

Report of the workshop on strengthening of country capacities to implement integrated vector management toward reducing the reliance on DDT for eight disease endemic countries

Proceedings of the Regional Training Workshop on

Strengthening of Country Capacities to Implement Integrated Vector Management (IVM) as Alternative to DDT



International Centre of Insect Physiology and Ecology (ICIPE)

Nairobi, Kenya

June 2010

Executive Summary

Considering that DDT, has been in use for control of malaria vectors and that there is a global move to reduce reliance and phase it out, ICIPE was requested by UNEP Secretariat of the Stockholm Convention on PoPs to conduct a training workshop on integrated vector management (IVM) as an alternative solution to vector control to strengthen in country decision making process on vector borne disease control.

ICIPE organized a 5-day training workshop from 7 – 11 June, 2010 for 18 participants from nine countries in the eastern and southern African region who are public health or environmental health specialists in their countries. The main objective of the workshop was to strengthen countries capacity in line with the Global Alliance mission of developing alternatives to DDT and to provide technical skills on integrated vector management as an alternative approach to use of harmful chemicals for indoor residual spraying. Through the UNEP focal points in the countries, the ministries of health and ministries of environments from 9 countries were requested to nominate 2 officers to attend the workshop in Nairobi. However, only 7 countries nominated participants as follows: 2 each from Kenya, Ethiopia, Zambia, Tanzania, Rwanda and Malawi and one from Uganda, making a total of 13 participants. The program of the workshop included 4 days of lectures and group work and one day of field visit to the Mwea Rice irrigation Scheme, a malaria study site in central Kenya.

The WHO office in Geneva provided the curriculum for the training which was adapted from previous modules used for the regions. The curriculum borrowed heavily from the IVM Handbook that is still under development at WHO headquarters. By the end of the workshop, the participants appreciated the process of evidence based decision making towards sustainable solutions to disease control. The 5 key elements of IVM were found to be very useful in planning and implementing this approach in building capacity for vector control. As part of the country recommendations, it was agreed that there will be a follow up workshop involving the same participants to evaluate the progress made on the action plans they developed for their countries.

1.0 Introduction

Vector Borne Diseases such as malaria, human African trypanosomiasis, onchocerciasis, schistosomiasis, leishmaniasis, yellow fever, plague, typhus, and rift valley fever are among the most prevalent diseases in Africa. WHO together with other partners have initiated integrated vector management (IVM) as a new strategy for vector control. Integrated Vector Management takes into account the available infrastructure and resources, and integrates all available and effective chemical, biological, or environmental tools and measures on evidence based approach to achieve sustainable and efficient control of the vector. However, evidences to base the decision and skill to properly integrate all available vector control tools are often not found in disease endemic countries. Community participation is a key element in IVM approach. When considering available vector control options for decision making, community acceptance and participation in implementing the programmes are important to take into account for its sustainability and success.

There is need to increase capacity for vector control based on principles of IVM at national level in order to make full use of the power of vector control tools and thereby reduce reliance on DDT in disease vector control. Support is required to develop national infrastructure and strengthening human resource for planning, implementation and evaluation of IVM and sound management of public health pesticides.

With support of UNEP, a five day workshop was organized at ICIPE to strengthen in-country decision-making on IVM. A 2 weeks curriculum on IVM that was develop by WHO was tested during the one week workshop at ICIPE. The training combined lectures, group discussions and field visits.

1.1 Opening remarks by Director General of ICIPE

The training workshop was formally opened by Prof. Christian Borgemeister, the Director General, of ICIPE. In his opening remarks he emphasised the link between capacity building and technology transfer in regards to alternative solutions to vector control. With regard to DDT, he emphasised that there are enough alternatives to DDT and in his opinion there is no need for countries to revert to DDT use that is harmful to humans and the environment. He gave the experience of ICIPE in Integrated Pest Management (IPM) for that has proven to be a satisfying counterforce to use of pesticides. The Director acknowledged that there is no “silver bullet” and that intervention models have to be developed based on ecological peculiarities. Recognising that easy solutions are not sustainable solutions, there was a strong possibility that pesticide use will alternately lead to resistance by vectors and the gains made in disease control will be reversed.

1.2 Remarks by WHO/AFRO representative_ Dr. John Govere

On behalf of WHO, Dr. Govere expressed the support the regional office has given to capacity building on integrated vector management and the need for countries to embrace the new approach to vector control that operates under a dynamic system of governance. He noted that it was high time that sectors within and outside the Ministry of Health started working together to fight malaria and other vector borne diseases.

