Evidence for Impact: NALA's Research Strategy for Sustainable NTD Prevention

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1. Vision and mission for research

Vision:
To establish a research arm within NALA that will serve as a center of excellence in generating high-quality, actionable evidence that informs and advances effective preventative strategies for the sustainable elimination of neglected tropical diseases (NTDs)

Mission:
To lead a research agenda that generates the evidence needed to design, test, and scale preventative solutions for NTD elimination. NALA's mission is to produce actionable research that informs national strategies, strengthens local health systems, and ensures that prevention-driven interventions rooted in WASH, behavior change, locally-led action, and innovation are rigorously evaluated and adapted across diverse settings.

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2. Strategic objectives

- **Assess the Effectiveness and Scalability of Integrated NTD Prevention Approaches** Conduct research to assess the effectiveness and transferability of interventions such as STEPS (WASH-SBC framework), WoW (WASH on Wheels), community-led surveillance (Snail mapping) mechanisms. Can be done through longitudinal studies and field epidemiological assessments. **Example:** operational study shows benefits of MDA+ WASH vs just MDA.
    - Target: at least one research question per project that is aligned to NALA's strategic objectives
- **Contribute Evidence to shape policy and global discourse** produce and share high-quality research that informs national and international health policy on neglected tropical diseases. This includes peer-reviewed publications, implementation case studies, and evidence presented at key research platforms as national and international conferences (e.g COR-NTD, GSA, ASTMH etc.). Through these channels, NALA contributes to the global body of knowledge and supports data-driven decision-making in the NTD sector.
    - Target: 3 conferences, 2 publications per year
- **Explore and assess scientific innovation that will support NALA's goals.**
  The Research Department will actively explore and evaluate emerging scientific innovations that can advance NALA's strategic objectives. Areas of investigation

include early-stage technologies such as environmental DNA (eDNA) monitoring for water-based surveillance, water biome assessments to detect transmission risk environments, artificial intelligence (AI)-driven disease monitoring tools, and low-cost community solutions like local soap production to enhance hygiene interventions. These innovations will be assessed for feasibility, cost-effectiveness, and their potential to inform future program designs. In parallel, the Research Department will strengthen understanding of environmental, behavioral, and epidemiological drivers of NTD transmission to guide NALA's disease and geographic focus. This includes identifying new workstreams such as the emerging burden of female genital schistosomiasis (FGS) in Ethiopia and other endemic countries, and evaluating how these evolving challenges can be integrated into NALA's prevention and elimination frameworks. By systematically scouting, assessing, and applying scientific advances, the Research Department ensures that NALA's strategy remains evidence-based, innovative, and responsive to emerging public health needs.

    - Target: Pilot 3 new innovations in the next 5 years

- **Scientific partnerships**
  The Research Department will actively cultivate partnerships with academic institutions, research centers, technology innovators, and public health agencies. These collaborations will enhance the rigor, reach, and impact of NALA's research activities by facilitating access to specialized expertise, advanced methodologies, and cutting-edge technologies. Through co-designed studies, data-sharing agreements, joint publications, and participation in global research initiatives, NALA will contribute to, and benefit from, the broader scientific community's efforts to advance NTD prevention, WASH innovations, and community-driven health models. In particular, NALA will prioritize equitable partnerships with institutions in the Global South, fostering mutual learning and capacity exchange to ensure that research agendas and interventions are contextually grounded and locally relevant

- **Secure and diversify funding for research**
  Actively pursue funding opportunities from philanthropic foundations (e.g Gates foundation, Wellcome Trust, SID Israel), government agencies (e.g EDCTP3, Swiss Agency for Development and Cooperation (SDC), Norwegian Agency for Development Cooperation (Norad)) and through collaboration with other NGOs (e.g ORBIS, PATH, WaterAid).

    - Target: Submit all relevant research grants to support research activities of all sorts.

