Integrated Vector Management and Capacity building for Vector Control

by

Drs K. Ichimori and R. Velayudhan
Vector Ecology and Management
NTD/HTM
WHO, Geneva
Definition of IVM

A rational decision-making process for the optimal use of resources for vector control
A Growing Need for Integrated Vector Management

- IVM enables social / environmental changes to be addressed effectively in an intersectoral framework.

- IVM helps to consolidate and sustain public health achievements from global malaria initiative.

- IVM principles will contribute to the judicious use of available insecticides.
IVM: WHO Global Strategic Framework

2004

Five Key Elements:

- Advocacy, social mobilization and legislation
- Cross sector collaboration
- Integrated approach
- Evidence-based decision-making
- Capacity-building
IVM Global Development

May 2007

December 2008
Regional Resolution

**EMRO: The Eastern Mediterranean**

2005

**AMRO: The Americas**

2008

*Integrated Vector Management*

**Resolution**

**Regional Committee for the Eastern Mediterranean**

**Fifty-second Session**

**Agenda Item 5 (a)**

**INTEGRATED VECTOR MANAGEMENT**

The Regional Committee,

Having reviewed the technical paper on the importance of vector-borne diseases as a re-emerging public health problem,

Recognizing that a shift to a genuine integrated vector management approach would offer countries opportunities to address the current problems in vector control,

Appreciating the need to develop national integrated vector management strategies and plans,

Commend the importance of strengthening the national and regional capacities in entomology and vector control,

1. **REQUESTS** Member States to
   1.1 Establish or strengthen national units for integrated vector management and ensure adequate human and financial resources;
   1.2 Establish a functional intersectoral mechanism for the collaboration and coordination of all related activities;
   1.3 Identify needs, gaps and opportunities for vector control and develop national integrated vector management strategies and plans for all vector-borne diseases;

---

*Document No. EM/RC52/5*
IVM and the future of vector control

April 2008

• IVM is a rational decision-making process for the optimal use of resources for vector control
WHO Position Statement on IVM

Attributes:

- Cost-effectiveness
- Intersectoral action
- Subsidiarity
- Relevance of local eco-epidemiology
- Sustainability
- Appropriate public health regulatory and legislative framework
National policy development for IVM

- Concept
  - Global Strategic Framework

- Global Policy
  - Position Statement on IVM
    - WHA Resolution

- Global Agenda
  - Regional Resolution (EMRO, AMRO)

- Regional Agenda
  - National Policy

- National Policy
  - Country implementation

Country implementation

- AMRO
- EMRO
A Path from Concept to Actions

Concept
Global Policy
Global Agenda
Regional Agenda
National Policy

Capacity Building
Advocacy
Collaboration
Evidence based Decision Making
Integrated Approach

Global Policy
Global Agenda
Regional Agenda
National Policy

Actions: Vector Control Programme

Partnership and Network
The concept of Integrated Vector Management.

The Global Strategic Framework for IVM.

A WHO consultation meeting on Integrated Vector Management (IVM).

The Regional Strategy for Vector control

Biregional plan for dengue control (includes IVM)

A workshop to introduce IVM

WPRO the draft Regional Strategic Plan for IVM

WHO Position Statement on IVM

2nd consultation on IVM

Stakeholders meeting

Global Workplan

National policy and Training on IVM

Regional Strategy for IVM

Regional Training on IVM

Regional Meeting on IVM

National Training on IVM

Stakeholders meeting

Regional Training on IVM

Biregional plan for dengue control (includes IVM)
IVM
Global Strategic and Action Plan
Global Strategic Plan and Action Plan

Area 1: Capacity-building and training

Area 2: Advocacy and Collaboration

Area 3. Evidence-based decision making and integrated approach
Global Action Plan – Three Major Areas of Action

Advocacy

Capacity-building

Evidence-based
Area 1: Capacity-building and training

Expected Result 1. Capacity increased for vector control based on principles of IVM at national, regional and global levels

1. Support development of national infrastructure and career opportunities, and strengthening human resources for planning, implementation and evaluation of IVM and sound management of public health pesticides.

2. Develop guidelines and training documents for implementation and evaluation of IVM and sound management of pesticides.

3. Support resource mobilization for IVM, including community participation, for effective and sustainable delivery of vector control interventions.
Area 2: Key Elements 2 & 3. Advocacy and Collaboration

Result 2. Advocacy, social mobilization and legislation framework established in support of IVM within the health and other sectors

1. Develop advocacy plans and promote IVM principles in health policy for NTDs with partners

2. Support the establishment and/or strengthening of policy and legal frameworks for IVM and sound management of public health pesticides

3. Establish or strengthen global and regional collaboration and coordination, exchange of information and rational use of resources and expertise for IVM and sound management of pesticides.
Area 3. Key Elements 4 & 5. Evidence-based decision making and integrated approach

Result 3. Evidence-base established and utilized for rational decision making for NTDs and other vector-borne diseases

1. Develop and use mechanisms for monitoring implementation of IVM and sound management of pesticides by Member States

2. Identify operational research needs and develop safe and cost-effective tools and approaches.

Advocacy Working Group Meeting Recommendations

- To ensure strong participation of other relevant programmes in WHO/HQ on IVM activities
- To compile and document success stories for IVM advocacy
- Support towards the preparation of the stakeholders meeting
- Resource-mobilization campaign
Capacity Strengthening Working Group Meeting
Recommendations

- Development of core training curriculum on IVM with training modules (based on the Handbook). This will assist the Regions and partner organizations in harmonizing their training materials.

- WHO is requested to facilitate networking, communication and collaboration on IVM between the partner institutions, and to open up conversation with specialists in relevant disciplines, such as ecosystem management, business management and IPM.

- Ongoing efforts to establish a web-based information portal on IVM, with linkages to individual partner websites, need to be accelerated.
Evidence-based Decision Making and Integrated Approach Working Group

Priority research areas are:

- Basic biology (mostly of vectors)
- One intervention versus multiple diseases
- Combinations versus single interventions
- Household and community issues
- Environmental issues
- New technologies
- Intersectoral issues
- Stratification and decision support
- Systems issues (IVM is a platform to strengthen health systems for delivery of vector control interventions)
Key activities planned for IVM

- Develop an IVM network
- Further develop database on research institutions relevant to IVM
- Compilation of case studies on IVM
- Consolidate M&E framework for IVM
- Regional and national Training courses
- Collaborate with Global Fund programs where ever possible
Capacity building for Vector Control

- Long duration Courses
  - Post graduate courses
  - Diploma courses

- Intermediate duration courses
  - In service training
  - Global fund supported workshop

- Short term courses
  - ACTMalaria
  - RTI

- Others – Can distance learning be a reality?
Role of Entomologist today

- The need:-
  - Planning of programs
  - Implementation
  - Monitoring and Evaluation
  - Quality Control of products
  - Role in malaria elimination

- Skill Requirements
  - Integration of malaria with other programmes
  - Community Vector Control
  - Intersectoral coordination
  - Monitoring and management of insecticide resistance
  - Management of insecticides
The Challenge:

- Harmonisation of training
- Cascading skills in countries
- Mosquito and vector taxonomy (IHR 2005)
- Career pathway and integration
- Regional expertise and emergency needs
- Management of outbreaks
Thank you