1.3 Remarks by UNEP representative – Dr. Gamini Manueera

Dr. Manuweera gave an overview of Global Alliance that was established at the COP4 meeting of the Stockholm convention in May 2009. He stated that the current workshop was addressing one of the five themes of the Global Alliance on development of alternatives to DDT. The theme is on strengthening of in-country decision-making on integrated vector management. He encouraged the participants to join anyone of the five themes which can be accessed at the UNEP website. He further stated that GEF is funding activities in the search for sustainable solutions to vector control as well as demonstration projects for alternatives to DDT in collaboration with the World Health Organization in capacity building at national and regional levels. He explained the role of Global Alliance in development of alternatives to DDT under five thematic groups:

1. Cost-effectiveness of alternatives to DDT;
2. Strengthening of in-country decision making on IVM;
3. Malaria vector resistant patterns and mechanisms;
4. Reduce barriers to bring new chemicals and products to market;
5. Reduce barriers to bring new non-chemical products to market.

1.4 Workshop objectives by Dr John Githure

Dr. Githure said that the workshop was convened at ICIPE in response to a request by the UNEP Secretariat to the Stockholm Convention on POPs to provide technical assistance to countries in the eastern and southern Africa region to fulfill their obligations under the convention on alternatives to DDT.

The training aims at:

1. To increase knowledge of participants on the principles of Integrated Vector Management (IVM) approach to vector borne diseases control;

2. To develop action plans for implementation of IVM strategy for disease vector control;
3. To contribute to information sharing on vector control through the Global Alliance website;
4. To tap on the GEF, UNEP, WHO, GF, etc. funding agencies to strengthen IVM initiatives in Africa as alternatives to chemical control.

Expected outcome:

1. Participants fully aware of IVM principals;
2. Participants act as ToTs for IVM advocacy in their countries;
3. Establish a network of vector control specialists;
4. Update on follow up actions on IVM implementation by ICIPE (establish a data base of trainees).

2.0 Workshop process and deliberations

The training workshop was conducted using the draft core curriculum developed by WHO headquarters as a pilot for testing six modules that included: a) Basics on vectors of human diseases, b) Policy and institutional arrangements, c) Planning and implementation, d) Monitoring and Evaluation, e) Advocacy and Communication and f) Organization and Management. The first three days were devoted to learning about malaria vector control in Africa, the Stockholm Convention with specific emphasis on DDT and group work on IVM as the way forward to reducing reliance on DDT.

One day was devoted to field visit in Mwea field study site where the participants learnt the organizational structure of IVM implementation as well as community based activities undertaken to control malaria. The training workshop was attended by 13 participants drawn from Kenya, Uganda, Tanzania, Ethiopia, Zambia Rwanda and Malawi (Annex 1).

2.1 Presentations

General Introduction to IVM: - John Githure

Dr. Githure presented an overview of integrated vector management and the steps the process has taken in WHO and partners to reach the current stage of global implementation.

A background understanding of the principles of IVM was deemed necessary for the participants since vector control is an essential component of any vector borne disease control programme. IVM was defined as the “the rational decision making process for the optimal use of resources for vector control. He highlighted the 5 key elements of IVM: a) Advocacy, social mobilization and legislation, b) collaboration within the health sector and partners, c) integrated approach, d) evidence based decision making and e) capacity building. He further highlighted that IVM should be cost-effectiveness, involve intersectoral action, and be sustainable. He said that a country can only be seen to implement IVM if all these areas are addressed at all times both at local and national level.

2.2 Summary of Country profiles

Prior to the commencement of the workshop, participating countries were requested to prepare country profiles on vector borne diseases in their countries. This exercise was aimed at gaining insights on the spectrum of vector borne diseases, the responsible control agencies, whether there is an effort to utilize IVM principals and the gaps or barriers for implementation of IVM.

The participants presented their country reports and had the following issues that were common in all countries:

1. The MoH is responsible for vector borne disease control and limited interactions exist within and between government departments, NGOs and private sector;
2. All countries reported that malaria was the major problem in their country;
3. Three countries, Uganda, Zambia and Ethiopia reported that they currently use DDT for spraying to control vector borne diseases. Ethiopia that has used DDT for many years was however reverting to the use of pyrethroids due to observed resistance to DDT. The country was encouraged to publish this information so that other countries can learn from it as they use this chemical for diseases control.

