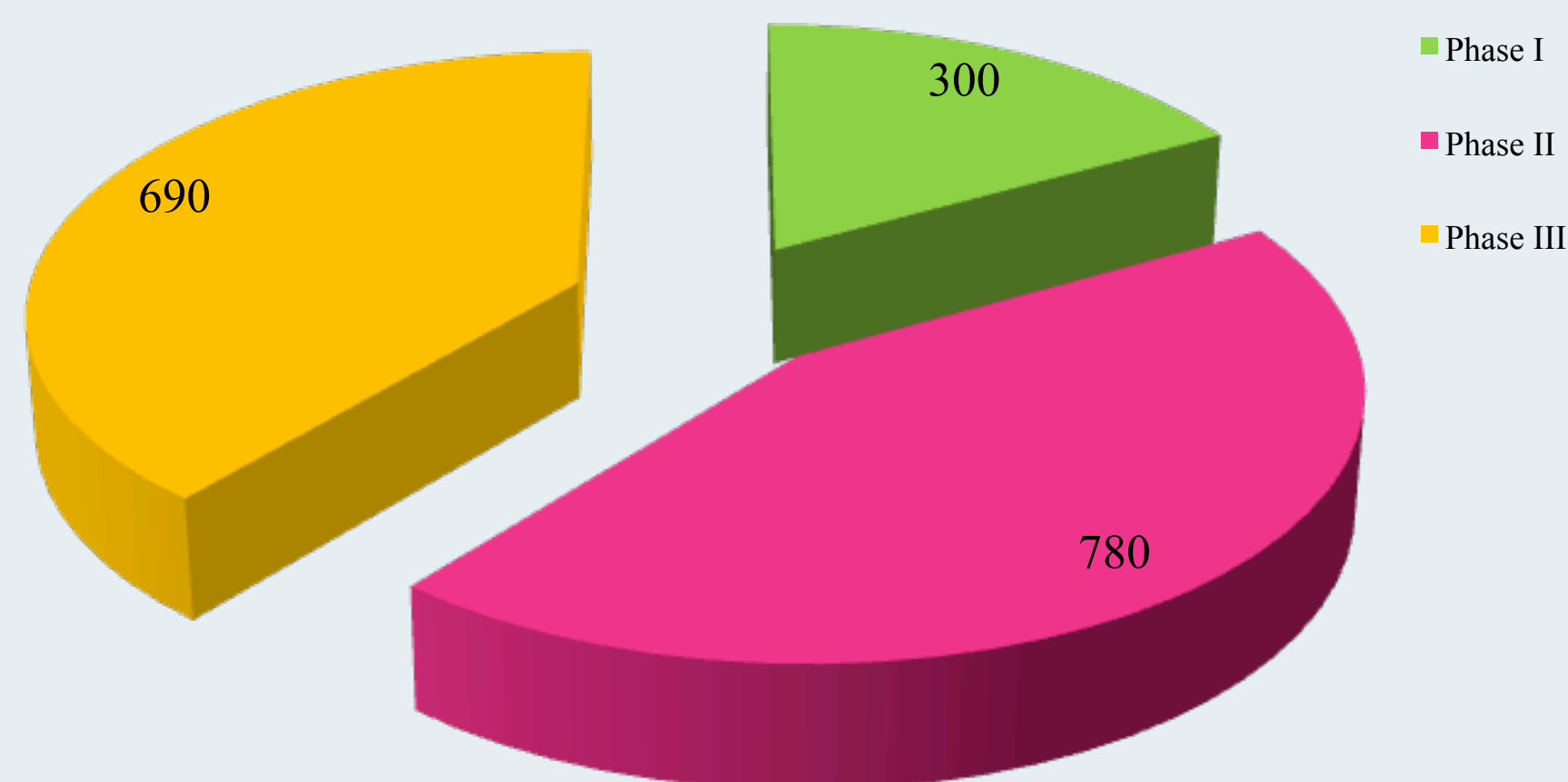


Figure 2: Number of schools sampled from 59 districts during LF re-mapping exercise

