CITIZENS' REPORT

IMPLEMENTATION OF THE STRATEGIC APPROACH TO INTERNATIONAL CHEMICALS MANAGEMENT (SAICM) BY IPEN PARTICIPATING ORGANIZATIONS 2009-2012

September 2012
Prepared by IPEN

IPEN
a toxics-free future

IPEN is a leading global organization working to establish and implement safe chemicals policies and practices that protect human health and the environment around the world. IPEN's mission is a toxics-free future for all.

IPEN brings together leading public interest groups working on environmental and public health issues in developing countries and countries in transition. It helps build the capacity of its member organizations to implement on-the-ground activities, learn from each other's work, and work at the international level to set priorities and achieve new policies.

IPEN's global network is comprised of more than 700 public-interest organizations in 116 countries. Working in the international policy arena and in developing countries, with international offices in the US and in Sweden, IPEN is coordinated via eight IPEN Regional Offices in Africa, Asia, Central/Eastern Europe, Latin America, and the Middle East.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

BAT	Best Available Techniques
BEP	Best Environmental Practices
CEE	Central and Eastern Europe
CMR	Carcinogen, Mutagen and Toxic to Reproduction
CSO	Civil Society Organization
DDT	Dichloro-Diphenyl-Trichloroethane
EECCA	Eastern Europe, Caucasus, and Central Asia
EPR	Extended Producer Responsibility
EU	European Union
FAO	United Nations Food and Agriculture Organization
GEF	Global Environment Facility
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
GPA	Global Plan of Action
HHP	Highly Hazardous Pesticide
IAASTD	International Assessment of Agriculture Science and Technology for Development
ICCM	International Conference on Chemicals Management
IPEN	International POPs Elimination Network
IPM	Integrated Pest Management
ISIP	International SAICM Implementation Project
MCW	Mercury-Containing Waste
MDG	Millennium Development Goals
NGO	Non-governmental Organization
OPS	Overarching Policy Strategy
PBT	Persistent Bioaccumulative and Toxic Substance
PCB	Polychlorinated Biphenyl
POP	Persistent Organic Pollutant
PRTR	Pollutant Release and Transfer Register
QSP	Quick Start Programme
REACH	Registration Evaluation Authorization and Restriction of Chemicals
SAICM	Strategic Approach to International Chemicals Management
SGP	Small Grants Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
WHO	World Health Organization

EXECUTIVE SUMMARY

Public interest NGO Contributions to Implementation of the Strategic Approach to International Chemicals Management (SAICM)

Public interest non-governmental organizations (NGOs) and civil society organizations (CSOs) have important roles to play in successful SAICM implementation. The SAICM Overarching Policy Strategy (OPS) addresses the need for a "multi-stakeholder approach in pursuing the sound management of chemicals," and asserts the need to "promote and support meaningful and active participation by all sectors of civil society, particularly women, workers and indigenous communities, in regulatory and other decision-making processes that relate to chemical safety."[1] This report documents extensive work conducted by public interest NGOs and CSOs around the world to implement SAICM activities corresponding to all the principal SAICM objectives.

In the period of 2009-2012, IPEN developed and executed activities to promote effective SAICM participation and undertake enabling and implementation activities for NGOs and CSOs in developing and transition countries with the following elements:

- **International SAICM Implementation Project (ISIP):** ISIP promoted SAICM implementation by public interest NGOs and CSOs by developing strategic small-scale activities that emphasized SAICM objectives in the areas of pesticides, wastes, heavy metals, public participation, chemicals in products, and contaminated sites. ISIP resulted in more than 100 SAICM implementation activities in 50 countries.

- **Heavy metals program:** Spurred to action by civil society and international concerns about the harms from toxic metals, IPEN launched its heavy metals program in 2009. Since then, IPEN has built a robust base of public interest NGOs and CSOs working to raise awareness about threats from cadmium, lead, and mercury. IPEN has supported work to advocate for the development of a strong global treaty to eliminate or significantly reduce threats from mercury along with a variety of activities to protect consumers and raise awareness on cadmium and lead in products. Public interest NGO and CSO participants in the heavy metals program have implemented more than 40 activities in 31 countries.

- **Global Common Statement for a Toxics-free Future:** Twenty years after the first Rio Earth Summit, toxic chemicals contaminate all living things and the harms to human health and the environment are escalating. In response, IPEN catalyzed and coordinated the formulation of and support for a Global Common Statement for a Toxics-Free Future. The Statement, which was released publically just prior to Rio+20, calls on CSOs around the world to join a global campaign for a sustainable, toxics-free future, recognizes the high cost of inaction on chemicals, and commits to principles that underpin a toxics-free future mission: precaution, right to know, "no data, no market," substitution and elimination of hazardous substances, polluter pays, and extended producer responsibility (EPR). This initiative cultivated a global partners group with representation from 10 major international NGOs and Indigenous Peoples organizations working in the health, environment, labor, women's, human rights, and other public interest sectors. In total, more than 1000 public interest NGOs and CSOs have signed on to the Global Common Statement for a Toxics-Free Future.

- **Targeted work on SAICM emerging policy issues:** IPEN Participating Organizations have actively engaged on SAICM's current four emerging policy issues: lead in paint; chemicals in products; hazardous substances within the life cycle of electrical and electronic products; and nanotechnologies and manufactured nanomaterials. Public interest NGOs have participated at both the policy level and in activities on the ground by implementing more than 50 activities in 37 countries. Finally, IPEN successfully bridged the chemical policy-development aid sector in 2012 when the network launched a lead elimination project in seven Asian countries with support from the European Union's international aid agency.

Overall, the 2012 IPEN Citizens' Report documents more than 300 activities conducted by IPEN Participating Organizations in 50 countries that relate to SAICM implementation. The activities include work on 146 of the 273 items in the SAICM Global Plan of Action (GPA) and all five principal SAICM Overarching Policy Strategy Objectives: risk reduction, knowledge and information, governance, capacity building, and illegal traffic. IPEN interventions have ranged from local activities to national and international work. These activities cover a wide variety of issues including: monitoring products, food, paint, and humans for toxic metals and chemicals; promoting substitution with safer alternatives; implementing ecological agriculture; addressing toxic chemicals in manufacturing and wastes; public awareness-raising for vulnerable groups; the characterization of hotspots; and work to eliminate illegal traffic of chemicals and wastes.

1 SAICM OPS paragraphs 9 and 16

NGOs will continue contributing to chemical safety objectives within the limitations of available and accessible resources. Unfortunately, many NGOs around the world are still unaware of SAICM and lack access to the necessary resources and capacity to participate meaningfully as effective stakeholders. IPEN will continue to encourage NGO implementation of SAICM by linking efforts of its Participating Organizations around the world, providing expertise and resources, and conducting actions that build capacity among national- or community-based NGOs. With the support from our donors, this post-ICCM2 NGO program has been very successful and has provided a solid base to build on. Predictable, accessible, and additional resources to continue and expand these joint programs on SAICM outreach and implementation will build NGO capacity, increase NGO-government dialogue, and greatly advance the common SAICM 2020 goal.

PUBLIC INTEREST NGO VIEWS OF SAICM IMPLEMENTATION

SAICM implementation has slightly improved since 2009, but implementation has been uneven and the pace will need to greatly accelerate to achieve SAICM's 2020 goal.