2.3 Lecture presentations

The facilitators gave presentations on the six modules as follows:

E. Kabiru: He highlighted module 1 on the basics on vectors of human diseases and appraised the participants with the life cycles and disease transmission. C. Mbogo continued with the module and highlighted the vector ecology and conditions under which vectors breed. Participants were requested to go round the campus and identify all

potential breeding habitats of mosquitoes. A number of habitats and their characteristics were presented by the participants.

J. Govere, F. Kihumba and J. Githure gave presentations on module 2 where they highlighted the policy and institutional arrangements for IVM and the problems and policy environment under which these arrangements should operate.

A. Githeko, C.Mbogo E. Momanyi and J. Githure presented module 3 which emphasized on planning and implementation of IVM. Monitoring and evaluation under module 4 was presented by A. Githeko, J. Govere and C. Mbogo who highlighted the importance of setting up indicators for vector control, methods of evaluation and vector surveillance.

J. Govere and C. Mbogo gave presentation on advocacy for policy makers and community empowerment under module 5. The last Module 6 on organization and management given by J. Govere and G. Manueera highlighted the integration and partnership with other sectors as well as resource mobilization. The details of the presentation are found in the programme (Annex 2).

3.0 Group work report

The participants were grouped into two to discuss the vector control needs in their regions as addressed in the 15 questions listed below. Group one comprised of Malawi, Tanzania and Zambia while group two comprised of Uganda, Kenya, Ethiopia and Rwanda.

QUESTIONS TO THE GROUPS:

1. Is there a vector control unit or department in the Ministry of Health and if so, how is it structured in the organization?
2. Is the vector control unit/department responsible for all vector-borne diseases?
3. Is there a focal person responsible for vector control of each of the different vector-borne diseases?
4. Is there a national strategic plan for vector control?
5. Identify key stakeholders in vector control (IVM);
6. In two sectors (e.g. Health and Agriculture or Environment), identify the conditions that are in support of vector control:
 - a. What are the common goals between these two sectors?
 - b. What are the barriers for collaboration with other sectors for participation in vector control?
7. How can each of the barriers listed above be resolved to address IVM?
8. Provide the names of training institutions in the country that conduct relevant training in the area of entomology and vector control;
9. Provide the names of research institutions in the country that carry out research on entomology and vector control;
10. Is the research conducted in collaboration with the Ministry of Health or other relevant agencies?
11. What are the linkages or collaboration between vector control programmes and research institutions and do they address real field problems related to IVM or vector control?
12. Who determines the operational research agenda?
13. How are the findings of research translated into action and policy in the country?

Group One

Question	Malawi	Tanzania	Zambia
1	Yes, but only for Malaria, under the NMCP unit	Yes, it's under Directorate for Preventive Services	Yes, only for Malaria, under dept of Public Health and Research (NMCC)
2	No	Yes	No
3	Yes, for Malaria only	Yes, not all diseases (esp. neglected Tropical Diseases)	Yes
4	Yes for Malaria	Yes for Malaria	Yes for Malaria
5	Research & Academic Institutions, Donors, NGO, MoA, MoE, Private companies	Research & Academic Institutions, Donors, NGO, MoA, MoE, MoLG	Research & Academic Institutions, Donors, NGO, MoA, MoLG, MoE, Private companies,
6	Health & Env: Environmental policy designed to prevent and control vectors	Health & Env: Environmental policy designed to prevent and control diseases, plus guidelines	Health & Env: Environmental policy designed to prevent and control diseases
7	Health & Env: all towards a clean, safe and healthy country	Health & Env: all towards a clean, safe and healthy country	Health & Env: all towards a clean, safe and healthy country
8	A lack of comprehensive integration of policy, programmes and plans	A lack of comprehensive integration of policy, programmes and plans	A lack of comprehensive integration of policy, programmes and plans
9	Advocacy for Integration of PPP	Advocacy for Integration of PPP	Advocacy for Integration of PPP
10	University of Malawi, (College of Medicine, Bunda College, Chancellor College)	University of Dar es Salaam, MUHAS, Tumaini University, Amani Vector Control Institute, (other research institutions: IHI,)	University of Zambia, Chainama Health Sciences College, Evelyn Hone, (other research institutions: TDRC, Macha)
11	University of Malawi, (College of Medicine, Bunda College, Chancellor College), NMCP	University of Dar es Salaam, MUHAS, Tumaini University, Amani Vector Control Institute, NIMR (other research institutions: IHI,)	University of Zambia, (other research institutions: TDRC, Macha, ZARI), NMCC
12	YES	YES	YES
13	MoH give specific roles and responsibilities to research institutions and feedback used for policy implementation. However, such institution may run independent projects. -Yes for the MoH directed research	MoH give specific roles and responsibilities to research institutions and feedback used for policy implementation. However, such institution may run independent projects. -Yes for the MoH directed research	MoH give specific roles and responsibilities to research institutions and feedback used for policy implementation. -Yes for the MoH directed research
14	MoH	MoH	MoH
15	Review of Policy, laws, Guidelines, Programmes, and Plans.	Review of Policy, Guidelines, Programmes, and Plans.	Review of Policy, Guidelines, Programmes, and Plans.

