GOVERNMENT OF SIERRA LEONE
Ministry of Health
National Malaria Control Programme

Optimizing ITN Distribution Channels

Evidence from Pilot and Scale-Up of School-Based Distribution in Sierra Leone

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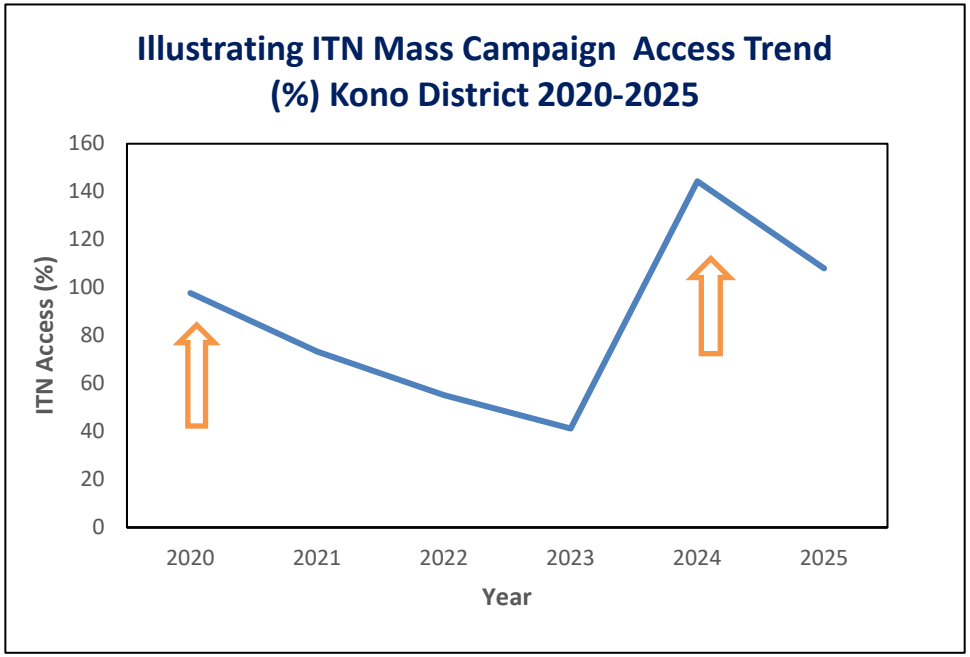
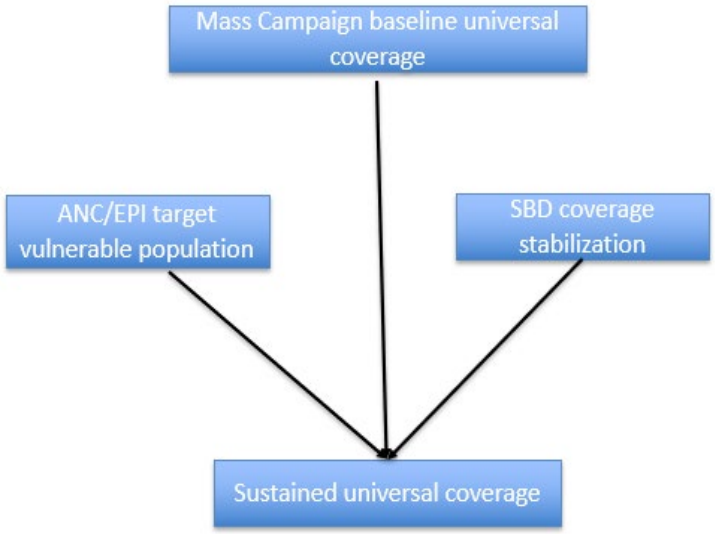
Why Optimize Distribution Channels?

