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

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Implemented by
United Nations Environment Programme
Executed by
World Health Organization - (HQ & Regional Offices)
Duke University
World Wildlife Fund
Green Cross International
and the stakeholders of participating countries

Approved by GEF Council on 23 April 2008
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Objective

 to protect human health and the environment through the reduction of DDT release into the global environment.

by:

 decreasing the use of DDT through the introduction, demonstration and scaling-up of sustainable alternative approaches in disease vector management.





World Health Assembly Resolution 50.13, 1997:

Members States "to take steps to reduce reliance on insecticides for control of vector borne diseases through promotion of integrated pest management approaches in accordance with WHO guidelines..."





"No change in global DDT use in recent years"

"South-East Asia used the greatest amount of DDT at 3623 tons of active ingredient per year which is 82% of global use of DDT. The remainder was used in Africa."

(c.795 t per year in Africa)

"Global use of DDT was fairly constant from 2000 to 2009, indicating little impact of the Stockholm Convention on the use of DDT. India has shown a modest decline but there was a sharp increase in Africa until 2008 owing to expanding programmes on indoor spraying. Since 2008, there has been a decrease in DDT use in Africa ... accompanied by an increase in the use of pyrethroids."

European Commission: DG Environment News Alert Service, 12 July, 2012

http://ec.europa.eu/environment/integration/research/newsalert/pdf/292na3.pdf







Demo Project: Malaria control in Mexico and Central America in the context of elimination of DDT use

Target – highly malarial areas in 8 countries including Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama

Time Period - 2003 to 2009

Executing agency - PAHO, national and local governments

Implementing agency - UNEP

Co-funding - GEF, Roll Back Malaria Initiative, Global Fund against HIV/AIDS, Malaria and Tuberculosis, PAHO and Countries

Total Budget - about 13,8 million US \$ (GEF: 7,4 million)

Objectives:

- Demonstrate integrated and environment-friendly methods for malaria vector control without the use of DDT or other pesticides;
- Assess the effects of these methods on malaria occurrence;
- Dispose stockpiles of DDT/POPs pesticides (200t)



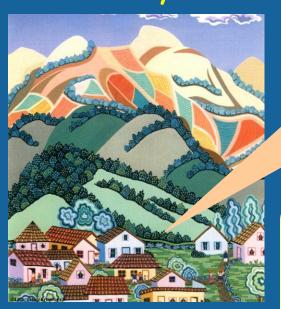




Project Activities

Promoting a decentralized participatory approach

Environmental management at community level



Planting of trees with mosquito repellent properties; Focal treatment in "malaria house" and neighbouring contacts; Biological control with larvivorous fish:

Personal application of natural, locally available repellents;
Personal hygiene;
Use of bed nets;
Awareness raising & education;









Control: traditional methods (including other chemical pesticides but not DDT), focused treatment of malaria cases

Disposal of 200 tons of POPs pesticides



Summary of results

At the country level

- Overall; malaria cases in demonstration areas decreased as a proportion of national cases
 - (3.6 % in 2004 to 1.8 % in 2007)
- ·National reductions in cases in demonstration areas from 2002 to 2006 varies:
 - (26.6 % in Guatemala to 80.4 % in Belize)
- *Statistically significant differences in incidence decreases between demonstration and control groups (2006 31%, 2004 15%)

At the village level

Malaria incidence reduction:
demo villages >> controls
 ~ 30% of annual cases
 (>600) avoided in demo
 villages

Reduction of malaria cases =
avoided loss of 10 person

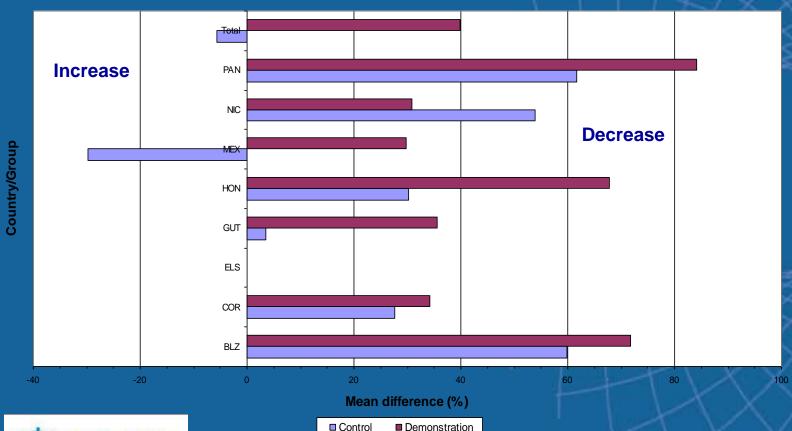
work year per year







Changes in malaria parasite incidence in demonstration and control villages



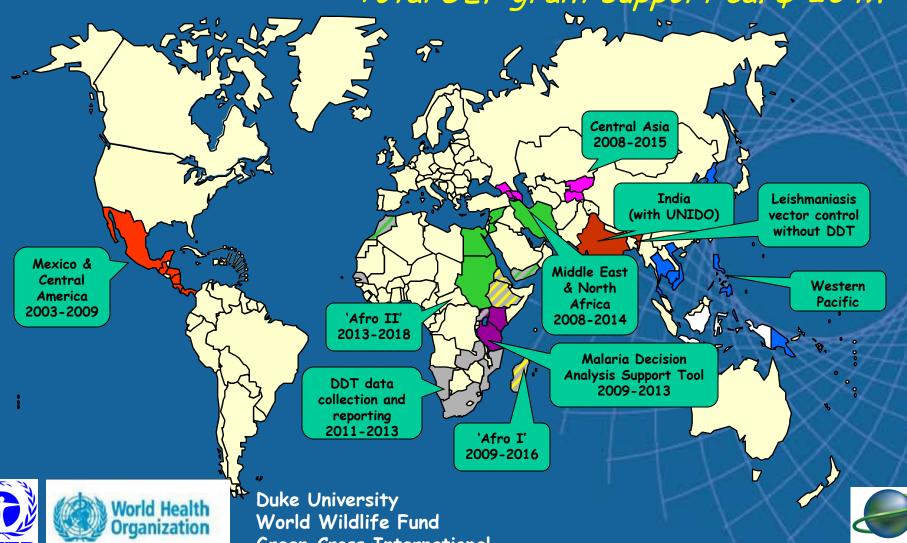






The DSSA programme

Total GEF grant support ca. \$ 20 M







Green Cross International

Opportunity to strengthen links between the DSSA programme, the DDT Global Alliance and key actors:

exchanging policy advice, replicating best practices and learning practical lessons to improve vector control without DDT.

Thank You

David Piper United Nations Environment Programme





