



Corporate Social Responsibility

Bioko Island Malaria Control Project

Since 2004, the Bioko Island Malaria Control Project has invested US\$61 million and reduced the transmission of malaria on Bioko Island by nearly 70 percent in children 2 to 14 years of age.

Overview

Malaria kills about 700,000 people every year, of which 90 percent of those deaths occur in sub-Saharan Africa. Equatorial Guinea is one of the most affected countries on the African continent. Malaria significantly contributes to an estimated mortality rate of 11.3 per 1,000 in children under five years of age. This is 14 times higher than the mortality rate in the United States.

Even when not fatal, malaria compromises the health and productivity of many people and significantly impacts the financial well-being of families, especially those least able to afford medication. Marathon Oil identified malaria as a key issue facing both employees and the local communities on Bioko Island. It was clear that the elimination or significant reduction of malaria transmission on Bioko Island would reduce both the health and economic burden of this disease and make a major difference in the lives of Equatoguineans.

Marathon Oil and its business partners Noble Energy, GEPetrol and SONAGAS, teamed up with the Government of Equatorial Guinea through the Ministry of Health and Social Welfare to design the Bioko Island Malaria Control Project (BIMCP) in 2004. Since then, this partnership has invested US\$61 million and resulted in a drastic reduction in the transmission of malaria on Bioko Island by nearly 70 percent in children 2 to 14 years of age in the past decade.

The BIMCP is implemented by the non-profit organization Medical Care Development International (MCDI) in collaboration with other leading institutions in the field of malaria control: London School of Hygiene & Tropical Medicine, Texas A&M University, The Innovative Vector Control Consortium, and Liverpool School of Tropical Medicine. The BIMCP intervention is currently focused on indoor residual spraying, distribution of long-lasting insecticidal nets, diagnosis and treatment of malaria cases, entomological monitoring, health education, operational research, monitoring and evaluation. It also includes a substantial investment in human resources development and a strong commitment to capacity-building of local personnel. This world class and innovative intervention has been so remarkable that the BIMCP has been approached by Sanaria, a biotechnology company, and the Ifakara Health Institute in Tanzania, with the goal of incorporating a promising anti-malaria vaccine into the next phase of the program.





The BIMCP intervention includes a substantial investment in human resources development and a strong commitment to capacity-building of local personnel.

A DECADE OF MALARIA CONTROL

During the past 10 years, the Bioko Island Malaria Control Program has:

- ◆ Completed 18 rounds of indoor residual spraying, with a cumulative number of about 550,000 houses sprayed.
- ◆ Distributed 111,300 long-lasting insecticidal nets in 2007.
- ◆ Provided 84,500 rapid diagnostic tests to public health facilities.
- ◆ Treated more than 190,000 malaria cases with dual drug therapy.
- ◆ Conducted annual malaria indicator surveys, continuous entomological surveillance, and regular monitoring of insecticide resistance in mosquitoes.
- ◆ Conducted training for public and private health care providers.
- ◆ Provided intensive capacity building of host country nationals within the Ministry of Health and Social Welfare.

INTEGRATED AND COMPREHENSIVE INTERVENTIONS

Due to the project's integrated and comprehensive approach, the BIMCP achieved a:

- ◆ 69 percent reduction of the Parasite Prevalence, from 45 percent in 2004, to 13.7 percent in 2012.
- ◆ 64 percent reduction of mortality in under-5 children, from 152/1,000 in the 5-year pre-intervention period (1999-2003) to 55/1,000 in the initial 5-year intervention period (2004-2008).
- ◆ 80 percent reduction of anemia in under-5 children, from 15 percent in 2004 to 3 percent in the last 3 years (2010 to 2012).
- ◆ 98 percent reduction of the entomological inoculation rate (number of infective mosquito bites per person per year), from more than 1,000 before 2004 to 14 in 2012.

PATH FORWARD: PHASE III AND THE ELIMINATION GOAL

Despite these achievements, malaria transmission persists in Bioko Island and continuing interventions are needed if elimination is the goal. The continuation of the BIMCP has been proposed with additional initiatives such as the involvement of the private sector (clinics and pharmacies), development of community-based intensified focal activities, larval source management and the introduction of a vaccine initiative.

A small clinical trial of the radiation attenuated whole sporozoite malaria vaccine (PfSPZ), produced by Sanaria and already tested in other countries, will be conducted in 2014. The final objective of the pilot is a mass vaccination of the entire Bioko Island population, once the vaccine obtains the necessary licensure from regulatory authorities.

