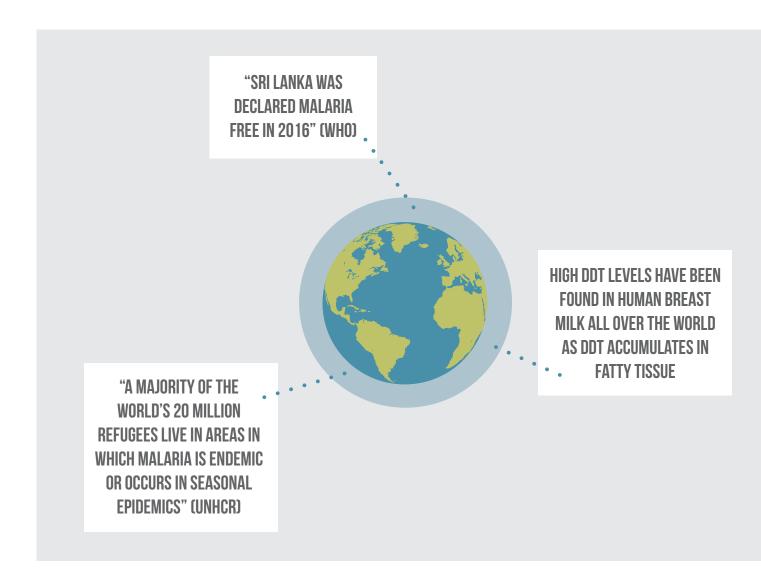
TOWARD ALTERNATIVES TO DDT

INTRODUCTION TO DDT

DDT, or dichlorodiphenyl trichloroethane, is a chemical that has dangerous effects on the environment and human health. To date, DDT is used as an insecticide for disease vector control, for example to fight malaria and leishmaniosis.



A TRANSITION AWAY FROM DDT TOWARD LOCALLY SAFE, EFFECTIVE, AFFORDABLE AND ENVIRONMENTALLY SOUND ALTERNATIVES IS KEY FOR A SUSTAINABLE FUTURE.

HEALTHY PLANET HEALTHY FOOD HEALTHY ENVIRONMENT HEALTHY PEOPLE Environmentally Sound DDT accumulates in fatty A healthy environment Management of DDT and tissue and concentrates and healthy food reduces responsible use is important people's exposure to toxic higher up in the food chain. Monitoring DDT levels chemicals. for a healthy environment. Once in the environment, and keeping these below international standards is DDT can persist for long periods of time (100+ years) essential for guaranteeing and travel great distances healthy food. across international boundaries. ⅉ

The Stockholm Convention is a global treaty that aims to protect the environment and human health from DDT and other chemicals, called Persistent Organic Pollutants. It restricts DDT production and/ or use only for disease vector control purposes.



The Global Alliance is a global multi-stakeholder mechanism under the Stockholm Convention that promotes the development and deployment of alternative products, methods and strategies to DDT for disease vector control.

The Global Alliance addresses two key themes:



The Way Forward for a Transition Away from DDT

ALTERNATIVES TO DDT

Inventories, Safe Storage and Elimination

DDT STOCKPILES





A GLOBAL PARTNERSHIP

THE GLOBAL ALLIANCE

A global multi-stakeholder mechanism that promotes and encourages the development of effective, affordable and environmentally sound alternatives to DDT for disease vector control.



THE GLOBAL ALLIANCE

The Global Alliance was established by the Conference of the Parties (COP) to the Stockholm Convention at its fourth meeting in 2009 (decision SC-4/2). The Global Alliance leads the way toward developing alternatives to DDT by:

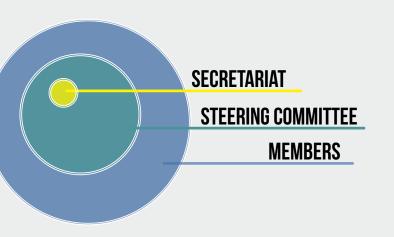
- Defining strategies and facilitate activities
- Providing targeted assistance and developing guidance materials
- Raising awareness
- Encouraging global and regional coordination and exchange of information between different stakeholders

The Global Alliance provides updates on progress of work to every meeting of the COP to the Stockholm Convention and the United Nations Environment Assembly (UNEA). At these meetings, important decisions are made regarding the activities of the Global Alliance.

Strengthen the means of implementation and revitalize the global partnership for sustainable development.