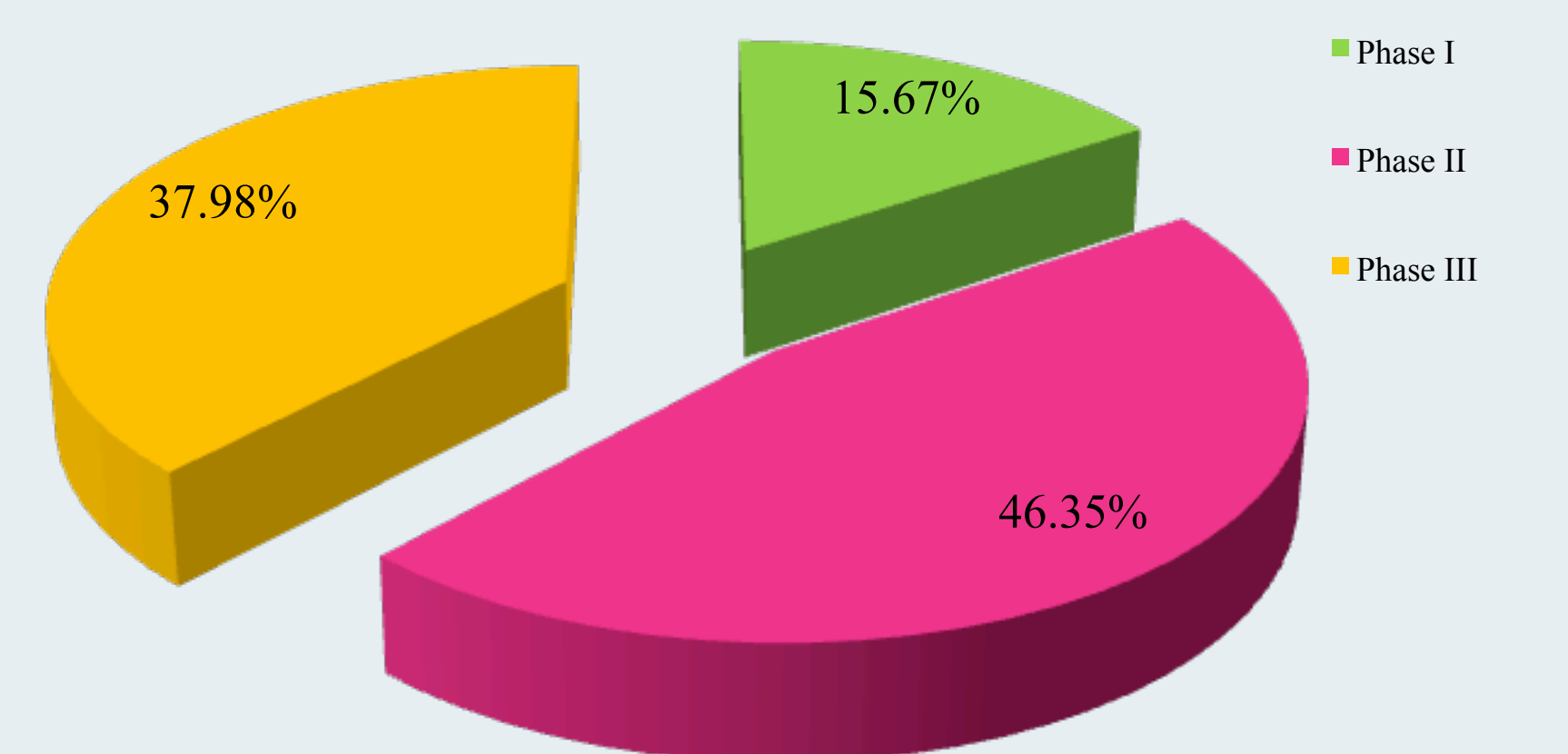


Figure 3: Percentage of pupils screened for LF in each phase (N = 29054)

