

Achieving Effective Public-Private-Civil Society Engagement to Reduce Malaria In A Challenging Environment

**The Government of Equatorial Guinea** 

**Marathon Oil Corporation** 

Medical Care Development International (MCDI) and Partners

Global Fund to Fight AIDS, TB and Malaria

APHA Annual Meeting Washington, D.C. November 6, 2007

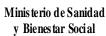




















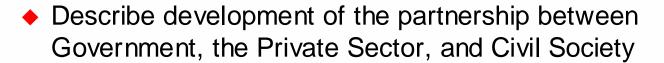






#### **Purpose of Presentation**





Presentation of Equatorial Guinea's malaria control initiatives:

**BIMCP and EGMCI** 

 Summary of progress to-date

 Substantial benefits to the people of Equatorial Guinea



- Achieving corporate goals, including international recognition and awards
- Leveraging Civil Society experience working with communities to achieve public health goals

















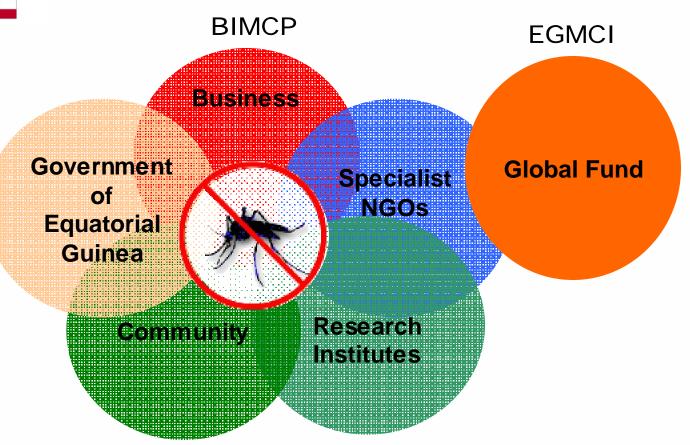






### BIMCP + EGMCI: Public + Private + Multilateral Partnership





Collaborative design, leading to effective, results-based execution



















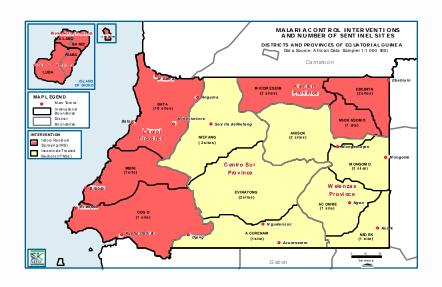




# Equatorial Guinea's two unique malaria control initiatives: BIMCP and EGMCI



- Bioko Island Malaria Control Project (BIMCP) 2003-2008
  - US\$12.86 million including US\$1.55 participation by GoEG
  - Jointly financed by Marathon Oil, Noble Energy, Atlantic Methanol,
     Sonagas and the Government of Equatorial Guinea
  - Experience leveraged resources from the Global Fund
- Equatorial Guinea Malaria Control Initiative (EGMCI) 2006-2011
  - US\$26.99 million
  - Jointly financed by Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and the Marathon Foundation

























### **Genesis and Evolution of a Partnership (BIMCP)- 1**





- Early 2002: Marathon identifies opportunity to combine corporate interests (malaria reduction in on-site workers) with government goals (improved health status) in collaboration with the National Malaria Control Program
- Mid 2002: Marathon conducted malaria reduction feasibility study with Government of Equatorial Guinea
- Late 2002: Marathon Medical Director secures agreement from Senior Vice President that malaria control is possible
- Early 2003: Marathon contacts CORE group seeking experienced NGO with whom to partner; Marathon issues request for applications; MCDI secures Board approval to respond
- Mid 2003: MCDI and partners develop and submit proposal; proposal approved; implementation begins and baseline surveys completed, and monitoring and evaluation protocol established
- 2004: Implementation continues first round of Indoor Residual Spraying (IRS)