3. Potential and relevant methodologies are:

- Mixed-methods (quantitative + qualitative)

  We will apply integrated quantitative and qualitative methodologies to triangulate findings and capture both epidemiological trends and socio-behavioral dynamics. Quantitative methods that include disease prevalence surveys, snail infection rates, structured KAP assessments (examples are: Gomma District, Ethiopia (Bekana et al., 2022) and KwaZulu-Natal, South Africa (Nwoko et al., 2023)). These will be complemented by qualitative approaches (e.g., focus group discussions, in-depth interviews, participatory rural appraisal) to ensure contextual validity and explanatory depth. This mixed-methods design is critical for capturing the complexity of NTD transmission and prevention in real-world settings and takes advantage of the fields that NALA has been mastering.

- Implementation science to study "how" and "why" implementation worked (for example: How does integrating real-time snail surveillance improve early outbreak detection and MoH responsiveness), as well as operational research to address practical barriers to program delivery (For example: What logistical or behavioral barriers prevent consistent soap production at school level).

- Participatory action research (PAR) where stakeholders and communities are co-researchers. In PAR, stakeholders, particularly district officials, implementers, and occasionally communities (such as in the snail mapping) act as co-researchers, not just subjects. They help define the problem and co-develop solutions.

- Longitudinal and cross-sectional surveillance studies- These epidemiological tools help us understand disease and behavior over time and across different contexts: Cross-sectional studies offer a snapshot of current conditions (e.g., infection prevalence, WASH access). While longitudinal studies track changes across months or years, critical for evaluating sustained impact or intervention durability.

- Randomised Controlled Trials (RCTs)- RCTs serve as the gold standard for evaluating the causal impact of an intervention. In this design, participants (such as schools, districts, or health posts) are randomly assigned to either the intervention or control group, reducing bias and ensuring comparability. RCTs help determine *what* works by isolating the effects of specific components (e.g., whether integrating community snail mapping significantly reduces reinfection rates compared to standard health education alone). This method is particularly useful when testing new models before scaling them nationally.

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4. Partnerships and Collaborations

Strategic partnerships are central to NALA's research success and the advancement of sustainable NTD prevention. The Research Department will prioritize building, strengthening,

and leveraging collaborations with a diverse range of actors to maximize scientific rigor, operational relevance, and global impact.

Key categories of partners include:

- National Ministries of Health
- WHO and other multilateral agencies
- Academia and research institutions
- Implementation partners
- Donors: END Fund, Gates Foundation, ELMA
- Pharma companies and technology institutions

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5. Research Ethics and Data Management

Upholding the highest standards of research ethics and responsible data management is foundational to NALA's research agenda. Ethical integrity, participant protection, and data stewardship will be embedded across all research activities to ensure that evidence generation is both scientifically rigorous and socially responsible. By 2026, the Research team will adopt protocols on research ethics and data management that are:

- Alignment with national/international research ethics standards.
- Informed consent and equitable participation are required for all studies.
- Data use follows FAIR principles: Findable, Accessible, Interoperable, Reusable.

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6. Research Capacity Building within NALA

A. Building Internal Scientific Capacity

The research unit is committed to strengthening the research competencies of its internal team to design, implement and lead high-impact research. Key initiatives include:

- Hands-on experience in research protocol development, implementation science, statistical analysis, and mixed-methods design.
- Peer learning opportunities, such as journal clubs, research roundtables, and participation in leading scientific conferences (e.g., ASTMH, COR-NTD, ECTIMH).
- Mentorship and technical exchange with academic partners in fields such as epidemiology, parasitology, WASH, and health economics.

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7. Human Resources

Our research activities will involve a multidisciplinary team with expertise in public health, epidemiology, WASH (Water, Sanitation, and Hygiene), parasitology, health economics, and data science. The following roles will be essential:

- **Head of Research-** provides strategic and technical leadership to NALA's research activities, ensuring alignment with organizational priorities and global NTD research agendas. This role oversees the design, implementation, and knowledge sharing of research.
- **Research Manager**- oversees the implementation of the research agenda, ensures alignment with strategic priorities, manages partnerships, and is responsible for data analysis and structuring publications.
- **M&E Team-** Research will work in synergy with the M&E team to ensure relevant data is collected from the field and meets research requirements.
- **Laboratory technicians and Field team (surveyors)** - Responsible for the actual data collection on the ground and interpretation in the lab
- **Consultants/ Technical Advisors (as needed)**- Provide subject-matter expertise in field studies, epidemiology, health systems, and community health and data analysis.
- **Interns, students and young researchers** will support as needed.