Some countries have initiated SAICM activities and developed steering committees to address certain chemicals management issues with stakeholder involvement. In other countries, SAICM has triggered actions to develop or update inventories of contaminated sites and resulted in legislation banning highly hazardous pesticides (HHPs). In several countries, SAICM has actually helped create an appropriate framework for addressing chemical safety with the participation of many stakeholders. Sometimes, a specific SAICM issue (such as lead in paint) draws government, public health, industry, and public interest NGO stakeholders into coordinated action. The SAICM Quick Start Programme (QSP) has also helped countries build the capacities of regulators and policy makers on chemical safety issues and helped countries address some specific needs. For example, development of national chemical management profiles has helped establish national chemical safety policies as they provide the data used to identify needs and gaps. Hopefully, these positive advances in chemical safety will rapidly expand and transform the institutional framework governing chemicals in the coming three-year period.

Despite some tangible advances, several serious concerns with SAICM implementation remain. In adopting SAICM, governments agreed that sound chemicals management requires a multisectoral and multistakeholder approach to chemical safety. However, in practice, SAICM is often considered to be an issue that is mainly the responsibility of the technical authorities in ministries of environment. As a result, the coordination between key government institutions is often unclear or non-existent. This problem is compounded by a frequent lack of sufficient budgets allocated to the chemical safety agenda, which comes from the relatively low rank chemicals occupy compared to other environmental issues such as climate change and biodiversity. Economic instruments that provide cost recovery from the chemical industry and earmark funds for chemicals management could be helpful but they are rare in developing and transition countries. No global agreement for cost internalization by the chemical industry has appeared, despite the large amount of money that could be available to governments for sound chemicals

IPEN Global Meeting, Petropolis, Brazil June 2012

management, even by receiving only a small percentage of the industry's global sales, which total more than USD$3 trillion.[2] Adequate means of implementation will be required to meet the agreed SAICM 2020 goal and this includes sufficient and sustainable financing.

As countries struggle to evaluate, strengthen, or create regulatory infrastructure, poor enforcement of new or existing laws undermines chemical safety objectives. Often the regulated industry lobbies to weaken chemical safety regulations during their formulation or after they already exist. Weak laws, poor enforcement, and lack of industry responsibility play a key role in continuing problems of waste management. Information is a key component of SAICM's objectives and the basis for safer substitution, but information about chemicals in the workplace and in products is insufficient, and workers and the public often are often not aware of the potential threats. In addition, the public often does not have access to monitoring data of industrial emissions, which would provide a transparent means of mobilizing public support for cleaner production. Overall, public and media awareness of chemical safety remains low, and meaningful participation of the civil society in decision-making or implementation related to chemical safety policies is thin.

One of SAICM's key pillars establishes the inherent link between chemical safety and sustainable development. However, few developing countries have successfully mainstreamed chemicals management into development assistance plans. An even deeper issue considers what is actually meant by development and what kind of development is appropriate for a country. The true cost of resource extraction, chemical-based agriculture, industrial production, end-of-life toxic-product exposures, and other activities is often vastly underestimated or not even considered when development decisions are made. For this reason, more than 1000 public NGOs and CSOs signed the *Global Common Statement for a Toxics-Free Future,* which recognizes the high cost of inaction on chemicals and commits to principles that underpin chemical safety in sustainable development: precaution, right to know, "no data, no market," substitution and elimination of hazardous substances, polluter pays, and EPR.

CONCLUSION

IPEN Participating Organizations actively executed more than 300 activities in 50 countries in all UN regions to work towards implementing all five objectives of the SAICM OPS and 146 of the 273 items in the GPA. IPEN developed and carried out a global program to implement specific SAICM objectives on pesticides, wastes, heavy metals, public participation, chemicals in products, and contaminated sites; developed and executed another program to address the harms from cadmium, lead, and mercury; implemented focused work on SAICM emerging policy issues such as lead in paint, chemicals in products and electronics, and nanotechnology; and coordinated the formulation of and support for a *Global Common Statement for a Toxics-Free Future*, which more than 1000 public interest NGOs and CSOs have endorsed in the lead up to Rio+20.

Key features of SAICM's importance include its high level of political endorsement and the multitude of ways in which it links chemical safety to sustainable development, financing, regulatory infrastructure, enforcement, coherency in coordination across ministries and stakeholders, and key chemical safety principles, such as right to know, substitution, polluter pays, and others. In the period of 2009-2012, SAICM implementation has advanced, but the pace will need to greatly accelerate to achieve SAICM's 2020 goal. At this decisive point, SAICM needs re-commitment from its stakeholders in order to achieve its critically important 2020 goal. Highly motivated public interest NGOs and CSOs are working diligently to support and promote SAICM's objectives in all parts of the world. With financial resources to build NGO capacity and to support SAICM activities, the commitment of civil society to chemical safety can be harnessed to accomplish the 2020 goal.

2 http://www.icca-chem.org/en/Home/About-us/

ORGANIZATION OF THE CITIZENS' REPORT

This report describes the state of SAICM implementation around the world from the perspectives of public interest NGOs and CSOs. It documents progress and points to areas in which more work is needed. It also provides an extensive sample of the work of public interest NGOs and CSOs around the world to protect human health and the environment from hazardous chemicals.

The report describes four key elements of SAICM implementation by IPEN Participating Organizations:

- International SAICM Implementation Project (ISIP)
- Heavy Metals Program
- Global Common Statement for a Toxics-Free Future
- Targeted work on SAICM emerging policy issues

In addition, the report describes SAICM implementation activities in each IPEN region. As IPEN's 700 Participating Organizations are primarily self-organized by geography and language, the report presents information from the following regions: Anglophone Africa; Central and Eastern Europe (CEE); Eastern Europe, Caucasus, and Central Asia (EECCA); Francophone Africa; Latin America and the Caribbean; the Middle East; South Asia; and Southeast Asia and East Asia.

Taken together, the report provides a rich narrative picture of how public interest NGO and CSO activities relate to specific concrete items in the GPA and specific objectives of the OPS. Instead of counting indicators, the report describes the breadth of actual work, the extent to which national plans have been created, multistakeholder mechanisms set up, new information garnered from monitoring, the degree of public participation in planning and implementation, training programs carried out, educational materials developed and distributed, and many other activities. There is no completely satisfactory way to document SAICM implementation, but the Citizens' Report provides a window into the myriad ways public interest NGOs and CSOs approach SAICM, and it highlights their deep dedication to the 2020 goal.

SAICM REPORTING INDICATORS AND NGO ACTIVITIES

The best way to describe public interest NGO and CSO implementation is to actually illustrate how their activities relate to specific Overarching Policy Strategy objectives or specific concrete measures in the Global Plan of Action. Therefore, 2012 IPEN Citizens' Report details this extensively, including over 300 activities in 50 countries.

In 2009, the second session of the International Conference on Chemicals Management (ICCM2) decided on 20 indicators to be used by stakeholders in reporting on progress on SAICM implementation. These indicators are divided into the five categories of the OPS: risk reduction (5 indicators), knowledge and information (5 indicators), governance (3 indicators), capacity building and technical cooperation (6 indicators), and illegal international traffic (2 indicators). In general, the indicators count the number of countries with certain mechanisms and implementation of different types of chemicals management arrangements. All the indicators begin with "The number of…" This makes for quantifiable information but loses the richness and details of stakeholder efforts on implementation that can be communicated in a narrative.

