



Demonstrating and Scaling-up of Sustainable Alternatives to DDT in Vector Management Global Programme (Global DSSA Programme)

The DSSA Programme in Africa at a glance

Purpose of the document:

*To describe the scope behind a series of already approved, on-going, or planned projects supported by UNEP and WHO under the DSSA Programme addressing alternative approaches to DDT use in vector control for malaria and other vector-borne diseases **in Africa**.*

1. DSSA Programme Objective and Expected Results

The Global Programme aims at the protection of human health and the environment through the reduction of emission of DDT into the global environment by means of decreasing the use of DDT through introduction, demonstration and scaling-up of sustainable alternatives to DDT in disease vector management, for example for malaria. **For Africa, 5 projects including 18 countries will be involved.**

2. Background and Programme Rationale

Malaria is one of the greatest public health challenges facing the developing world. World Health Organization (WHO) data indicate that malaria causes over 1 million deaths per year, with over 90% of those deaths occurring in sub-Saharan Africa.¹ Malaria causes over 300 million cases of acute illness each year. Children account for over three-quarters of these cases, and malaria kills an African child every 30 seconds.² Beyond the immediate disease burden, malaria incurs devastating costs on local economies, both direct costs of treatment and prevention and indirect costs of lost productivity. This burden is especially great in the tropical developing world where malaria most often occurs.³

Currently more than 10 countries use DDT in Malaria vector control in Africa, or are preparing to use DDT.

Perhaps the most controversial strategy for battling malaria and other vector-borne diseases is **the application of DDT in IRS** programs. Spraying indoor surfaces with DDT has been highly effective in interrupting malaria transmission in many developing countries. DDT, as a persistent organic pollutant, is toxic. Because of its chemical stability, it is slowly metabolized, it ac-

¹ World Health Organization. 2002. Roll Back Malaria Program brochure: "What is Malaria?" Available: <http://www.who.int/inf-fs/en/InformationSheet01.pdf>

² Ibid.

³ ---. 2003. Roll Back Malaria Program Fact Sheet #94 "Malaria in Africa". Available: http://www.rbm.who.int/cmc_upload/0/000/015/370/RBMInfosheet_3.htm.

cumulates in the environment through food chains and in tissues of exposed organisms and is potentially harmful to wildlife and to humans. DDT and its residues build up in the food chain, and it is potentially harmful to wildlife and to humans, if not applied in accordance with WHO guidelines and recommendations. Chlorinated hydrocarbon pesticides such as DDT, which became widely used in the 1940s, are slowly metabolized, accumulate in living tissue, and can affect the health of humans and wildlife. There is now considerable debate and increased suspicion regarding the ability of DDT and other pesticides to disrupt the endocrine systems of mammals. New evidence is being published about links between low-level DDT exposure and adverse health effects, in particular related to childhood neurodevelopment, breast cancer in women, male reproductive health (reduced sperm counts and quality) and to diabetes.

3. Building on existing structures and networks

It is paramount for an efficient and effective implementation of the DSSA programme in Africa global programming to build on and use existing structures, mechanisms, and networks, such as national health and vector control programmes executed by **national Ministries of Health**, many times **in collaboration with donors and the WHO**, like national, regional and sub-regional action programmes under WHO, etc. New project initiatives will include **the Civil Society- and NGO groups** in order to reach the largest proportion of the society possible.

4. Program Partners and Africa contacts

<p>United Nations Environment Program UNEP Headquarters Nairobi, Kenya Tel. +254 20 762 4607 <i>Contact person: Jan Betlem</i> Jan.Betlem@unep.org</p>	<p>World Health Organization WHO Headquarters Geneva, Switzerland Tel. +41-22-791 1088 <i>Contact person: Stephanie Guillaneux</i> Guillaneuxs@who.int</p>
<p>World Health Organization WHO Regional Office North Africa & Middle East Egypt Tel. +20-222765271 <i>Contact person: Abraham Mnzava</i> mnzavaa@emro.who.int</p>	<p>World Health Organization WHO Regional Office for Africa Congo Brazzaville Tel. +47 24139338 <i>Contact person: Lucien Manga</i> mangal@afro.who.int</p>
<p>Global Environmental Facility 1818 H Street, NW Washington, DC 20433 Tel. 202 473 2340 <i>Contact person: Robert K. Dixon</i> Rdixon1@thegef.org</p>	<p>Global Environmental Facility 1818 H Street, NW Washington, DC 20433 Tel. 202 473 2716 <i>Contact person: Ibrahima SOW</i> Isow@thegef.org</p>

Annex 1: Demonstrating and Scaling-up of Sustainable alternatives (DSSA) to DDT in Vector Management

Provisional Project Titles and country involvement for DSSA Programme in Africa initiatives at a glance

(provisional) country	Demonstrating Cost-effectiveness and Sustainability of environmentally Sound and Locally appropriate alternatives to DDT for Malaria Vector Control in Africa (AFRO I)	Demonstration of Sustainable Alternatives to DDT and strengthening of National Vector control Capabilities in Middle East and North Africa	Malaria Decision Analysis Support Tool (MDAST): Evaluating Health, Social and environmental Impacts and Policy Tradeoffs.	Establishment of efficient and effective data collection and reporting procedures for evaluating the continued need of DDT for disease vector control
	<i>Time table:</i> 2009-2014	2008-2013	2009-2012	
Djibouti		X		
Egypt		X		
Eritrea	X			X
Ethiopia	X			X
Kenya			X	
Madagascar	X			X
Mauritius				X
Morocco		X		X
Mozambique				X
Namibia				X
Senegal				X
South Africa				X
Swaziland				X
Sudan		X		
Tanzania			X	
Uganda			X	X
Zambia				X

Under this program, UNEP/WHO are also planning to submit a regional project in Africa (AFRO II, covering Mauritius, Morocco, Mozambique, Namibia Senegal, South Africa, Swaziland Uganda and Zambia) for 2010 - 2015