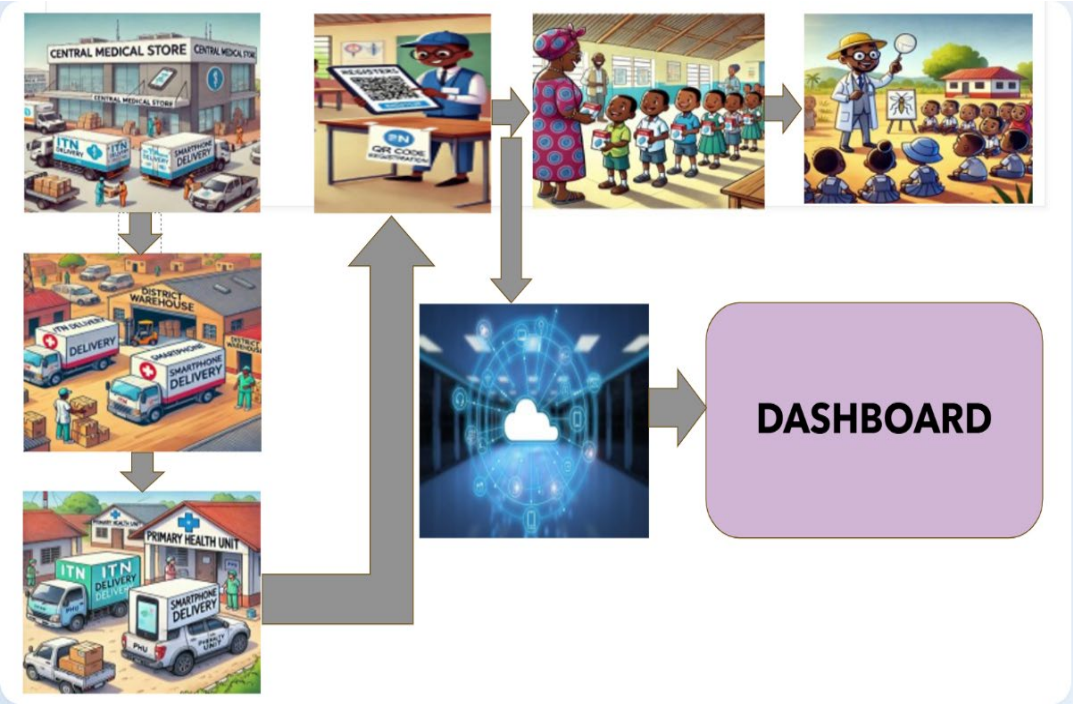


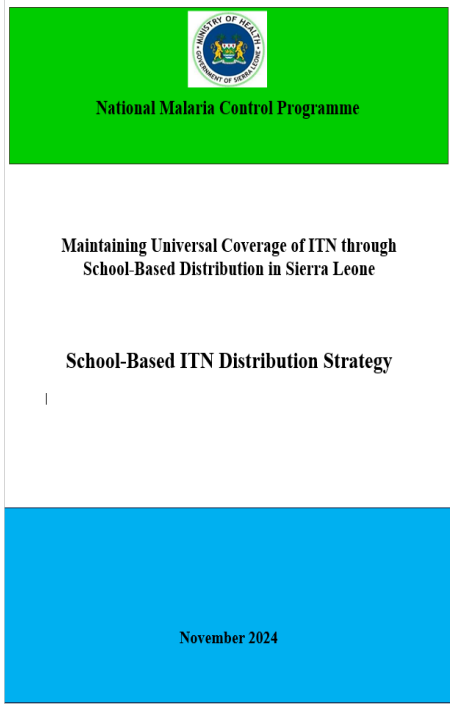


- Mass campaign **(2020 & 2024)** is the primary channel to establish universal coverage; coverage and durability declines between cycle,
- Routine ANC/EPI reach limited populations
- Continuous distribution; School based distribution (SBD) is required to sustain coverage and to reach wider population

Universal coverage is achieved not by replacing campaigns, but by stabilizing them through complementary distribution channels

School Based ITN Distribution Strategy





Criteria for selection of distribution channel: Large population, epidemiologic important, existing infrastructure, cost effective and scalable

School-Based ITN Distribution: High enrolment rates, regular contact with children, platform for health education direct household reach through pupils and has proven effectiveness in many countries

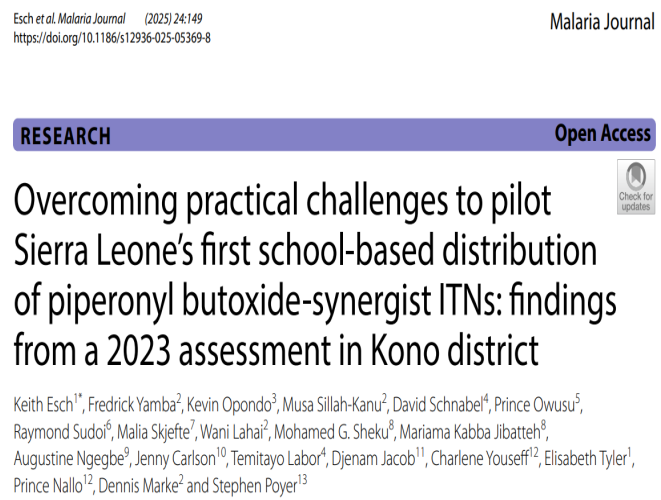
Criteria for targeting SBD: ITN Access, Burden, vector control intervention