Source: Global Environment Facility



A MULTI-STAKEHOLDER MECHANISM

The Global Alliance is coordinated by the secretariat, hosted by UN Environment's Chemicals and Health Branch. The secretariat works in close collaboration with the Basel, Rotterdam and Stockholm Conventions Secretariat.

The Global Alliance is composed of a Steering Committee and Global Alliance members. The Steering Committee oversees the work of the Global Alliance and meets annually to review the activities undertaken and establish the direction for future work. Membership to the Global Alliance is open to governments, intergovernmental organizations, donors, nongovernmental organizations, industry, experts/academia, Stockholm and Basel Conventions Regional Centres and business sectors.

ACTIVITIES

The Global Alliance undertakes a number of activities within the context of the Road Map for the Development of Alternatives to DDT. The Road Map provides a thematic guide and sketch the steps that are needed for the development and deployment of alternatives to DDT for the purpose of disease vector control to Parties to the Stockholm Convention and other global stakeholders.

The Global Alliance is a key stakeholder for the coordination and implementation of the Road Map for the Development of Alternatives to DDT. The secretariat of the Global Alliance reports progress on implementing the Road Map to the COP, including the global situation of DDT need, production, trade, use, environmental and human exposures, Global Environment Facility (GEF) projects, progress on developing chemical and non-chemical alternatives and elimination of DDT stockpiles.

Other concrete activities by the Global Alliance include assisting with preparations for the COP; coordinating the UNEA; and coordinating meetings of the Steering Committee.

CONTACT US!

Do you have questions about the Global Alliance or its activities? Would you like to become part of the Global Alliance?

E-mail: science.chemicals@unep.org

or visit the **Global Alliance page on our website** web.unep.org/chemicalsandwaste

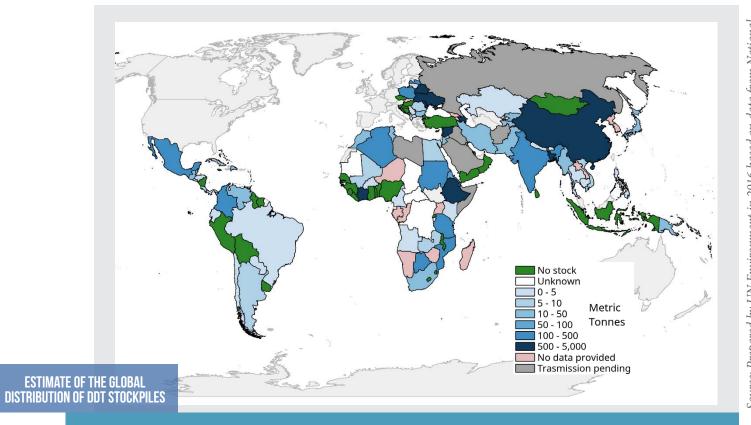






INVENTORIES, SAFE STORAGE AND DISPOSAL DDT STOCKPILES

Safe chemicals management is key for a healthy environment.



STOCKPILES

DDT storage for future use

OBSOLETE STOCKPILES

Useless DDT amounts in storage

The global amount of stockpiles is estimated at 20,000 tonnes, of which the majority are obsolete stockpiles. However, the amount is expected to be much higher. The largest stockpiles are likely to be located in former Soviet Union countries, Africa and China.

Source: Prepared by UN Environment in 2016 based on data from National Implementations Plans, the Effectiveness Evaluation, and DDT Questionnaire

INVENTORIES

Each Party to the Stockholm Convention is required to gather information on DDT stockpiles. The table below shows the number of countries per region that have stockpiles according to National Implementation Plans (NIPs) and other sources.

DDT STOCKPILES IN METRIC TONNES (MT)

Region	N° of Countries	NIP	Other sources
AFRICA	21	1,116	9,271
GROUP OF LATIN AMERICAN AND CARIBBEAN COUNTRIES (GRULAC)	15	213	50
ASIA-PACIFIC	17	645	1,918
CENTRAL AND EASTERN Europe (CEE)	12	7,536	404
TOTAL	65	9,510	11,643
TOTAL AMOUNT OF STOCKPILES	21,153		

Data on global stockpiles from National Implementation Plans is often outdated and unreliable.