Some of the topics contained in the indicators are applicable to NGO activities, such as monitoring data on selected environmental and human health priority substances and communicating information on the risks associated with chemicals to vulnerable groups. However, many of the indicators are more suited to governmental activities and are difficult to adapt to the work of public interest NGOs; for example, indicator 16 is "Number of countries where development assistance programmes include the sound management of chemicals."

Public interest NGOs have actively implemented SAICM in each of the SAICM OPS categories. Risk reduction activities of public interest NGOs address priority chemicals and wastes through activities focusing on POPs, HHPs, mercury, and lead. These activities include: generating e-waste and hazardous waste inventories; monitoring soil, water, food, and humans for chemicals; and promoting pollution prevention. Knowledge and information activities incorporate advocacy for labeling the chemical content of consumer products, public awareness-raising (including for vulnerable groups), and characterization of hotspots. Governance activities include support for SAICM implementation through the *Global Common Statement for a Toxics-Free Future* and use of multistakeholder approaches to address chemical safety problems. Capacity-building activities consist of workshops and reports on country situations; generation of guides on mercury, POPs, and pesticides; and demonstration of techniques to reduce and eliminate chemical exposures. Work on illegal international traffic includes activities focused on wastes and pesticides. More specific examples of SAICM implementation by public interest NGOs in each of the five OPS categories can be seen in the section, "Public interest NGOs and SAICM implementation in eight IPEN regions." SAICM implementation through activities on specific items of the GPA is clearly illustrated in the section below.

INTERNATIONAL SAICM IMPLEMENTATION PROJECT (ISIP)

In 2010, in an effort to increase SAICM implementation by public interest NGOs, IPEN launched the International SAICM Implementation Project, also known as ISIP.[1] ISIP aims to mobilize resources for initial enabling activities pertaining to national priorities, in keeping with the work areas set out in the strategic objectives of section IV of the SAICM OPS. In particular, ISIP supports the Governance objective of SAICM OPS paragraph 26, which calls for enhanced "cooperation on the sound management of chemicals between Governments, the private sector and civil society at the national, regional and global levels." In addition, ISIP builds on IPEN's 2008-2009 Global SAICM Outreach Campaign[2] to raise awareness about SAICM and strengthen collaboration among the public interest, health, and labor sectors. Since 2010, ISIP has executed 100 activities in 50 developing and transition countries in all UN regions.

ISIP used a country-driven model to advance the following four objectives:

- Promoting the need for sound chemicals management by raising awareness about serious threats to public health and the environment associated with the unsound production, use, and disposal of potentially toxic chemicals and wastes
- Advancing national SAICM implementation through mainstreaming national strategies for sustainable development in developing countries and countries with economies in transition, including linking SAICM recommendations to all relevant national policy sectors (health, agriculture, labor, environment, etc.)
- Promoting global SAICM implementation by civil society, including promoting international policy change, national legislation, regulatory and institutional reforms, and other actions aimed at advancing chemical safety objectives through advocacy, campaigns, and other programs or projects
- Building capacity and developing educational tools and activities to enable NGOs in developing countries and countries with economies in transition to engage with their national authorities on chemical policy discussions relevant at both the national and international levels

1 http://www.ipen.org/ipenweb/saicm/implementation.html

2 http://www.ipen.org/campaign/

The ISIP program supports Participating Organizations in a wide variety of GPA items and SAICM Emerging issues, with GPA emphasis on the following areas:

- Pesticides – integrated pest management, ecological farming, alternatives, FAO code of conduct, obsolete stockpiles, and community monitoring (GPA items 23- 25, 27, 29, 54, 89, 112, 114, 159, 187, 195, 206, 215, 227, 256, 265, 273)
- Waste – zero waste, dioxins, incineration and co-incineration, illegal trade, and medical waste (GPA items 44-45, 54, 56-57, 70, 84, 119, 121, 134, 161-162, 187, 258-259, 262)
- Heavy Metals – in products, mining, and industrial pollution, with a specific focus on lead and mercury (GPA items 7, 44-45, 54, 57, 89, 108, 174, 206, 258, 262)
- Public Participation – law, access to information, and policy dialogue (GPA items 1, 23, 27, 114, 116, 164-165, 174, 187, 194-195, 197, 206, 211, 255)
- Chemicals in Products (GPA items 7, 20, 54, 89, 108, 112, 150, 163, 174, 206, 211, 215, 255)
- Hotspots/contaminated areas – especially for poor communities at risk (GPA items 47, 68, 146=147)

Examples of ISIP activities include:

- Introducing the FAO Code of Conduct to reduce pesticide risks in Armenia
- Pilot project on collection of batteries and electronic wastes in Belarus
- Participation in the National Commission on Chemical Safety in Brazil
- Characterization of electronic waste to develop a management strategy in Ethiopia
- POPs pesticide elimination strategy for vegetable production in Ghana
- Awareness on mercury in the health and education sectors in India
- Medical waste management and alternatives to mercury-containing devices in Indonesia
- Awareness-raising on electronic wastes in Jordan
- NGO input into the SAICM National Implementation Plan in Kazakhstan
- Reducing exposure of slum dwellers to lead in Kenya
- Contributing to the national action plan on the Khaidarkan mercury mining facility in Kyrgyzstan
- Addressing waste management issues to eliminate the Saida dump in Lebanon
- Characterizing traditional gold mining in Mali
- Documenting neurotoxicity in children in communities located near cement plants and other industries in Mexico
- Convening multisectoral forums on SAICM implementation in Nepal
- Impact assessment of electronic waste handlers and livelihoods in Nigeria
- Community education on HHPs in Philippines
- Survey of bisphenol A in foods in Russia
- Promoting government and civil society dialogue on chemical safety in Sri Lanka
- Reducing and substituting mercury-containing medical devices in Syria
- Situational analysis of a POPs hotspot in Tanzania
- Mapping toxic hotspots near an industrial production area in Thailand
- Awareness-raising in schools on SAICM and chemical safety in Tunisia
- Research of the mercury country situation and awareness-raising on SAICM in Ukraine
- Identification of pesticide hotspots in Uzbekistan

RIO+20 AND THE GLOBAL COMMON STATEMENT

In 1992, governments meeting at the Rio Earth Summit acknowledged that chemical contamination could be a source of "grave damage to human health, genetic structures and reproductive outcomes, and the environment."[1] The subsequent Chapter 19 of Agenda 21 focused on Environmentally Sound Management of Toxic Chemicals, and in particular, the needs of developing countries when faced with the chemical hazards of their rapidly industrializing economies. However, 20 years later, in 2012, toxic chemicals contaminate all living things and the harms to human health and the environment are escalating. In response, IPEN actively participated in the negotiating sessions leading up to Rio+20 and mobilized public interest NGOs/CSOs to provide input to world leaders at the meeting.

