Building a Sustainable Program: Deworming in Kenya

Margaret Ndanyi
Head of School Health & Nutrition, Ministry of Education

Karen Levy
Regional Director, Deworm the World

Kenya’s National Deworming Program

• Built on a strong foundation: Kenya’s National School Health Policy and Guidelines
• Geographic targeting
• Engaging stakeholders
• Building on existing infrastructure
• Strategic support from DtW
• Phase I results
• Plans for Phase II

Background: The National School Health Policy and Guidelines

• Signed and launched in May 2009
• Policy developed by Ministry of Education, Ministry of Public Health and Sanitation, various partners and stakeholders.
• The policy provides:
  – A legal framework
  – Clear cut leadership for ownership and sustainability
  – A guide to program implementation

National School Health Policy

• Lays the groundwork for evidence-based program design / targeting.

• School-based mass deworming adopted as an effective preventative and treatment measure; policy instructs that:

  “Treatment shall be administered to all school-age children, including those out of school, based on the prevalence and intensity of worms and bilharzias in the area.”

  – GoK Nat’l School Health Policy, p. 32
School Health & Nutrition Programme

The SH&N programme is one of the Investment Programmes in the Directorate of Basic Education.

The main aim of this component is to promote healthy and well-nourished children attending basic education through inter-sectoral and community collaboration.

Kenya’s National Deworming Program

- Built on a strong foundation: Kenya’s National School Health Policy and Guidelines

Geographic targeting
- Engaging stakeholders
- Building on existing infrastructure
- Strategic support from DtW
- Phase I results
- Plans for Phase II

Evidence-based implementation: Geographic Targeting

- Scientific basis for targeting mass treatment
  - Increases efficiency and effectiveness of program
  - Helps to explain resource allocation choices to local and national leaders and politicians
- Technical inputs and scientific expertise from KEMRI-ESACIPAC, Wellcome Trust, PCD, MoPHS
  - Consolidating data from existing surveys
  - Undertaking new prevalence surveys
- DtW helped to operationalize scientific information: generated and organized lists of administrative units, schools, personnel, etc.

Worm Prevalence vs. Population Density
(information from Dr. Simon Brooker, KEMRI-Wellcome Trust)

Three areas of high prevalence:
- Coast; Western/Nyanga; parts of Eastern/Central
**Kenya’s National Deworming Program**

- Built on a strong foundation: Kenya’s National School Health Policy and Guidelines
- Geographic targeting
- **Engaging stakeholders**
  - Building on existing infrastructure
  - Strategic support from DtW
  - Phase I results
  - Plans for Phase II

**Engaging Stakeholders**

- Programme Launched at KEMRI
- Press Conference attended by Ministers, Assistant Ministers, Permanent Secretaries of both ministries
- Covered by print media, television, and numerous radio stations
Engaging Stakeholders

• Press Coverage
• Funds for local sensitization
• Radio adverts on vernacular stations (organized by PR Officer, MoE)
• Prof. Karega Mutahi on Power Breakfast

Kenya’s National Deworming Program

• Built on a strong foundation: Kenya’s National School Health Policy and Guidelines
• Geographic targeting
• Engaging stakeholders

❖ Building on existing infrastructure

• Strategic support from DtW
• Phase I results
• Plans for Phase II

School-based deworming: Building on existing infrastructure

• Schools are the best place to efficiently reach large numbers of children – especially since the introduction of FPE.
• Administering deworming tablets can be done by teachers.
• School-based deworming is cost-effective because it uses existing infrastructure.
Kenya’s National Deworming Program

- Built on a strong foundation: Kenya’s National School Health Policy and Guidelines
- Geographic targeting
- Engaging stakeholders
- Building on existing infrastructure

- Strategic support from DtW
  - Phase I results
  - Plans for Phase II

Strategic support from Deworm the World

- Operational support
- Catalytic funding
- Technical assistance

Operational Support: Training

- Roll-Out Process
  - Master Teachers to Districts, then Districts to Divisions and Zones
  - Each Zone had anywhere from 11 to 24 schools

- Teacher Training Sessions
  - Each Teacher Training Session (TTS) was led by 2-3 division-level personnel, and was supervised by district-level officials who circulated between sessions.
  - Each school was asked to send two teachers to the TTS.
    - The Head Teacher and one other teacher, preferably the head of the school health club, were asked to attend.
    - Teacher Training Sessions lasted for half a day.

Training Roll-Out

Example: Kwale District

- Master Trainers

- Kwale District

- Kubo Division
  - Mkonangi Zone: 24 schools
  - Shimba Hills Zone: 11 schools

- Matuga Division
  - Ngombeni/Waa Zone: 17 schools
  - Tsimba/Tiwi Zone: 24 schools
**Example of Catalytic Funding: Training Materials**

Previously designed and adopted in a cooperative process between KEMRI and the Ministries of Education and Health, with support from the Partnership for Child Development, JICA, and others.

**Organizing Training Materials**

Proper advance planning ensured that the roll-out went smoothly and that each district had enough materials.
Deworming Day!

- Teachers in each school ran the deworming program
- Each Zone had two Division level and three District level personnel supervising the event
- Example of Technical Assistance: Management of Monitoring and Evaluation using KEMRI personnel

Kenya’s National Deworming Program

- Built on a strong foundation: Kenya’s National School Health Policy and Guidelines
- Geographic targeting
- Engaging stakeholders
- Building on existing infrastructure
- Strategic support from DtW

- Phase I results
  - Plans for Phase II

Achievements

- Roll-out of Phase I successfully reached all 45 targeted districts
- Over 1,000 district and division personnel trained (MoE, MoPHS, KEMRI)
- Over 16,000 teachers trained

Over 3.6 million children in over 8,200 schools were dewormed!
**Cost-effectiveness**

Overall cost: approximately USD $0.36 per child treated

This includes all costs: training, logistics, deworming drugs, monitoring, printed materials, etc.

---

**Kenya’s National Deworming Program**

- Built on a strong foundation: Kenya’s National School Health Policy and Guidelines
- Geographic targeting
- Engaging stakeholders
- Building on existing infrastructure
- Strategic support from DtW
- Phase I results

❖ Plans for Phase II

---

**Plans for Phase II**

- Repeat and expand treatment for STH
- Targeted treatment for schistosomiasis (bilharzia)
  - Schools within 5 kilometers of Lake Victoria
  - Schools targeted with help of School Health Questionnaires
    - SHQs have been implemented in over 5,000 schools in high-risk areas
- Roll-out of Phase II planned for this year; preparation has already started

---

**Map of Phase II Coverage**
School-level targeting for treatment of Schistosomiasis

Evidence-based planning

- In Phase I, all districts had the same program
- In Phase II, districts will have customized program based on:
  1. Did the district participate in Phase I of the program?
  2. Will the district treat for STH in Phase II of the program?
  3. Will the district treat for Schisto in Phase II of the program?

Building on Deworming

- Evidence-based approach
  - What works?
  - Where is it needed?
  - What is most cost-effective way to deliver high-impact services to the largest number of appropriately-targeted children?
- Schools are:
  - Entry points for community health
  - Distribution points for health interventions, messages, and services
- Programmatic priorities: Interventions that are proven to have impact, are cost effective, can build on existing structures and resources, address health issues that are most relevant to children and to education.

The National School-Based Deworming Programme: Improving the Health and Education of Kenya’s Children