

# Reduction and Elimination of Persistent Organic Pollutants (POPs) in China

## *Alternatives to DDT Usage in the Production of Antifouling Paint*

### The Challenge

Persistent Organic Pollutants (POPs) are chemicals that remain intact in the environment for long periods, accumulate in living organisms, and are toxic to humans and wildlife. Due to their persistence in the environment and mobility, they can circulate globally and negatively impact the environments they are found in.

While the production and consumption of most POPs pesticides have been prohibited in China, China still produces 4 POPs pesticides - DDT, HCB, Chlordane and Mirex - for domestic use and for export. In China, DDT were added to paints as antifoulants to be released to form a toxic layer over the structure (e.g. vessels) which can kill the spores and larva of marine fouling organisms and thus achieve the desired antifouling effect. However, during usage these antifoulants can contaminate marine water, induce biological variation, cause damage to marine food chain, and threaten marine ecological balance and human health.

Annually, China consumes about 65,000 MT of antifouling paint. Surveys conducted during the PDF-B phase shows that China has 300,000 fishing ships widely distributed along its 18,000 km. coastline, which consume 10,000 MT antifouling paint, approximately half, i.e. 5,000 MT is DDT based.

### The Response

To address the key issues of the reduction and elimination of DDT, the UNDP/GEF project, "Alternatives to DDT Usage in the Production of Antifouling Paint" aims at substituting DDT based antifouling paint by technically feasible, economically viable, and environmentally friendly alternatives. The binding objective of the project is to eliminate the use of 250 MT/year of DDT as additives in the production of antifouling paint by conversion to non-toxic and environmentally friendly alternatives. In addition, the prospective objective of the project is to establish a long-term mechanism to protect marine environment and human health from pollution of harmful antifouling systems based on the technologies, experience and instruments obtained

from phase out of DDT based antifouling paint.

To ensure sustainability of the elimination and conversion, related regulations and standards will be established or revised, and supported by capacity building, to create an enabling policy environment for the phase out of DDT based antifouling paint and promote sustainable alternatives. In addition, the successful experience in DDT phase out will contribute to support China to accede to the IMO Convention and elimination of TBT based antifouling paint, in order to establish a long-term mechanism to protect marine environment and human health from pollution of harmful antifouling systems.

## At A Glance

Preparatory Phase: 2006  
Full Project Phase: 2006-2009  
Implementing Partner: State Environmental Protection Administration  
Project ID: 00053562

UNDAF: Outcome 9 - Key UN conventions promoted through improved capacity to fulfill their obligations  
MDG: Goal 7 – Ensure environmental sustainability

Preparatory Phase	
GEF Funding:	US\$295,000
Government contribution:	US\$ 50,000
Other Co-financing:	US\$ 20,000
Total Budget:	US\$365,000

Full Project	
GEF Funding:	US\$10,705,000
Government Contribution:	US\$ 3,750,000
Private Sector:	US\$ 8,500,000
Total Budget:	US\$22,955,000

To contribute to this initiative, or to find out more about the project, please visit our website or contact Ms. Judy Li, Programme Associate at 86-10-8532 0737 or judy.li@undp.org

UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. UNDP is on the ground in 166 countries, working with them on their own solutions to global and national development challenges. As they develop local capacity, they draw on the people of UNDP and its wide range of partners.