Group Two

Questions	Kenya	Ethiopia	Rwanda	Uganda
1	Yes: MOH-PS-Director-Department of Disease control and prevention (Division of Vector borne disease- Division of malaria control, DPT of Environmental health)	Yes: MOH-Disease prevention and control dept-Malaria and other vector borne diseases Unit –Vector control case team.	Yes: MOH-PS-TRACPlus (NMCP-Vector control, NTDs)-Environmental health desk	Yes: MOH-PS-DG-Director Community and Curative – Commissioner Community health (vector control division-Principal entomologist-entomologist-vector control officer-other staff)
2	Yes. Division of VBD	Yes. Malaria and other vector borne diseases Unit	None	Yes : Vector control division except malaria vectors (National disease control)
3	Yes	Yes	None	Yes
4	Yes	Yes	None	None
5	<ul style="list-style-type: none"> • Min of Education • Research institutions • Min of Agriculture • Min of Environment • Regulatory bodies • Min of Roads • Municipalities • NGOs • CSO and FBO • Private sector • Communities • Donor community 	<ul style="list-style-type: none"> • Min of Education • Min of Agriculture • Environmental authorities • Municipalities • NGOs • CSO and Faith-based Organisations • Private sector • Communities • Donor community 	<ul style="list-style-type: none"> • Min of Agriculture and animal resources • Environmental authority • Min of infrastructures • Regulatory bodies • Municipalities • NGOs • CSO and Faith-based Organisations • Private sector • Communities • Donor community 	<ul style="list-style-type: none"> • Min of Education • Min of Agriculture • Environment authority • Regulatory bodies • Research institutions • Municipalities • NGOs • CSO and FBO • Private sector • Communities • Donor community
6	<ul style="list-style-type: none"> • Common goal for health issues and poverty alleviation • Regulatory and policies tools 	<ul style="list-style-type: none"> • Common goal for health issues and poverty alleviation • Regulatory and policies tools 	<ul style="list-style-type: none"> • Common goal for health issues and poverty alleviation • Regulatory and policies tools 	<ul style="list-style-type: none"> • Common goal for health issues and poverty alleviation • Regulatory and policies tools
7	Social welfare, Poverty alleviation and sustainable development	Poverty alleviation and sustainable development	Social welfare, Poverty alleviation and sustainable development	Social welfare, Poverty alleviation and sustainable development