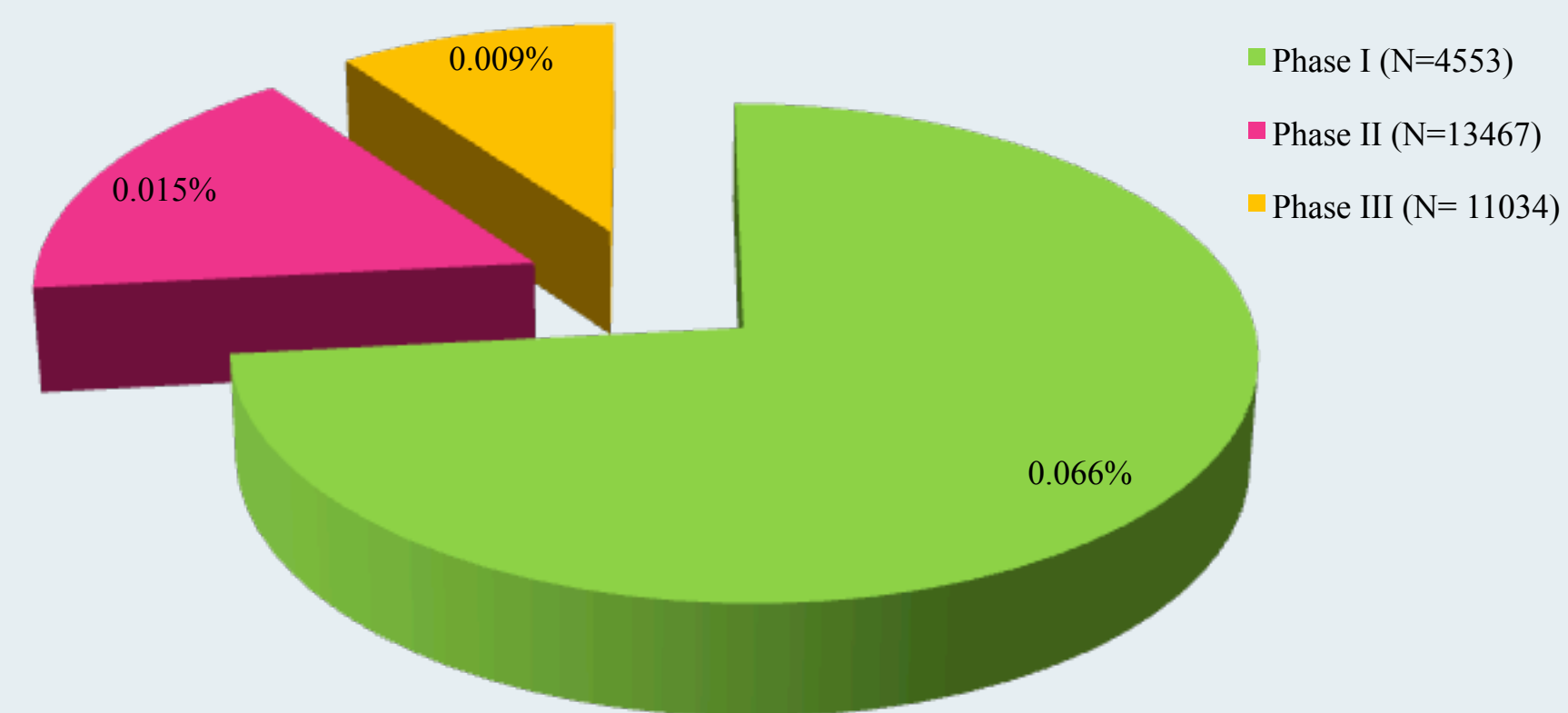


Figure 4: Proportion of students who tested positive in the LF re-mapping exercise

Conclusion

The results of the re-mapping indicated that these districts do not require MDA. This is an important step in scaling down MDA interventions in Tanzania and now the NTD program will focus on the remaining districts to achieve elimination.

Acknowledgements