IPEN catalyzed and coordinated the formulation of and support for a Global Common Statement for a Toxics-Free Future, which was released publically just prior to Rio+20.[2] The Statement

COUNTRIES WHERE PUBLIC INTEREST ORGANIZATIONS ENDORSED THE GLOBAL COMMON STATEMENT FOR A TOXICS-FREE FUTURE

Albania
Argentina
Armenia
Australia
Azerbaijan
Bangladesh
Belarus
Belgium
Benin
Brazil
Bulgaria
Burundi
Cameroon
Canada
Chile
China
Cote d'Ivoire
Croatia
Czech Republic
Ecuador
Ethiopia
Fiji
France
Georgia
Germany
Ghana
Guatemala
Honduras
India
Indonesia
Iran
Ireland
Italy
Japan
Jordan
Kazakhstan
Kenya
Korea
Kyrgyzstan
Laos
Lebanon
Liberia
Macedonia
Malaysia
Mali
Mauritania
Mauritius
Mexico
Moldova
Mongolia
Morocco
Mozambique
Nepal
Netherlands
New Zealand
Niger
Nigeria
Pakistan
Panama
Paraguay
Peru
Philippines
Romania
Russia
Rwanda
Scotland
Senegal
Serbia
Slovakia
South Africa
Spain
Sri Lanka
Sudan
Sweden
Switzerland
Syria
Taiwan
Tajikistan
Tanzania
Thailand
Togo
Tunisia
Uganda
Ukraine
United Kingdom
United States
Uruguay
Uzbekistan
Venezuela
Vietnam
Yemen
Zambia

1 Agenda 21, Chapter 19, Environmentally Sound Management of Toxic Chemicals, Including Prevention of Illegal International Traffic in Toxic and Dangerous Products, Section 19.2 Available at http://www.un.org/esa/dsd/agenda21/res_agenda21_19.shtml

2 http://ipen.org/toxics-free-2012/common-statement/

calls on CSOs around the world to join a global campaign for a sustainable, toxics-free future and references the SAICM Dubai Declaration, which states that sound chemicals management is "essential to achieving sustainable development, including the eradication of poverty and disease, the improvement of human health and the environment and the elevation and maintenance of the standard of living in countries at all levels of development." The Global Common Statement recognizes the high cost of inaction on chemicals and commits to principles that underpin a toxics-free future mission and sustainable development: precaution, right to know, "no data, no market," substitution and elimination of hazardous substances, polluter pays, and EPR. Finally, the Statement calls for a recommitment to SAICM at the highest political levels and urges governments and stakeholders to fundamentally increase financial support for the implementation of SAICM and the multilateral chemical and waste agreements.

IPEN coordinated with public interest groups in all global regions and achieved formal adoption of the Global Common Statement by 10 international NGOs and Indigenous Peoples organizations working in the health, environment, labor, women's, human rights, and other public interest sectors in April 2012.[3] On the June 11, 2012, IPEN coordinated a meeting of NGOs at the Toxics-Free Future Forum in Rio de Janeiro, Brazil. The NGO/CSO Global Common Statement for a Toxics-Free Future was released at the forum by the organizations that came together with this important message to the world's leaders. More than 1000 public interest NGOs and CSOs have signed on to the Global Common Statement for a Toxics-Free Future.

3 Global Alliance for Incinerator Alternatives, Health Care Without Harm, Friends of the Earth International, IPEN, International Indian Treaty Council, International Society of Doctors for the Environment, Northern Alliance for Sustainability, Pesticide Action Network International, Women in Europe for a Common Future, and World Alliance for Citizen Participation (CIVICUS)

HEAVY METALS AND SAICM IMPLEMENTATION

The harms to human health and the environment from toxic metals have captured international attention. In 2002, the Johannesburg Plan of Implementation called for promoting "reduction of risks posed by heavy metals." The SAICM OPS includes mercury in a group of chemicals for assessment due to concerns of "unreasonable and otherwise unmanageable risk to human health and the environment." The SAICM GPA includes activities directed at reducing harms posed by metals in items 57, 60, 156, 157, and 244. Finally, the UNEP Governing Council launched the negotiation of a global mercury treaty in 2009 in Decision 25/5. The same year, IPEN formally launched its heavy metals program to advance work principally on cadmium, lead, and mercury.

The IPEN Mercury-Free Campaign has addressed the alarming level of human and environmental health threats posed by mercury around the world.[1] Through the Campaign, IPEN is aiming to build a robust base of civil society and NGOs working to raise awareness about mercury threats and support the development of a strong global treaty to eliminate or significantly reduce these threats. Participating NGOs from all over the world work together to build NGO capacity, raise awareness about mercury exposure and safer alternatives, monitor mercury-containing products and the availability of mercury-free alternatives, support activities that link to the international mercury discussions, and promote NGO engagement in the treaty negotiation process. In 2009, when governments decided to begin negotiations on a global treaty, IPEN adopted its Views on a Global Mercury Treaty, which explains why a global treaty on mercury is needed and puts forward a civil society vision for it.[2]

In 2010, IPEN released "An NGO Introduction to Mercury Pollution."[3] This comprehensive guidebook provides information about the toxic effects of mercury; Minamata disease; how mercury gets into the environment; mercury supply; mercury in products, mining, and industrial practices; unintentional mercury sources; mercury wastes and contaminated sites; and information about the global mercury treaty. The booklet has been translated into all UN languages and widely disseminated globally. Moreover it has served as an excellent preparatory tool for NGO and government delegates in the treaty negotiation process.

At the first negotiating meeting of the mercury treaty in 2010, IPEN and the Swedish Society for Nature Conservation (SSNC) conducted a survey of mercury in the hair of delegates from 40 countries and found it in all of them.[4] Mercury levels ranged from 93 µg/kg to 2,956 µg/kg and more than one-third of the samples exceeded levels of concern. Surprisingly, average mercury levels in people from developing and transition countries were twice the levels measured in delegates from developed countries. The difference was statistically significant. This monitoring activity changed the perspective of mercury pollution from abstract to personal.

In 2010, the German Federal Ministry for Environment, Nature Conservation, and Nuclear Safety (BMU) funded a collaboration among IPEN, Arnika Association (an IPEN Participating Organization), and GRS (Germany) to conduct a market analysis of some mercury-containing products and their mercury–free alternatives.[5] The objective was to gather information concerning the availability, suitability, and cost of mercury-containing versus mercury-free products in developing and transition countries. The study examined products such as thermometers, skin-lightening products, batteries, and dental materials in Brazil, China, India, Kenya, Kyrgyzstan, Mexico, Russia, and Senegal. The study provided an interesting picture about consumer awareness, availability and cost of alternatives, and knowledge about the harms posed by mercury.

IPEN info action at the third mercury treaty negotiations in Kenya (2011), where IPEN Participating Organizations raised awareness among delegates about the harm caused by small-scale gold mining to children, as well as the toxic legacy associated to allowing mercury use in gold mining.

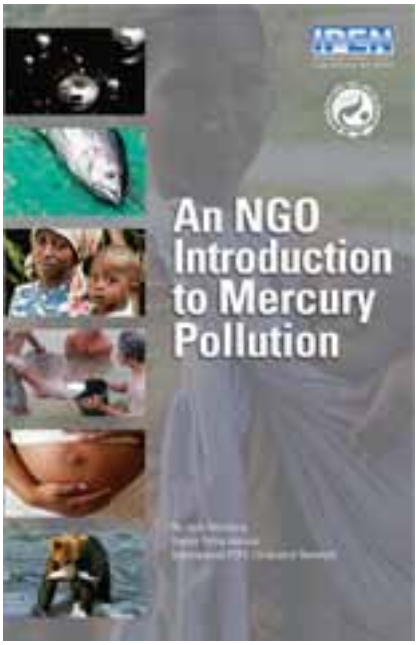
1 http://ipen.org/hgfree/

2 http://www.ipen.org/ipenweb/work/mercury/mercury_treaty_report_r5.pdf

3 http://www.ipen.org/ipenweb/documents/book/ipen%20mercury%20booklets.pdf

4 http://ipen.org/hgfree/wp-content/uploads/2011/07/English-final-mercury-hair-report.pdf

5 http://english.arnika.org/files/documents/Market_analysis_mercury.pdf



As part of the IPEN Mercury-free campaign, an NGO mercury booklet was produced with the aim to swiftly educate NGOs about public and environmental health threats related to mercury together with scientific references on specific issues associated to mercury pollution, as well orient the reader to the international mercury treaty negotiations.