8	<ul style="list-style-type: none"> • Different strategies to reach the goals • Inadequate coordination mechanism focusing on IVM issues • Inequality in the resources allocation 	<ul style="list-style-type: none"> • Different strategies to reach the goals • Inadequate coordination mechanism focusing on IVM issues • Inequality in the resources allocation 	<ul style="list-style-type: none"> • Different strategies to reach the goals • Inadequate coordination mechanism focusing on IVM issues • Inequality in the resources allocation 	<ul style="list-style-type: none"> • Different strategies to reach the goals • Inadequate coordination mechanism focusing on IVM issues • Inequality in the resources allocation
9	<ul style="list-style-type: none"> • Harmonization of integrated strategic and action plans • Strong coordination mechanisms • Capacity building 	<ul style="list-style-type: none"> • Harmonization of integrated strategic and action plans • Strong coordination mechanisms • Capacity building 	<ul style="list-style-type: none"> • Harmonization of integrated strategic and action plans • Strong coordination mechanisms • Capacity building 	<ul style="list-style-type: none"> • Harmonization of integrated strategic and action plans • Strong coordination mechanisms • Capacity building
10	<ul style="list-style-type: none"> • Research institutions (KEMRI, ICIPE) • Universities (13) and mid-level colleges 	<ul style="list-style-type: none"> • Research institutions (3) • Universities (5) 	<ul style="list-style-type: none"> • Research institutions (2) • Universities (3) 	<ul style="list-style-type: none"> • Research institutions (2) • Universities (4) • School of medical entomology and parasitology
11	KEMRI, ICIPE, CDC, KARI, ILRI, KEFRI	Health and nutrition Institute, Agricultural Research Institute, ILRI	Kigali Health Institute, ISAE	Uganda Virus research institute, ILRI.
12	Yes	Yes	Yes	Yes
13	<ul style="list-style-type: none"> • Technical working groups, • Coordinating committees 	Weak linkages	Weak linkages	<ul style="list-style-type: none"> • Technical working groups, • Coordinating committees
14	Individual institutions	Ministry of science and technology and related institutes	<ul style="list-style-type: none"> • Individual institutions (Research @ education institutions) • National institute of statistics 	Individual institutions
15	Dissemination of research findings to the policy makers by (technical working group, Ministry inter agencies coordinating committee: MICC to minister, cabinet)	Dissemination of research findings to the policy makers by Ministry of science and technology and related institutes	<ul style="list-style-type: none"> • Dissemination of research findings to the policy makers by research institutions 	Dissemination of research findings to the policy makers by research institutions

6.0 Relevance of study site in Mwea

The field visit was conducted at sites managed jointly by ICIPE and Ministry of Agriculture in the Mwea Rice irrigation scheme in central Kenya. The participants visited this site because of the long-term association of the community with ICIPE. The participants gave the following feedback on the field visit:

- (a). The participants noted the close linkage between research, communities and other sectors in malaria control;
- (b). The field experience was useful as it put into perspective practical application of IVM in a rural community with limited resources;
- (c). Women groups are dynamic as channels for reaching the wider community and they should be encouraged to implement IVM strategy.

7.0 Conclusions and Recommendations

By countries:

- (a). Formulate and/or complete IVM policy development;
- (b). Facilitate capacity building at National level on IVM;
- (c). Encourage inter/intra sectoral collaboration for IVM implementation;
- (d). Conduct situation analysis for needs and resources for IVM strategy (Vector control needs assessment);
- (e). Encourage country exchange study tours for IVM learning;
- (f). Encourage community involvement in joint planning in decision making process regarding IVM implementation;
- (g). Establish a database of specialists engaged in vector control;
- (h). By WHO and UNEP;
- (i). Support model demonstration IVM projects at Local/National level;
- (j). Strengthen regional networking for information sharing, e.g Global Alliance website;
- (k). Organize joint review and planning meetings for IVM action plans for participating countries in east and southern Africa.

Annex I

List of Participants and Facilitators

ETHIOPIA

Mr. Mesfin Haile Assfaw
Health Promotion Disease Prevention Officer
Health Promotion Disease Prevention Directorate
Federal Ministry of Health
1234 Addis Ababa, Ethiopia
Tel.: +251 911 981572
Fax: +251 551 2691/9366
Email: mesbase@yahoo.com

Mr. Abdrie Seid Hassen
Public Health Officer
Pollution Control Department
Environmental Protection Authority
Addis Ababa, Ethiopia
Mobile: 251-913275837
Fax: +251-011-6464882/76
E-mail: esid@ethionet.et /abdrie@gmail.com

KENYA

Mr. Paul Kiptoo
Technical Officer, Vector Control
Division of Malaria Control
P.O. Box 19982
00202 Nairobi, Kenya
Tel.: +254 729 961 569
Email: pkiptoo@domckenya.or.ke

Ms. Mercy Ingosi
Inspector
Pest Control Products Board
P.O. Box 13794
00800-Nairobi
Kenya
Tel.: +254 (20) 444 6115
Fax: +254 (20) 444 9072
Email: pcboard@todays.co.ke or
mercyabner@gmail.com

MALAWI

Mr. Shadreck Mulenga
Environmental Health Officer
National Malaria Control Programme
Nkhotakota District Hospital
P.O. Box 50
Nkhotakota, Malawi
Tel.: +265 08888 63 978
Fax: +265 01 292 363
Email: shadmulenga@yahoo.com

