#### 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**

### INTRODUCTION SECTION

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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 COMPRISING:

A ... BP for IMMC – INTRODUCTION SECTION
B ... BP for IMMC – THE MALARIA CRISIS
C ... BP for IMMC – HISTORY OF SUCCESSES
D ... BP for IMMC – MOSQUITOES AND MALARIA
E ... BP FOR IMMC – THE IMMC STRATEGY
F ... BP for IMMC – PORTFOLIO OF IMMC INTERVENTIONS
G ... BP for IMMC – DATA AND MANAGEMENT INFORMATION

IMMC – ORGANIZATION AND MANAGEMENT (An Excel workbook/spreadsheet)

IMMC – REFERENCES, 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)

#### MALARIA IS A HEALTH AND SOCIO-ECONOMIC CRISIS

An estimated 500 million cases of acute malaria occur worldwide each year, program links to functional expertise internationally while being very committed to initiatives that are most appropriate and effective at the country and local level. Activities that are not funded and managed directly through this program can remain independent and still benefit from the implementation of an integrated comprehensive mosquito and malaria control program.

## INTEGRATED MOSQUITO AND MALARIA CONTROL (IMMC) ELEMENTS OF IMMC

#### IMMC elements or interventions

IMMC elements or interventions include the following: (1) Collecting data and the analysis and interpretation of the data; (2) management information, organizing for optimum performance; (3) malaria awareness and neighborhood cleanup to reduce mosquito breeding places; (4) interior residual spraying (IRS); (5) ultra low volume (ULV) adulticide spraying to kill flying mosquitoes; (6) larvaciding to kill larvae and stop mosquito recruitment into the population; and, (7) personal use of insecticide treated bednets (ITN). The manner in which these various IMMC interventions are implemented is determined by the facts about program performance and the changes taking place.

#### Collecting data and the interpretation and analysis of the data

The starting point for the IMMC program is to collect and organize existing data so that it is easier to understand and to have a baseline and starting point. A lot of data are already available, and these data should be supplemented and updated as needed. There are several sets of data that are needed: (1) entomological data concerning the mosquito population and its breeding locations; (2) geographical or spatial information about the community ... population, buildings, water, etc; (3) medical information about malaria in the community and how cases are being treated (if at all); (4) the actual IMMC interventions that have taken place and where; and, (5) updates of all the information so that results can be compared to activities.

The collection of data and its organization so that it is easily available for analysis and planning can be done now using a combination of low cost local data collectors and the low cost and power of modern information and communications technology (ICT). The IMMC program pulls together a lot of data that have been collected in the past, as well as current data to provide a starting point for planning. The IMMC process then continues data collection, analysis and planning to ensure that IMMC interventions are as effective as they can be and low cost.

Data collection incorporates information flows that relate to the physical situation and spatial information for the area, entomological information about the mosquito, medical information about the human population and medical

information about the malaria parasite. Data is needed to measure results and also to alert the program managers to side effects like resistance or environmental risks that need to be minimized.

The next table shows as an order of magnitude the various intervention costs that need to be planned for in the operating projections. The planning model will be completed as soon as key operating assumptions are available for the proposed locations.

Operating Costs for Five Years* In thousand dollars (\$ 000)						
	Year 1	Year 2	Year 3	Year 4	Year 5	5Yr total
Environmental Clean Up	100	100	100	100	100	500
Data collection	300	300	300	300	300	1,500
Data analysis	100	100	100	100	100	500
Data system	100	100	100	100	100	500
IRS using DDT	1,000	1,000	1,000	1,000	1,000	5,000
Increment if not DDT	2,000	2,000	2,000	2,000	2,000	10,000
Aerial adulticiding	1,000	1,000	1,000	1,000	1,000	5,000
Ground adulticiding	300	300	300	300	300	1,500
Larvaciding (air)	500	500	500	500	500	2,500
Larvaciding (ground)	500	500	500	500	500	2,500
Medical treatment (people)	500	500	500	500	500	2,500
Medical treatment (drugs)	500	500	500	500	500	2,500
Bednets (distribution)	500	500	500	500	500	2,500
Bednets (product)	500	500	500	500	500	2,500
Public relations - awareness	500	500	500	500	500	2,500
Training	500	500	500	500	500	2,500
Management and admin.	600	600	600	600	600	3,000
Contingency	500	500	500	500	500	2,500
TOTAL PROJECT COST	10,000	10,000	10,000	10,000	10,000	50,000

<sup>\*</sup> Preliminary – under review

If this project cost is serving 2.5 million people, then the annual cost is \$4 per capita, and the 5 year cost is \$20. The IMMC planning model suggests that the costs can be significantly lower than this with costs in later years substantially reduced without reducing the value of benefits accruing to the community.

MORE TO COME