SBD Pilot Implementation- Kono District

- Implemented March–April 2023
- 531 schools
- Classes 1, 3, and 5 targeted
- 88,605 pupils reached
- PBO ITNs distributed
- Social behaviour change campaign conducted
- Coverage achieved: **96.8% of target pupils**
- Demonstrated operational feasibility

Post Distribution Evaluation of Kono Pilot

- Survey 920 households' comparison two arms: Households with eligible children (intervention) vs non eligible children (control)
- Significant impact on household net ownership, population ITN access and ITN use between intervention and control households



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Malaria Journal

RESEARCH Open Access

Overcoming practical challenges to pilot Sierra Leone's first school-based distribution of piperonyl butoxide-synergist ITNs: findings from a 2023 assessment in Kono district

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Key Findings

Indicators	Intervention	Control	P-value
Household owns at least one ITN	**93%**	**69%**	***<0.001***
Household owns at least one ITN per two people	**42%**	**24%**	***<0.001***
Population ITN access	**69%**	**46%**	***<0.001***
ITN use (previous night)	**71%**	**49%**	***<0.001***

Expansion of SBD — Bo and Bombali Districts 2025

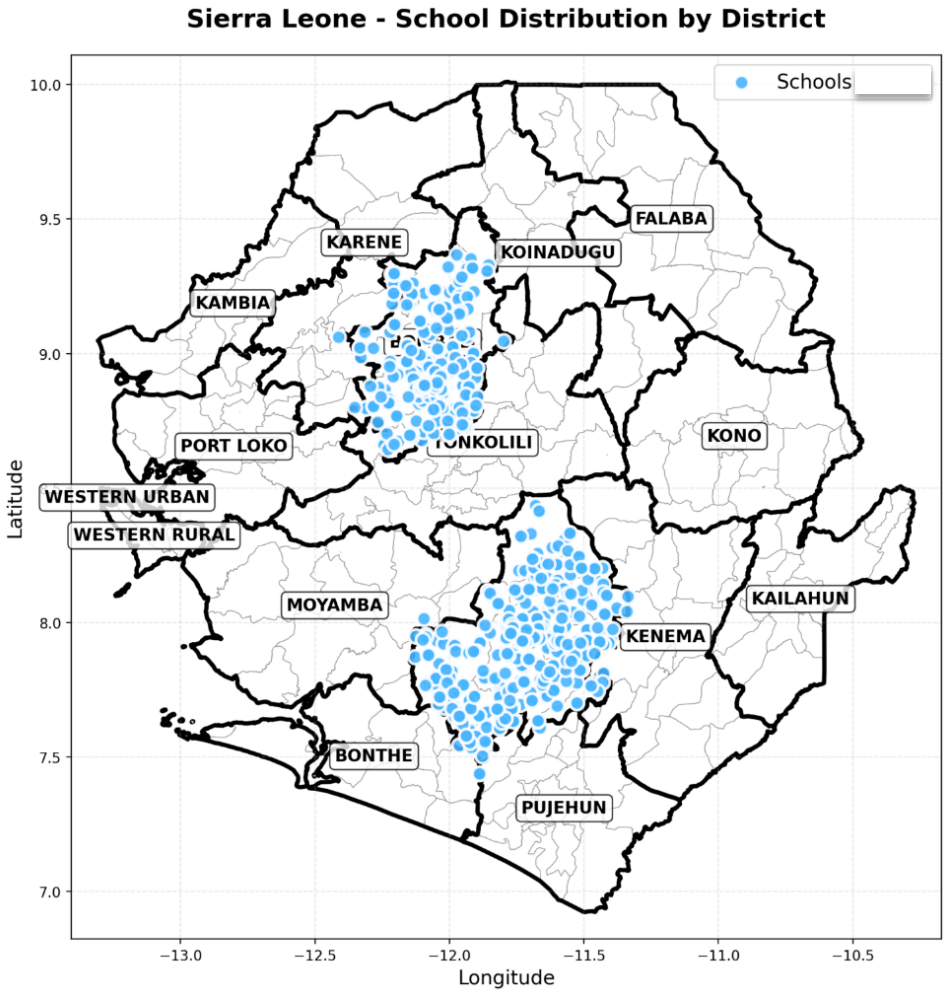
- Implemented May-June 2025
- 1173 schools
- Classes 1,2, 3, 4 and 5 targeted