Ms. Juwo Sibale
Senior Environmental Officer
Environmental Affairs Department
Ministry of Energy, Mines and Environment
Private Bag 394
264 Lilongwe
Malawi
Tel.: +265 (1) 771 111

Fax: + 265 (1) 888392930
Email: jjsibale@yahoo.co.uk

RWANDA

Mr. Emmanuel Hakizimana
Manager
Vector Control and Entomology Surveillance
National Malaria Control Programme/TRACPlus
P.O. Box 2514 Kigali, Rwanda
Tel.: +250-78-8303994
Fax: +250-252-576784
E-mail: ehakizimana@gmail.com

RWANDA

Mr Eliezer N Rusakana
Environmental Inspection Officer
Focal Point of Stockholm Convention on POPs
Rwanda Environment Management
Authority (REMA)
P.O Box 7436 Kigali
Tel: +250 788 683561
Email: rusakanael@yahoo.fr

TANZANIA

Ms. Jubilate Minja
Public Health Specialist
MOHSW - Preventive Department
National Malaria Control Programme
c/o NMCP, P.O. Box 9083
255 Dar Es Salaam, Tanzania
Tel.: +255 754 883485
Fax: +255 22 2124976
Email: jubbybm@yahoo.com

Mr. Charles Letinani Swai
Senior Environmental Management Officer
Division of Environment
Vice President's Office
P.O. Box 5380
Dar es Salaam, Tanzania
Tel.: +255-754-396700
Fax: +255-222-113856
Email: charlesswai@yahoo.com

UGANDA

Mr. Tom Byembabazi
Medical Vector Control Officer
National Disease Control
National Malaria Control Programme
Ministry of Health
P.O. Box 7272
Kampala, Uganda
Tel.: +256-77 629987
Email: bye3149@yahoo.com

ZAMBIA

Mr. Maxwell Nkoya
Senior Inspector

Pesticides and Toxic Substances
Environmental Council of Zambia
P.O. Box 35131, Lusaka
Zambia
Tel.: +260-211-254023
Fax: +260-211-254164
Email: mnkoya@necz.org.zm or
maxnkoya@yahoo.com

Mr. Chadwick H. Sikaala
IRS Specialist, Principal Indoor Residual Spraying
Officer (PIRSO)
National Malaria Control Centre (NMCC)
P.O. Box 32509
10101 Lusaka, Zambia
Tel.: +260 211 282455
Fax: +260 211 282427
Email: chsikaala@yahoo.co.uk

FACILITATORS

Dr. John Muchada Govere
Medical Officer - Entomologist
Malaria
WHO-Inter-country Support Team for ESA
WHO – IST for ESA, 86 Enterprise Road, P O
Box C348,
263 4 Harare, Zimbabwe
Tel.: +263 4 253724
Fax: +263 4 253731-2
Email: goverej@zw.afro.who.int

Dr. John Githure
Head, Human Health Division
International Center for Insect Physiology and
Ecology (ICIPE)
Kasarani, off Thika road
P.O. Box 30772
Nairobi, Kenya
Tel.: +254 20 8632000/ 863 2090
Fax: +254 20 8632001/2
Email: jgithure@icipe.org

Dr Gamini Manuweera
Programme Officer
Secretariat of the Stockholm Convention
United Nations Environment Programme
15 Chemin des Anemones, Chatelaine
1219 Geneva, Switzerland
Tel. : +41 22 9178604
Fax : +41 22 9178098
Email : gmanuweera@pops.int

Dr. Andrew Githeko
Chief Research Officer
Head: Climate and Human Health Research Unit
Centre for Global Health Research
Kenya Medical Research Institute
P.O Box 1578-40100
Kisumu, Kenya
Mobile: +254 722 849382

Email: githeko@yahoo.com Dr. Charles M
Mbogo
Chief Research Officer
Kenya Medical Reserch Institute
Centre for Geographical Medicine Research
P.O Box 428 – 80108
Kilifi, Kenya
Tel. +254 41 7522063/7522535
Fax: +254 41 7522390
Email: cmbogo@kilifi.kemri-wellcome.org

Prof. Ephantus W Kabiru
Chairman Department of Pathology
Kenyatta University
P.O Box 43844 – 00100
Nairobi, Kenya
Email: kabiru.ephantus@ku.ac.ke or
ewkabiru@yahoo.com