Additional activities of IPEN Participating Organizations on mercury have included:[6]

- Investigative report on coal ash and mercury in Australia
- Awareness-raising about mercury in schools and a study of mercury waste management in Bangladesh
- Study of legislation related to mercury sources in Brazil
- Capacity-building among beauty salon workers and advocacy for safer management of mercury and toxic chemicals in cosmetics, and public awareness-raising on mercury thermometers using a comic book style in Cameroon
- Launching the first campaign to phase-out mercury-containing medical devices at a children's hospital in China
- Awareness-raising on mercury for the public and workers in Cote d'Ivoire
- Survey of mercury in products in the Czech Republic
- Awareness-raising on mercury for NGOs, public, and government personnel in Egypt
- Awareness-raising on spill clean-up, study of CFL wastes, standards for medical products, workshops for doctors and healthcare professionals, and monitoring fish in India
- Investigation of medical waste management and medical devices in healthcare and measurements of mercury in air near a small scale gold mining site in Indonesia
- Report on Minamata and the global mercury treaty, holding an international mercury symposium, and work towards a mercury export ban in Japan
- Awareness-raising and country situation report on mercury in Jordan
- Survey of consumer products containing mercury and investigation of artisanal small scale gold mining in Kenya
- Survey of consumer products containing mercury and workshop for NGOs and governmental officials in Kyrgyzstan
- Measurement of mercury in air near dumpsites and incinerators in Lebanon
- Hair testing and awareness-raising on mercury in Macedonia
- Investigation of mercury use in artisanal small-scale gold mining in Mali
- Participation in a national government workshop on mercury in Mexico
- Workshop for NGOs, professional organizations, and government on mercury in Morocco
- Study of import, use, and management of mercury in Nepal
- Work with waste recyclers to reduce mercury emissions in Philippines
- Survey of mercury emission sources and investigation of mercury waste issues in Russia
- Survey of mercury-containing products in Senegal
- Collection of data related to the national inventory of mercury sources and emissions in South Africa
- Awareness-raising on mercury for patients, doctors, and authorities in Spain
- Collection of import data on mercury-containing products, investigation of contaminated sites, survey of hospitals, and promoting non-mercury alternatives in Sri Lanka
- Inventory of mercury-containing medical products and workshop to discuss management and substitution in Syria
- Training of trainers on non-mercury techniques in artisanal and small-scale gold mining in Tanzania
- Awareness-raising in schools in Tunisia
- Analysis of mercury use, storage, and disposal in Uganda
- Mercury situation report for Ukraine
- Education activities on mercury in the Alaskan Arctic and monitoring of coal ash in the U.S.

Activities on lead and cadmium include a comprehensive study of heavy metals in products in the Asia-Pacific region in 2011. UNEP incorporated comprehensive IPEN information into its *"Study on the possible effects on human health and the environment in Asia and the Pacific of the trade of products containing lead, cadmium, and mercury."*[7] The study focused on the analysis of trade, use, and disposal of products containing cadmium, lead, and mercury in Asia and the Pacific in order to assess how this can lead to adverse human and environmental effects due to the release of these toxic heavy metals. IPEN gathered and condensed case studies from IPEN Participating Organizations in seven countries in the Asia-Pacific region: Cook Islands, India, Nepal, Philippines, Samoa, Sri Lanka, and Thailand. The case studies highlighted issues such as e-waste, heavy metals in batteries, lead in paint, lead in children's jewelry, compact fluorescent light bulb recycling and hazards, and mercury in the healthcare sector. Other activities concerning metals are discussed in the sections on lead in paint and chemicals in products below.

6 More information about these activities that support the IPEN Mercury-Free campaign are available online, noting not all these actions were funded by IPEN (www.ipen.org/hgfree)

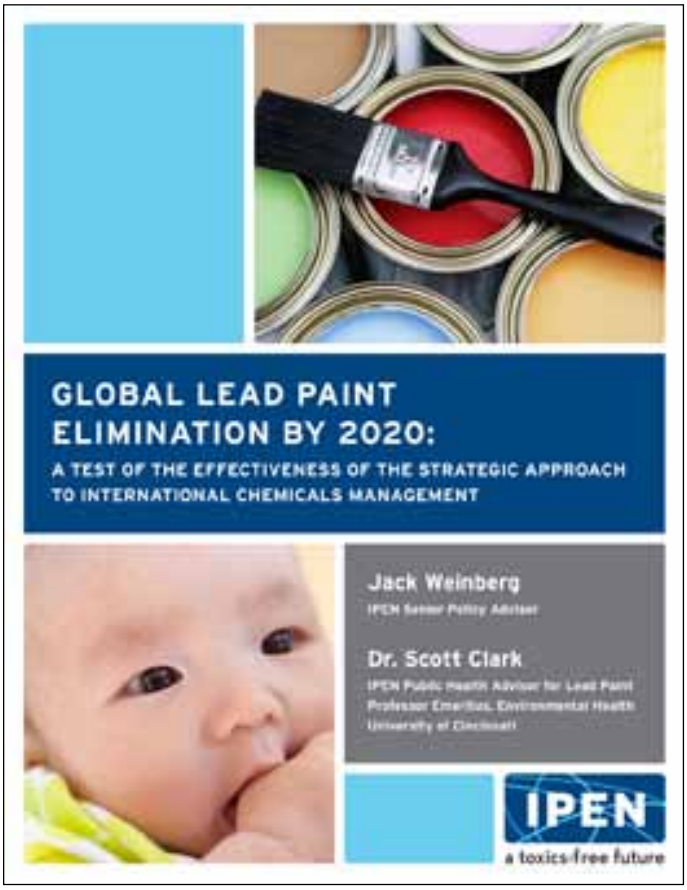
7 http://www.unep.org/hazardoussubstances/Portals/9/Lead_Cadmium/docs/Trade_Reports/AP/UNEPLeadPb-CaicedoCompilation110601.pdf

PUBLIC INTEREST NGO ACTIONS ON SAICM EMERGING POLICY ISSUES

In 2009, ICCM2 decided on four emerging policy issues: lead in paint, chemicals in products, hazardous substances within the life cycle of electrical and electronic products, and nanotechnologies and manufactured nanomaterials. All four issues are of great importance to public interest NGOs and this section describes NGO activities on these issues in the period of 2009-2012.

LEAD IN PAINT

ICCM2 identified lead in paint as a SAICM emerging issue and invited UNEP and WHO to establish a global partnership to promote phasing out the use of lead in paints and to serve as the partnership's secretariat.[1] UNEP and WHO jointly initiated this partnership at an organizational meeting held in May 2010 under the name Global Alliance to Eliminate Lead Paint (GAELP).[2]



IPEN's 2012 global report on lead in paint

GAELP's agreed broad objective is to phase out the manufacture and sale of paints containing lead and eventually to eliminate the risks from such paint.[3] Using the ICCM2 resolution as its point of departure, GAELP has defined the term "paint" to also include varnishes, lacquers, stains, enamels, glazes, primers, and coatings. GAELP defines the term "lead paint" as paint to which one or more lead compounds has been added.[4]

IPEN has been an active participant in GAELP from the start, has been a member of the GAELP Interim Advisory Committee, and has provided assistance to the GAELP Secretariat in the work of GAELP, including participating in teleconferences and attending meetings, undertaking speaking assignments, drafting documents and texts, participating in the preparation of the GAELP business plan, and other contributions.

