

# TRANSPARENCY AND ACCOUNTABILITY NETWORK



# IMMC

## INTEGRATED MOSQUITO AND MALARIA CONTROL

A comprehensive integrated mosquito and malaria control program to reduce the incidence of malaria, and other insect spread diseases.

## BUSINESS PLAN PORTFOLIO OF IMMC INTERVENTIONS INSECTICIDE TREATED BEDNETS (ITN)

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DRAFT – FOR DISCUSSION ONLY

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# INTEGRATED MOSQUITO AND MALARIA CONTROL CONTEXT

**THIS DOCUMENT IS PART OF A SERIES THAT INCLUDES  
THE FOLLOWING:**

*EXECUTIVE SUMMARY – INTERNATIONAL*

*EXECUTIVE SUMMARY – LIBERIA*

**BUSINESS PLAN – INTEGRATED MOSQUITO AND MALARIA CONTROL  
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## **APPENDICES**

**IMMC – ORGANIZATION AND MANAGEMENT**

*(An Excel workbook/spreadsheet)*

**IMMC – REFERENCES, ETC.**

*(An Excel workbook/spreadsheet)*

**CONTACTS, ETC.**

*(An Excel workbook/spreadsheet)*

**SIMULATION MODEL**

*(An Excel workbook/spreadsheet)*

**IMMC – BEHAVIOR OF COSTS**

*(An Excel workbook/spreadsheet)*

**IMMC – FINANCIAL PROJECTIONS – MACRO OVERVIEW**

*(An Excel workbook/spreadsheet)*

**IMMC – FINANCIAL PROJECTIONS – COUNTRY VERSION**

*(An Excel workbook/spreadsheet)*

**IMMC – FINANCIAL PROJECTIONS – DISTRICT VERSION**

*(An Excel workbook/spreadsheet)*

## **SLIDE PRESENTATIONS**

*Components of IMMC (21 slides)*

*History of Malaria Eradication (24 slides)*

*Economics of Malaria (17 slides)*

*Organization of IMMC (24 slides)*

## Introduction

Progress in the reduction of the prevalence of malaria is only going to be achieved if there are adequate physical anti-mosquito and anti-malaria interventions. The interventions included in a comprehensive IMMC strategy include the following:

- (1) neighborhood cleanup to reduce mosquito breeding places;
- (2) interior residual spraying (IRS);
- (3) ultra low volume (ULV) adulticide spraying to kill flying mosquitoes;
- (4) larvaciding to kill larvae and stop mosquito recruitment into the population;  
and,
- (5) personal use of insecticide treated bednets (ITN).
- (6) medical treatment

## Bednets and insecticide treated textiles

Bednets, insecticide treated nets (ITN), are another intervention that should be part of a comprehensive anti-malaria campaign. The model being used for IMMC planning has not been able to demonstrate that bednets on their own are as cost effective as other IMMC interventions, but they do have a favorable impact for the people who choose to use bednets.

The model suggests that bednets in fact have a potential value to help reduce the transmission of malaria from infected humans to others, and could be used to facilitate a form of quarantine for infected patients.

Long lasting insecticide treated bednets have been introduced in Africa since around 2003. These nets retain their effectiveness for about 5 years. The bednet shown below is being used in Uganda.



Data regarding the effectiveness of bednets seems to show that a bednet reduces the risk of malaria infection for the users of the bednets, but has no appreciable impact on the community as a whole that does not have bednets. This is in contrast to IRS, where the community at large seems to benefit from an IRS program, even where less than all the houses are sprayed.

Insecticide treated textiles can be used to manufacture clothes. The technology has been used already for military uniforms for soldiers being deployed in malaria endemic areas. The approach might be used in an IMMC program for uniforms for “Malaria Control Teams” as well as for the various uniformed services of countries in malaria endemic areas.

Use of long lasting impregnated bed nets may be very helpful in reducing the transmission of malaria for two reasons: (1) in the first case merely to reduce the incidence of mosquito bites and the associated transmission of disease; and, (2) to help keep mosquitoes away from people with the malaria infection. They cost around \$8 to manufacture, and with delivery and storage the delivered cost will be around \$10 each (assuming local and national governments do not impose duties or taxes on the import and purchase of the nets).