### **Genesis and Evolution of a Partnership (BIMCP) - 2**





- 2005: Case Management, Intermittent Preventive Treatment of Pregnant Women (IPTp), Supervision, and inventory control, management and distribution of malaria-related diagnostic supplies and drugs
- 2005 CDC funding secured to strengthen national malaria control program management systems
- 2006: Health information and malaria information systems strengthened, and active case detection and treatment initiated to reduce the human reservoir
- 2006: Based on BIMCP results and success, Global Fund application submitted and approved to scale up activities to the mainland
- 2007: LLINs added to IRS as complementary vector control activity to test combined effect and further drive transmission down
- 2008 (planned): with technical advisory group (Harvard, Yale, CDC, MRC, London School), exploring option of mass drug administration (MDA) to lower transmission in areas of persistent parasitemia























#### **Implementation**:







- Vector (mosquito) control
  - Indoor residual spraying (IRS)
  - 2. Long lasting insecticide treated bed nets (LLINs)
  - 3. Selective environmental control of breeding sites (larvaciding)
- Diagnosis and treatment of malaria















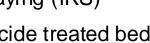


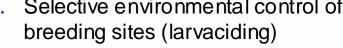






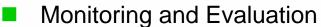
















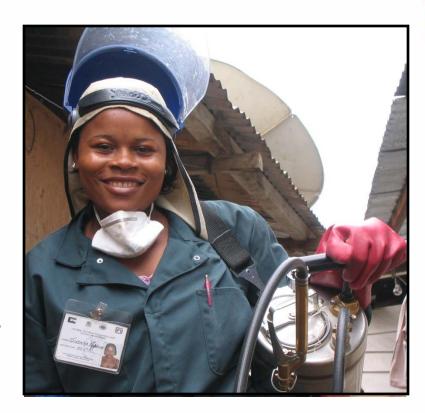


#### **Indoor Residual Spraying**





- 2 mosquito species that transmit most of the malaria in EG need to rest indoors on walls after blood feed
  - Insecticide on walls kills infected mosquitoes reducing transmission
- 90 Equato-Guinean sprayers and supervisors sprayed Bioko since 2004
- 6 spray rounds completed on Bioko since 2004 – 7<sup>th</sup> in progress
- ±120,000 structures sprayed per round on Bioko (BIMCP)
- ± 280,000 structures will be sprayed per round on Mainland (EGMCI)

























#### **Bed Nets and Larvaciding**





- Household Distribution of Long Lasting Insecticide Treated Bed Nets (LLINs)
  - 164,000 LLINs distributed on mainland (EGMCI) - Aug 2007
  - 82,000 LLIN distribution in process on Bioko – Oct 2007
  - Coverage all occupied beds.
  - Goal of transmission reduction
- Targeted larvaciding to kill 1 mosquito species that prefers to rest outdoors after a blood feed (BIMCP)
  - Found in limited coastal areas of Bioko Island (especially near Marathon plant)

























### Improved diagnosis and treatment of Malaria





- New Artemisinin Combination Therapy (ACT) drugs supplied to overcome resistance to Chloroquine and to avoid mono-therapies
- Free ACT supplied to children under 15 years old and pregnant women
  - 35,000 treatments supplied on Bioko in 2005
  - 14,000 treatments supplied on Bioko in 2006 – lower following IRS spraying
- Treatment provided by staff at Government hospitals and health centers
- Rapid Malaria Tests supplied to all health centers
- Hospital laboratories supplied

























### Information, Education and Communication





- Information provided at community level on malaria and program services (free IRS, ACT)
- Education of communities
  - Recognizing signs and symptoms of malaria
  - Timely care seeking
  - Appropriate follow-up
  - Safety and IRS
  - Window traps
- Communications by radio and other media
  - Availability of free care
  - Spraying schedule
  - LLIN distribution plans

























#### **Monitoring and Evaluation**





- 17 sentinel sites on Bioko Island (BIMCP) to monitor
  - Mosquito numbers
  - Level of malaria in mosquitoes
  - Level of malaria in children and mothers
- 31 sentinel sites on the mainland (EGMCI)
- 102 mosquito traps on Bioko; 186 on the mainland
- Annual health survey to evaluate impact following 2004 baseline
- 110 Equato-Guineans involved in this component on Bioko

























#### **Capacity building and integration**





- Detailed integration strategy developed with Ministry of Health in 2004
- Training of all doctors and nurses on Bioko in improved malaria care
- Training of pharmacists in effective drug management
- IRS implemented by Equato-Guineans
- National Malaria Control managers provided computers and trained
- Support to development of national Health Information System, including project developed Malaria Information System (MISM)