At ICCM2, IPEN presented data on the lead content of decorative paints that were purchased by NGOs in 11 developing countries and countries with economies in transition. Since then, NGOs have continued sampling and testing paints. NGOs have engaged in follow-up testing in several of the original 11 countries including Brazil (Associação de Proteção ao Meio Ambiente de Cianorte-APROMAC), India (Toxics Link), Philippines (EcoWaste Coalition), and Thailand (Ecological Alert and Recovery Thailand-EARTH). The Cameroon NGO Centre de Recherche et d'Education pour le Développement (CREPD) sampled and tested paints on its national market with financial support from the SAICM QSP Trust Fund and UNEP. In addition, NGOs associated with IPEN have tested paints in their counties, including in Bangladesh (Environment and Social Development Organization-ESDO), Kazakhstan (Greenwomen), Lebanon (IndyACT), Nepal (Centre for Public Health and Environmental Development-CEPHED), Paraguay (ALTERVIDA), and Russia (Eco-Accord).

The Indian NGO Toxics Link, in cooperation with the NGOs ESDO from Bangladesh and CEPHED from Nepal, prepared and disseminated a report entitled Double Standard: Investigating Lead Content in Leading Enamel Paint Brands in South Asia.[5]

IPEN, with assistance from IPEN Advisor Professor Scott Clark and Perry Gottesfeld of Occupational Knowledge International, has developed an expedited technique for collaborating with partner NGOs to sample and test paints for sale on their national

1 ICCM2 omnibus resolution II/4 on emerging policy issues; http://www.saicm.org/documents/iccm/ICCM2/emerging%20issues/ICCM2%20Outcomes/Emerging%20issues/Omnibus%20resolution%20II_4.doc

2 See GAELP Home Page http://www.unep.org/hazardoussubstances/LeadCadmium/PrioritiesforAction/GAELP/tabid/6176/Default.aspx

3 See GAELP Objectives; http://www.unep.org/hazardoussubstances/LeadCadmium/PrioritiesforAction/GAELP/GAELPObjectives/tabid/6331/Default.aspx

4 See GAELP Operational Framework; March 2011; http://www.unep.org/hazardoussubstances/Portals/9/Lead_Cadmium/docs/GAELP/Final_operational_framework_GAELP.pdf

5 http://toxicslink.org/docs/Double_Standard_Lead_Paint_29_June_2011.pdf

markets. IPEN provides the partner with a protocol for selecting paints to purchase and instructions on how to prepare paint samples for testing. IPEN ships the partner a kit that contains all the materials that they will need for sample preparation, including sample logs, chain of custody forms, disposable paint brushes (one for each paint to be tested), and pre-numbered strips to be painted on. IPEN experts are available by phone or email to give advice or answer questions. The partner receives the kit, purchases the paints, prepares the paint samples for testing, and ships the prepared samples and data logs to a central testing laboratory. The NGO partner can do all this with only a few days of work and only minimal expertise. IPEN is currently preparing a new round of paint testing with nine NGO partners from diverse countries and regions.

IPEN secured a grant of €1.4 million from the European Union's SWITCH-Asia program to support national lead paint elimination activities in seven Asian countries in collaboration with NGO partners: Environment and Social Development Organization (ESDO) in Bangladesh, Toxics Link in India, Balifokus in Indonesia, Centre for Public Health and Environmental Development (CEPHED) in Nepal, EcoWaste Coalition in the Philippines, Centre for Environmental Justice (CEJ) in Sri Lanka, and Ecological Alert and Recovery Thailand (EARTH) in Thailand. Activities under the grant began in December 2011 and will continue for three and a half years.

Children's products on the market in the Philippines were tested by with EcoWaste Coalition for toxic heavy metals. 29% of the 435 products tested contained at least one toxic metal above levels of concern.

Two NGOs have received grants from the SAICM QSP Trust Fund for lead paint-related activities in their countries: CREPD in Cameroon and LEADERS in Nepal.

IPEN has established an international NGO working group to facilitate and coordinate national, regional, and international NGO lead paint elimination activities and to encourage NGOs in as many countries as possible to take up the issue in their own countries. IPEN also helps mobilize resources for NGO lead paint elimination efforts.

IPEN has prepared a report that will be distributed at ICCM3 entitled *Global Lead Paint Elimination by 2020: A Test of the Effectiveness of the Strategic Approach to International Chemicals Management*.

Additional IPEN activities to eliminate lead in paint have included the following:

- In Jordan, Land and Human to Advocate Progress (LHAP) assessed the current status of lead in paint, with an eye toward developing informational materials and holding public hearings on regulatory policy
- In Tunisia, Association de l'Education Environnementale pour les Futures Générations (AEEFG) initiated a campaign involving art professors in colleges to discontinue use of lead-based paint and replace them with natural products
- In Uganda, Uganda Network on Toxic Free Malaria Control (UNETMAC) is campaigning to eliminate lead paint in Uganda by collecting samples for lead analysis and conducting public awareness-raising activities
- In Tanzania, AGENDA is reviewing national legislation on the regulation of lead content in paint and consulting key stakeholders on the issue, and a public awareness-raising campaign targets vulnerable groups, paint manufacturing industries, government ministries and agencies, and the general public

CHEMICALS IN PRODUCTS

Consumer awareness of chemicals in products is a strong driver for creating markets for cleaner products. However, IPEN's surveys and investigations (described below) have demonstrated that toxic chemicals are present in a large number of products in the market and they are often not adequately labeled if labeled at all. Current efforts and capacities to provide information about chemicals of concern in products are inadequate. Gray or informal markets pose huge challenges and the "no data, no market" principle should be applied.

Paragraph 15b of the SAICM OPS states an important SAICM objective: *"To ensure for all stakeholders: That information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly, adequate and appropriate to the needs of all stakeholders. Appropriate types of information include their effects on human health and the environment, their intrinsic properties, their potential uses, their protective measures and regulation."* Delegates at ICCM2 decided to implement the Chemicals in Products Project to promote this objective. The decision at ICCM2 reflects consensus agreement to collect and review existing information on information systems pertaining to chemicals in products, assess

that information in relation to the needs of all relevant stakeholders and identify gaps, and develop specific recommendations for actions to promote implementation of the Strategic Approach with regard to such information, incorporating identified priorities and access and delivery mechanisms.[6]

UNEP facilitated the Project and established a steering committee in 2009 comprised of governmental, private sector, and public interest NGO representatives including IPEN. The Project developed a survey of SAICM focal points on the need for information on chemicals in products. The result identified four priority areas for case studies: children's products and toys, electronics, textiles, and construction materials. All four case studies identified common needs such as producer-related information, chemical content, and instructions for safe use, handling, and disposal. In 2011, the Chemicals in Products Project moved toward identifying elements of a draft framework to improve the availability of and access to information on chemicals in products.