Mr. Francis Kihumba
Coordinator, Strategic Approach to International
Chemicals Management
Ministry of Environment and Mineral Resources
P.O Box 30521 – 00100
Nairobi, Kenya
Tel: 254 20 2730808/ 254 0722431110
Email: kihumbafn@yahoo.com

Mr. Eric Momanyi
Analyst/Modeler
Millennium Institute
2111 Wilson Blvd, Suite 700
Arlington, VA 22201-3052, USA
Tel: 254 726 890113
Fax: +1-703 3519292
Email: em@millennium-institute.org

Annex II

Training Programme on strengthening of country capacities to implement integrated vector management (IVM)

Nairobi, Kenya, 7 – 11 June 2010

Sun 6 June	Arrival	
Mon 7 June		
09.00 am	Welcoming Remarks	Director General - icipe
	Brief remarks	WHO - J. Govere UNEP – G. Manuweera
	Introductions	Participants
	Objectives of the workshop and House keeping	J. Githure
10.30 am	Coffee Break	
11.00 am	General introduction to IVM	J. Githure
11.30 am	Module I: Basics on vectors of human disease: Unit 1.2. Vector lifecycle Unit 1.4. Disease transmission	E. Kabiru
01.00 pm	Lunch Break	
02.00 pm	Module I: Basics on vectors of human disease cont.: Unit 1.3. Vector Ecology	C. Mbogo
03.00 pm	Country profile on vector-borne diseases	Participants
04.00 pm	Coffee Break	
04.15 pm	Module II: Policy & institutional arrangements: Unit 2.1. Problem analysis in vector control	J. Govere
05.15 pm	End of day 1	
Tue 8 June		
08.30 am	Module II: Policy & Institutional arrangements cont: Unit 2.2. Policy environment for IVM	F. Kihumba
09.30 am	Module II: Policy & Institutional arrangements cont: Unit 2.3. Institutional arrangements	J. Githure
10.30 am	Coffee Break	
11.00 am	Module III: Planning and implementation: Unit 3.1. Epidemiological assessment Unit 3.2. Stratification	A. Githeko
12.00 pm	Module III: Planning and implementation cont.: Unit 3.3. Vector assessment Unit 3.4. Local determinants of disease	C. Mbogo
01.00 pm	Lunch Break	
02.00 pm	Module III: Planning and implementation cont.: Unit 3.5. Selection of vector control methods	E. Momanyi
03.00 pm	Module III: Planning and implementation cont.: Unit 3.6. Needs and resources	J. Githure
04.00 pm	Coffee Break	
04.15 pm	Module III: Planning and implementation cont.: Unit 3.7. Implementation strategy	C. Mbogo
05.15 pm	End of day 2	

Wed 9 June		
08.00 am	Depart for Mwea, Central Kenya - malaria study site	Participants
05.15 pm	Back to Nairobi and End of day 3	
Thur 10 June		
08.30 am	Module IV: Monitoring and Evaluation: Unit 4.1. Indicators	A. Githeko
09.30 am	Module IV. Monitoring and Evaluation cont.: Unit 4.2. Methods of evaluation	J. Govere
10.30 am	Coffee Break	
11.00 am	Module IV: Monitoring and Evaluation cont.: Unit 4.3. Vector surveillance	C. Mbogo
12.30 pm	Lunch Break	
02.00 pm	Module V: Advocacy and Communication: Unit 5.1. Advocacy to policy makers	J. Govere
03.00 pm	Module V: Advocacy and Communication cont.: Unit 5.3. Community empowerment	C. Mbogo
04.00 pm	Coffee Break	
04.15 pm	General Discussions	C. Mbogo
05.15 pm	End of day 4	
Fri 11 June		
08.30 am	Module VI: Organization and Management: Unit 6.1. Integration within the Health sector Unit 6.2. Partnership with other sectors	J. Govere
09.30 am	Module VI: Organization and Management cont.: Unit 6.3. Mobilization of resources	G. Manuweera
10.30 am	Coffee Break	
11.00 am	General Discussions	E. Kabiru
12.30 pm	Lunch Break	
02.00 pm	Conclusion and Recommendations	J. Githure
03.30 pm	Closing remarks	G. Manuweera
04.00 pm	End of day 5	
Sat 12 June	Departure	