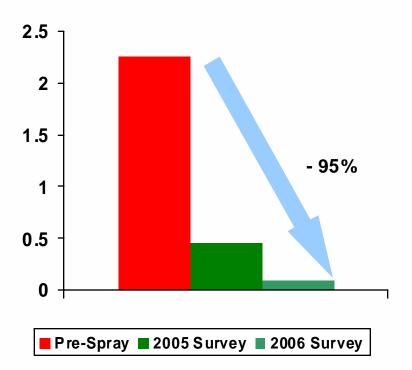


### Malaria transmission and prevalence on the decline

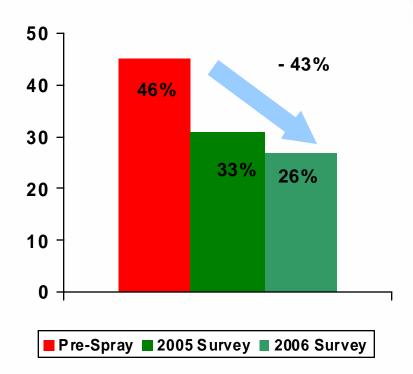




Average Number of Infected Mosquitoes Caught in the Home/100 Nights



Percentage of Children on Bioko Island with Malaria Parasites in Their Blood





















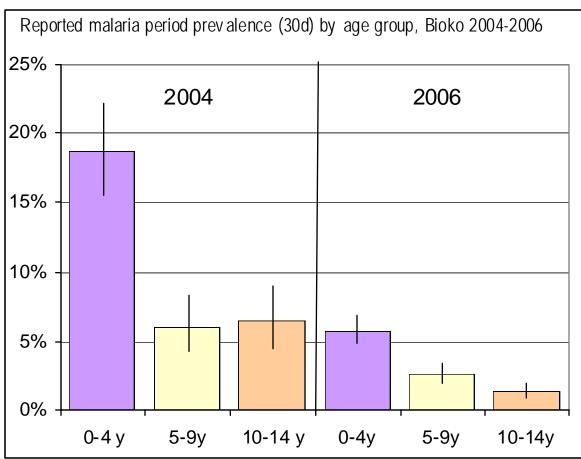




### Reduction in pediatric malaria morbidity







- The % of children reported to have suffered from malaria on Bioko has decreased substantially
- The malaria caseload treated at Government health facilities has been reduced by 74%



















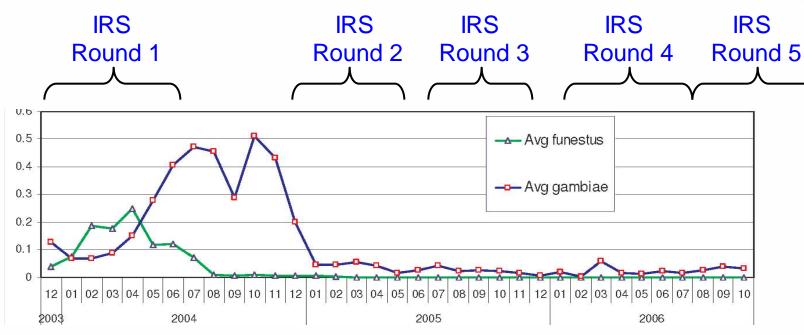




## The number of malaria-carrying mosquitoes have been drastically reduced at household level



#### Mosquito numbers per trap nights



#### Infectivity transmission index

Pre-spraying		After Round 1	After Round 2	After Round 3	After Round 4
gambiae -	1.0	0.32	0.00	0.02	0.03
funestus -	1.0	0.06	0.00	0.04	0.00



