IPEN Participating Organization activities on chemicals in products have included the following:

- **First study of bisphenol A in food in Russia:** The Chapaevsk Medical Association measured the endocrine disrupter bisphenol A in 21 samples from three cities. High levels of bisphenol A were found in baby food and in a baby's dummy (pacifier or soother). None of the samples were labeled to indicate the presence of the toxic chemical.

- **First study of POPs in a recycled product for the home:** IPEN conducted a study of brominated flame retardants in recycled foam carpet padding. The substances are listed in the Stockholm Convention for global elimination. The study showed flame retardant levels in the products qualify as hazardous waste, and was featured in the *New York Times*[7] presented at a scientific conference, and published.

- **First comprehensive study of chemicals used in the automotive industry in Korea:** Korean Network OUR requested network member Wonjin Institute of Occupational and Environmental Health to investigate and analyze the chemicals used in automobile industries. Wonjin Institute integrated and analyzed the chemical database of 13,000 products from 76 manufacturers of automobiles and auto parts. The results showed many opportunities to phase-out toxic substances for safer alternatives. The manufacturers of automobiles and auto parts have begun to substitute carcinogens with safer chemicals.

- **First children's hospital in China to commit to a mercury product phase-out:** Global Village of Beijing, in collaboration with the Chinese Centers for Disease Control, Director of Changchun Children's Hospital, and others, launched a campaign to phase-out mercury-containing medical products. The campaign began in the intensive care unit and children's health management center and will spread to other parts of the hospital in time. The campaign includes improving staff awareness of mercury pollution and training in cases of mercury spills.

IPEN Technical Advisor testing childrens' products for toxic heavy metals with an XRF Analyzer

- **First large-scale study of toxic metals in children's products in the Philippines and China:** The EcoWaste Coalition and IPEN found toxic heavy metals such as antimony, arsenic, cadmium, chromium, lead, and mercury in 30% of over 435 children's products purchased in three major cities in the Philippines (Cebu, Davao, and Manila).[8] None of the samples were labeled to indicate the presence of the toxic chemical. In China, Greenpeace East Asia and IPEN measured toxic metals in 500 children's products purchased in five Chinese cities (Beijing, Guangzhou, Hong Kong, Shanghai, and Wuhan).[9] The products came from shopping trips to more than 40 retailers, including shopping malls, street markets, and chain stores. To our knowledge this is the first publically available large-scale investigation of toxic metals in children's products in China. One-third of tested products contained at least one toxic metal at levels of concern. Some 48 samples (9.6% of the products) contained more than one toxic metal, increasing the possibility of harm. None of the tainted products contained warning labels to inform consumers about their toxic ingredients.

6 ICCM2 II/4C, SAICM/ICCM2.2/15, 2009

7 http://www.nytimes.com/2011/05/19/garden/tests-on-carpet-padding-show-toxins.html

8 http://ipen.org/toxicproducts/

9 http://www.greenpeace.cn/heavymetal/?id=

- **Mercury in skin-whitening products in Armenia, China, Philippines, and Thailand:** Armenian Women for Health and Healthy Environment found mercury in 82 of 100 samples of cosmetic items (skin-bleaching creams, soap, etc.), but the packaging provided no information on mercury content. In China, Green Beagle and IPEN collaborated with Chinese NGOs in 10 provinces to determine whether skin-lightening products containing high levels of mercury are available on the market in China. The results of testing 500 products showed that 23% of them were higher than the regulatory limit. In Philippines, the EcoWaste Coalition performed a series of tests of skin whitening products finding high mercury levels that exceed regulatory limits in the majority of them. In Thailand, the Foundation for Consumers and the Ecological Alert and Recovery-Thailand (EARTH) tested 47 skin whitening products sold nationally and found mercury in 20% of them. In all four countries, none of the products were labeled to indicate mercury content and instead many products promoted themselves as "natural."

- **Lead in children's jewelry in India:** Toxics Link investigated 54 samples of children's jewelry from six markets in Delhi and found high levels of lead were widespread in the samples. Toxics Link advocated for development of standards on lead to protect children from exposures in paint, toys, jewelry, and other products.

- **Market analysis of mercury-containing products and alternatives in Brazil, China, India, Kenya, Kyrgyzstan, Mexico, Russia, and Senegal:** Associação de Proteção ao Meio Ambiente de Cianorte, Global Village of Beijing, Toxics Link, iLima, Independent Ecological Expertise, Centro de Análisis y Acción sobre Tóxicos y sus Alternativas, Eco-Accord, and Pesticide Action Network Africa investigated the availability, suitability, and cost of mercury-containing versus mercury-free products. The study examined products such as thermometers, skin-lightening products, batteries, and dental materials.

- **Investigation of lead, cadmium, and phthalates in children's products in Korea:** Korean Network OUR found high levels of lead and phthalates in children's products from Lotte-Mart, E-Mart, and HomePlus, especially in stationary items and school supplies such as pencil cases.

- **Public awareness-raising and policy analysis in the Balkans, Kenya, Mexico, and Tunisia:** Women in Europe for a Common Future, together with NGO partners, have performed inventory comparisons of the actual and legal situation of chemicals in products in Balkan countries along with multistakeholder trainings and awareness-raising activities. In Kenya, iLima targeted women and informal sector workers in a campaign to raise awareness of toxic chemicals in products such as cosmetics and solvents. Fronteras Comunes in Mexico prepared two brochures entitled *Toxic Chemicals in Your Home (versions 1 and 2)* with accessible information on lead and mercury content in different products, chemical pesticides for household use, and the presence of toxic chemicals, such as PBDEs and PFOS, in electronic devices. In Tunisia, Association pour la Protection de l'Environnement et Développement Durable de Bizerte (APEDDUB) has conducted many public awareness-raising workshops on harmful substances found in children's toys.

- **IPEN co-authored the first scientific consensus statement that addresses brominated and chlorinated flame retardants as a class, the San Antonio Statement:** This Statement (published in *Environmental Health Perspectives*[10]) has profound regulatory implications as it clearly reveals the scientific concerns of 200 leading researchers and scientists from 30 countries about the industry practice of regularly substituting one dangerous chemical for another.

HAZARDOUS SUBSTANCES WITHIN THE LIFE CYCLE OF ELECTRICAL AND ELECTRONIC PRODUCTS

The rapid growth of the electronics sector has accelerated the problems of managing both domestically generated and trans

Nigerian e-waste recycler

10 http://ehp03.niehs.nih.gov/article/info:doi/10.1289/ehp.1003089

boundary electronic waste. Hazardous substances represent a key issue in safely managing these products as they often contain toxic metals or other toxic chemicals such as brominated flame retardants. The waste issue has provoked further concerns about harms to workers involved in production of electronic products and both life cycle steps point to the importance of green design as a key aspect of solving this problem.