- 1,161 schools reached

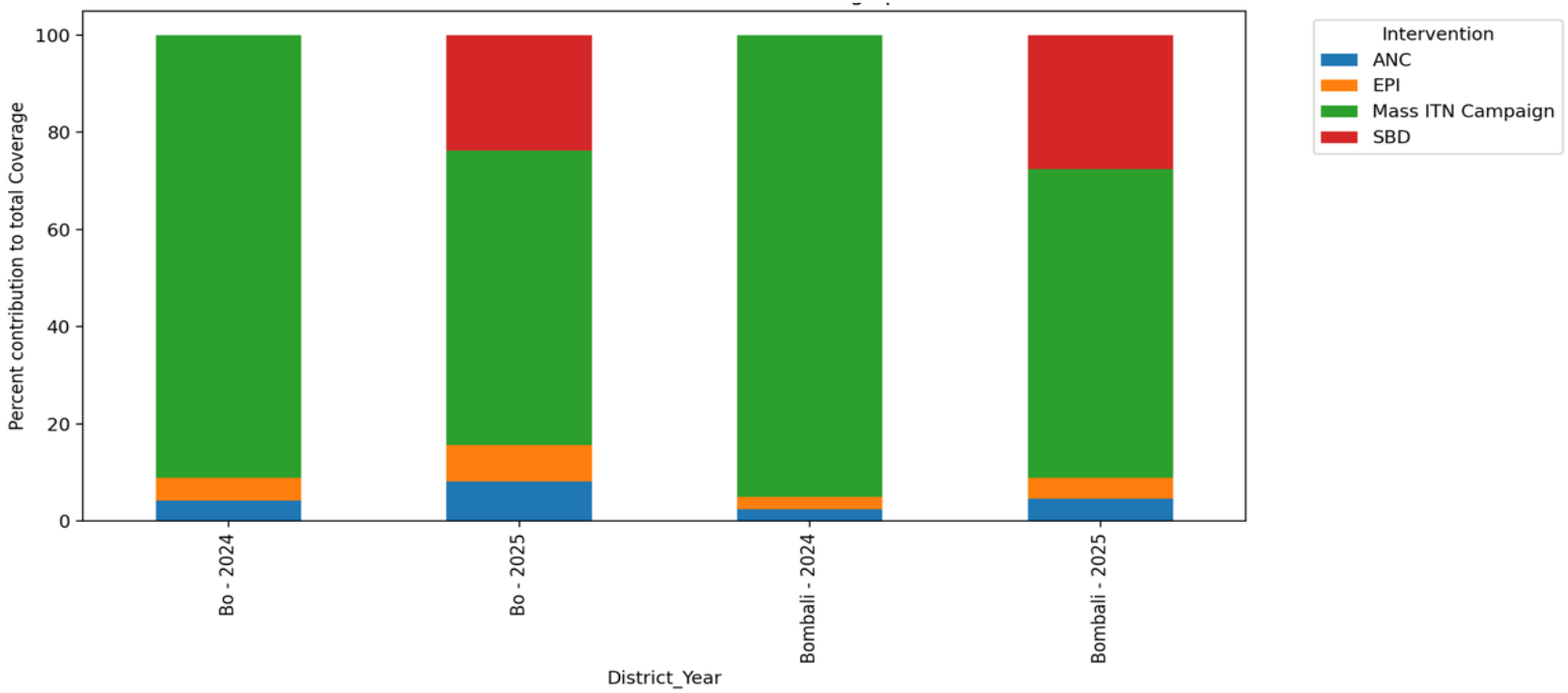
- 225,330 ITNs distributed

- 93% student coverage

- Nearly half a million people protected



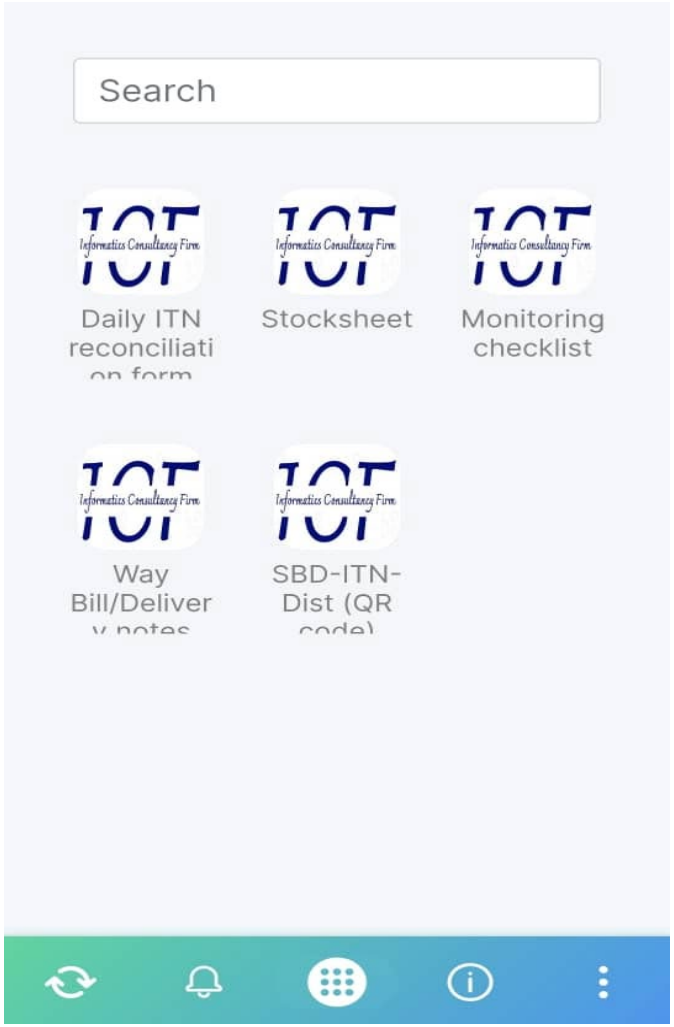
Intervention Contribution to ITN Access



- Mass ITN Campaign is the dominant contributor to ITN access in every District-
- Routine health service channels (ANC and EPI) provide smaller but meaningful steady contributions
- School-based distribution (SBD) provides an intermediate contribution that supplements the gap left by routine channels

Operational and Coordination Mechanisms Enabling SBD

- Partner coordination-led by NMCP
- Education-health sector collaboration: both involved in microplanning
- Use of Digital monitoring tools:
  - Mobile data collection tools
  - QR-coded school registration
  - Real-time monitoring dashboard
  - GPS tracking of distribution
- Integrated behaviour change communication : ITN use and care messaging



Key Implementation Factors Identified During Pilot and Scale-Up

- Strong coordination essential
- Minimum 12 weeks planning required
- Validate school enrolment early
- Align distribution with school calendar
- Digital monitoring strengthens programme management
- Targeted SBCC
- RE-channelling leftover nets to ANC/EPI
- Waste management and recycling systems

Reliable SBD requires structured coordination and monitoring mechanisms to maintain coverage gains

Recommendations for Future SBD

- Incorporate and adopt SBD as part of continuous distribution
- Integrate monitoring into national systems
- Strengthen financing and logistics
- Maintain good collaboration between Health and education sector
- Enhance communication strategies
- Conduct long-term impact evaluation

Conclusion

- Multi-channel delivery is required for universal coverage
- SBD is an effective continuous distribution channel
- SBD stabilizes coverage between campaigns, Improves household ownership and ITN access
- Supports replacement of damaged nets
- Essential for sustaining malaria prevention gains

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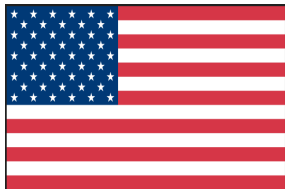
The Global Fund
To Fight AIDS, Tuberculosis and Malaria



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World Health Organization

RBM Partnership To End Malaria

The Alliance for Malaria Prevention

PMI Evolve
Evolving Vector Control to Fight Malaria

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