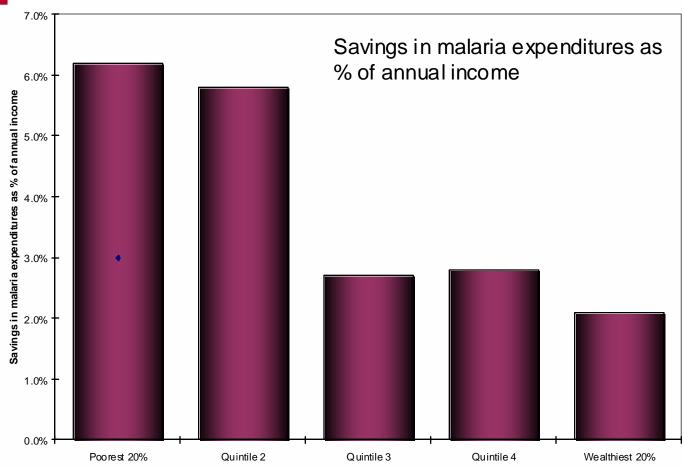




### Malaria control – A cornerstone of poverty alleviation in Equatorial Guinea































#### Partnership:

International recognition of contribution to fighting malaria in Africa







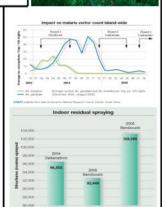
#### PROYECTO DE CONTROL DEL PALUDISMO DE LA ISLA DE BIOCO



Logrando reconocimiento internacional de la lucha contra paludismo en Guinea Ecuatorial







SURPASSING

**ORIGINAL TARGETS** 

2006
Africa
Investor
Magazine
Award
(Winner)

2006
International
Community
Service
Award from
U.S. Chamber
of Commerce
(Finalist)

2006 World Oil Award (Winner)

















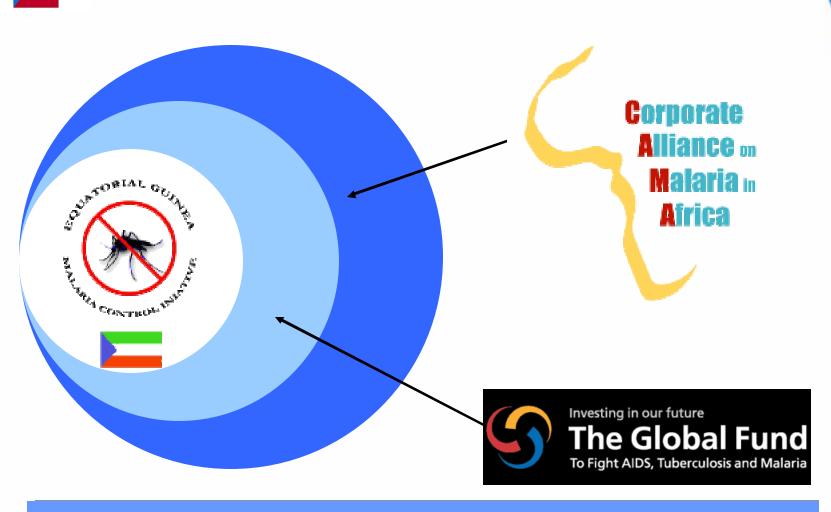






### Leveraging the substantial success and recognition of the BIMCP





Poised to become a blueprint for the fight against malaria in Africa











- A pioneer in the fight against malaria, one of the leading causes of death and disease in Equatorial Africa
  - Demonstrating that it is feasible to significantly reduce malaria transmission in a tropical zone of year-round transmission
  - Building strong government commitment to address public health problems
  - Strengthened National Malaria Control Program
- An unprecedented commitment to generating resources for the fight against malaria
  - The Government of Equatorial Guinea
  - Marathon Oil (Corporation and Foundation)
  - The Global Fund to Fight Aids, Tuberculosis and Malaria
  - The Equatorial Guinea Social Development Fund
- Leveraging technical experience and implementation expertise
  - Medical Care Development International (MCDI)
  - One World Development Group (OWDG)
  - Harvard University
  - The Medical Research Council of South Africa (MRC)
- Equatorial Guinea, an oil producing state, has an opportunity to leverage oil revenues to have a substantial impact on the welfare of its people





























- Business case must be made for private sector involvement, BUT business understands the importance of helping to achieve community goals as well as part as its social responsibility strategy
- Early high level corporate understanding and buy-in to project goals and objectives is critical to future commitment and success
- Early engagement and agreement on goals between government and business is essential
- Civil society and NGOs can effectively leverage multi-sector partnerships to enhance technical expertise and operational capacity;
- Business can be a development partner, with substantial involvement in program planning and execution, not just donor corporate social responsibility goes beyond writing checks
- Establishing and maintaining trust among partners is essential for long term success
- Public and private goals are often not seen as mutually reinforcing BUT,
- In this case, all partners have worked together to reach common goals and are achieving more than they would have working separately





