TRANSBOUNDARY TRANSPORT AND DISPOSAL

A limited number of countries in the world has the capacity to dispose of DDT stockpiles. In many cases, transboundary transport by water or land is necessary prior disposal. The Basel Convention provides technical guidelines for transboundary transport of hazardous chemicals. Some frequently faced issues with regard to transboundary transport are legal aspects, import and export bans and high costs.

SAFE STORAGE

Safe management of DDT stockpiles is key to prevent contamination of the environment and to avoid any exposure to humans.

Safe chemicals management can prevent DDT from entering the environment. Remediation of contaminated sites results in healthy soils and clean water.



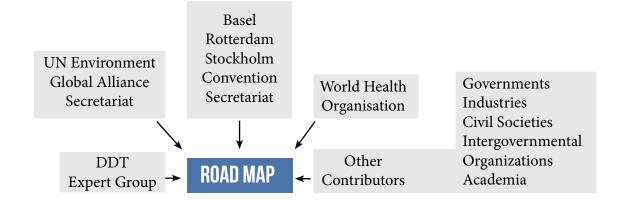




THE WAY FORWARD FOR A TRANSITION AWAY FROM DDT

THE ROAD MAP FOR THE DEVELOPMENT OF ALTERNATIVES TO DDT

Promoting locally safe, effective, affordable and environmentally sound alternatives.



The Road Map for the Development of Alternatives to DDT was developed in 2015 by UN Environment, in consultation with the World Health Organization (WHO) and the DDT Expert Group and the Secretariat of the Stockholm Convention, as assigned under a mandate of the Conference of the Parties (COP) to the Stockholm Convention on Persistent Organic Pollutants (POPs).

The purpose of the Road Map is to provide a thematic guide and sketch the steps that are needed for the development and deployment of alternatives to DDT for the purpose of disease vector control to Parties to the Stockholm Convention and other global stakeholders.

KEY ELEMENTS OF THE ROAD MAP FOR THE DEVELOPMENT OF ALTERNATIVES TO DDT

PART 1: ESTABLISH OVERALL ROADMAP MANAGEMENT AND REPORTING PROCEDURES

- Coordinate and implement the Road Map and provide funding
- Prepare assessment reports, monitor developments and evaluate progress (Linkages to Effectiveness Evaluation)

PART 2: IMPLEMENT THE ROADMAP

- Strengthen the base of knowledge for policy formulation and decision making
- Strengthen country and local capacities to manage insecticide resistance, develop and implement Integrated Vector Management (IVM) strategies, asses and deploy alternatives
- Develop and deploy chemical alternatives to DDT for Indoor Residual Spraying (IRS)
- Sharing experiences and upscaling the application of non-chemical alternatives

PART 3: ELIMINATE DDT STOCKPILES AND WASTE

- Update national inventories
- Collect obsolete stocks
- Repackage and dispose DDT stockpiles

CHEMICAL AND NON-CHEMICAL ALTERNATIVES FOR A TRANSITION AWAY FROM DDT

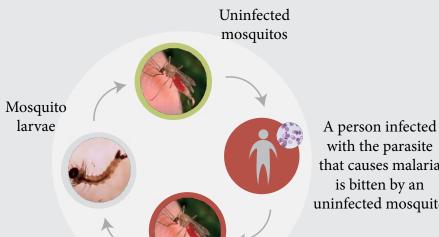
LARVAL DEVELOPMENT CONTROL

Examples of non-chemical alternatives

- Environmental modification of mosquito breeding sites
- Use of bacterial or botanical larvicides

Examples of chemical alternatives

Use of larvicides



that causes malaria uninfected mosquito

Now, the mosquito becomes infected and can transmit the parasite that causes malaria to other uninfected people

INTEGRATED VECTOR MANAGEMENT (IVM)

Examples of non-chemical alternatives

- Housing improvements
- Botanical repellents and bed nets
- Mosquito traps and targets
- Botanical pesticides (pyrethrum)

<u>Examples</u> of chemical alternatives

- Indoor Residual Spraying (IRS)
- Long-lasting Insecticidal Nets (LLINs)
- Chemical repellents



MALARIA PARASITE CONTROL

Examples of non-chemical alternatives

Use of medicinal herbs

of chemical alternatives

- Chemoprophylaxis
- Chemotherapy

THE WAY FORWARD

Key elements for the way forward include a coordinating body, fund raising and further defining other activities, including collecting comprehensive data, sharing best practices, projects, capacity building and awareness raising.

Promoting chemical and non-chemical alternatives to DDT is part of sustainable industrialization