To strengthen the scientific integrity and strategic direction of our research portfolio, the Head of Research will establish a research consultant group.
This advisory group will be composed of experts from academia, multilateral institutions, and technical agencies. Members will be selected based on the specific expertise needed per project (e.g., diagnostics, molecular surveillance, health economics). The board will provide technical guidance, ensure methodological rigor, and support the Head of Research in aligning NALA's research with global standards and innovations.

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8. Research Prioritization Framework

To ensure consistency, transparency, and alignment with organizational goals, NALA will apply a standardized prioritization rubric to evaluate and select all future research questions and projects. This tool supports strategic decision-making by weighing the value of each study based on five core dimensions that reflect NALA's strategic priorities: partnership strengthening, preventive impact, local ownership, integration, and feasibility.

Research Prioritization Rubric

Rubric Criterion	How It Aligns with NALA's Research Strategy
Strengthens Partnerships	Echoes Objective Partnerships & Collaborations: emphasizes work with Ministries of Health, WHO, universities, and implementers.
Highlights Prevention	Central to NALA's vision of **sustainable, community-led prevention**, especially in integrated approaches like SBC + WASH.
Promotes Local Ownership / Innovation	Using research to empower local actors, co-design interventions, and adapt to underrepresented groups (e.g., pastoralists, women).
Supports Integrated Model	Evaluates effectiveness of combined interventions
Low Cost / Funding Likely	Securing and diversifying funding, with a focus on cost-effective, scalable research that can attract donors or be embedded in program budgets.

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9. Synergy between Monitoring and Evaluation (M&E) and Research

The research department in NALA plays a complementary role to the M&E by producing high-quality, actionable evidence that informs long-term program impact, policy development, and innovation.

To ensure synergy between research and M&E:

- Research outputs will be shared with the M&E team to support longitudinal tracking of health and behavior outcomes.
- Baseline and endline data collection tools (e.g., for KAP surveys, WASH assessments, or malacological studies) will be designed in coordination with M&E leads to avoid duplication and ensure comparability.
- Research findings will inform future programmatic indicators, especially around community ownership, sustainability of WASH infrastructure, and effectiveness of behavioral interventions. M&E assessments will be used to inform research focus.
- A shared results dashboard may be developed to highlight real-time evidence-to-impact pathways across departments.

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10. Spirit of Research

For an NGO committed to sustainable health impact, research is not a luxury, it is a necessity. It ensures that our interventions are not only well-intentioned, but effective, equitable, and scalable. Research allows us to understand what works, for whom, and under what conditions. It helps us challenge assumptions, identify gaps, and adapt in real-time. Most importantly, research gives us the credibility and confidence to advocate for policy change,

mobilize resources, and elevate the voices of communities we serve. Not only that but it is clear that donors increasingly fund what's proven and without a research agenda, we risk being excluded from critical funding streams that require cost-effectiveness data, peer-reviewed validation, and documented learning.

Last but not least, research has the capacity to also empower our team. It sharpens our implementation, develops our people, and strengthens a culture of knowledge, curiosity, criticism and innovation.

As we move forward, our next steps include:

- Translating strategic objectives into work plans: Each research activity should align with this strategy and reflect our shared goals across teams and geographies.
- Aligning research and programmatic timelines: Collaboration between Research, M&E, Programs, and partnerships is essential for synchronization and shared accountability.
- Operationalizing the Research Milestones: We will use the milestones outlined in the Excel sheet to guide implementation, track progress, and identify bottlenecks.
- Fostering internal capacity: Investing in continuous learning, skill-sharing, and knowledge management within the team will be key to our success.
- Maintaining flexibility: We will regularly revisit and refine this strategy based on implementation learning, funding shifts, and evolving health landscapes.

References for research methodologies

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