The African region and Peru nominated hazardous chemicals in the lifecycle of electrical and electronic products as an emerging policy issue at ICCM2. In response, the ICCM2 decision recognized that near-end-of-life and end-of-life electrical and electronic products are a growing concern as a result of dumping in developing countries; there is a lack of capacity to handle electronic waste in an environmentally sound manner in almost all developing countries and countries with economies in transition, leading to the release of hazardous substances; there is a pressing need for the continued development of clean technology and environmentally friendly design; it is important to consider product stewardship and EPR aspects; and the Basel Convention electrical and electronic waste program needs further strengthening.[11]

ICCM2 called for a workshop to identify and assess where issues relating to the sound management of chemicals arise during the lifespan of electrical and electronic products (including the design of such products, green chemistry, and recycling and disposal), in particular in the context of the requirements of the Basel and Stockholm conventions, and it mandated the meeting to develop a series of options and recommendations for future work. In 2011, the United Nations Industrial Development Organization (UNIDO), Basel Convention, and Stockholm Convention hosted the workshop in Vienna, gathering representatives from governments, the private sector, and public interest NGOs to develop recommendations. The Vienna meeting on electronic products developed 13 Key Messages, along with detailed recommendations on upstream (design), midstream (production and use), and downstream (wastes) issues.[12]

IPEN Participating Organization activities on electronic products have included the following:

- **Electronic waste and battery assessment in Belarus:** The Center for Environmental Solutions performed an inventory analysis of both batteries and e-waste in cooperation with the city of Minsk, as both streams are covered by the same legislation in Belarus. The results lead to recommendations and public awareness-raising activities on both waste streams.

- **Batteries as part of e-waste in Cameroon:** Centre de Recherche et d'Education pour le Développement characterized and quantified batteries as a component of e-waste with financial support from Dr. Ouchi at Kobe University in Japan.

- **E-waste management proposal for the new general waste act in Chile:** Acción Ecológia worked to investigate amounts and quality of e-waste generated in Chile and how this information might enrich the new General Waste Act. The work included public awareness-raising among consumer organizations and the wider public.

- **Inventory of e-waste in four cities and management plan for Ethiopia:** Pesticide Action Nexus Association noted the absence of e-waste management plans in the country and developed detailed inventories of computers, mobile phones, refrigerators, and televisions in four major Ethiopian cities. The results are being used to develop a national management plan for e-waste in the country that will include aspects of public awareness-raising and the establishment of e-waste sorting and collection sites.

- **Working for new e-waste legislation in India:** Toxics Link has done a number of studies to highlight the plight of unregulated e-waste management in India. The sustained campaign and advocacy by Toxics Link and other NGOs led to a notification for a separate e-waste management rule by the government of India, which came into effect in May 2012. At present, NGOs Direct Initiative for Social and Health (DISHA) and Toxics Link are raising awareness among informal e-waste recyclers and providing support to bring them into formal channels in Kolkata. Toxics Link has also organized a series of workshops to raise awareness among stakeholders on new e-waste rules.

- **Country situation on electronic waste in Jordan:** Land and Human to Advocate Progress (LHAP) carried out an assessment of the situation on electrical and electronic (EE) waste in Jordan by assessing current national laws and general end-of-life destination; distributing questionnaires to schools and electronic shops to measure knowledge on e-waste; developing a brochure that contains basic information on EE-waste for the purpose of raising community awareness about the topic; and organizing community consultations in order to present the facts derived from the assessment study and discuss possible actions and recommendations.

- **Assessing electronic waste in Nepal:** The Center for Public Health and Environmental Development (CEPHED) assessed import and inventory of e-waste in five areas with a focus on computers, televisions, and mobile phones. The study will be used to help develop appropriate policies for management and import that are consistent with related international agreements.

- **Impact assessment of e-waste on waste handlers and livelihood in Nigeria:** Sustainable Research and Action for Environmental Development (SRADev) performed an in-depth assessment/evaluation of the risk associated in the e-waste recycling chain with a view to determining the knowledge of and practices associated with e-waste handlers. Goals include raised

11 ICCM2 II/4D, SAICM/ICCM2.2/15, 2009

12 http://www.saicm.org/images/saicm_documents/iccm/ICCM3/Meeting%20documents/INF%20Documents/ICCM3_INF24_Report%20e-waste%20workshop.pdf

awareness of the industry, community, and other key stakeholders, in order to work towards the establishment of an environmentally sound management regime in Nigeria.

- **Analysis of electronic waste disposal system in Kazakhstan:** The NGO Promotion of Sustainable Development analyzed the current regulatory framework on e-waste, both nationally and in the city of Almaty, and prepared recommendations on waste management for implementation at the city level.

- **Documenting carcinogens and occupational illness in the electronics sector in Korea:** Supporters of Health and Right of People in Semiconductor Industry (SHARPS) conducted an investigation that documented more than one hundred workers who developed cancer and other serious illnesses as a result of their work in electronics plants.[13] In a related investigation, the Korean Metal Workers Union (KMWU) conducted an investigation on the hazardous chemicals used in the electronics workplace. The investigation found that 17% of the chemical solutions used by workers in one semiconductor factory contained carcinogens.

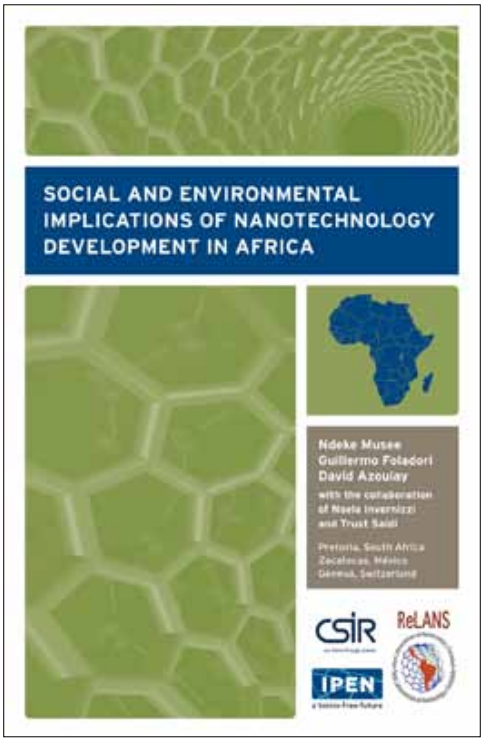
- **Public awareness-raising on hazardous chemicals in electronics in Bangladesh, Bulgaria, and Kenya:** In Bangladesh, Environmental and Social Development Organization (ESDO) worked to raise awareness among computer users about hazardous chemicals in computers and other electronic waste. In Bulgaria, Za Zemiata performed public awareness-raising activities on waste and e-waste in particular using discussions, screenings, subtitles for movies and other methods. In Kenya, Centre for Environmental Justice and Development raised awareness on the risks of e-waste among youth in colleges and universities.

NANOTECHNOLOGIES AND MANUFACTURED NANOMATERIALS

ICCM2 decided on nanotechnologies and nanomaterials as an emerging policy issue in 2009. The ICCM2 decision requests that governments and industry promote actions to safeguard human health and the environment (including, for example, through engagement with workers and their representatives), agrees that more research and better understanding of the potential risks to human health and the environment needs to be undertaken, encourages wider dissemination of human health and environmental safety information in relation to products containing nanomaterials, and calls for a report focusing on nanotechnologies and manufactured nanomaterials, including, in particular, issues of relevance to developing countries and economies in transition.[14]

In response to public interest NGO interest in the issue, IPEN created a dedicated working group of CSOs from five continents. The IPEN Nano Working Group has worked to support the ICCM2 decision by helping to raise awareness and build capacity among CSOs as a first necessary step to ensure the safe production, use, and disposal of nanomaterials. IPEN participated actively in two rounds of regional workshops under SAICM that were organized jointly by the United Nations Institute for Training and Research (UNITAR) and Organization for Economic Cooperation and Development. IPEN representatives prepared position papers and presented their views during the meetings. Additionally, prior to each workshop and SAICM regional meeting, the IPEN Nano Working Group organized separate awareness-raising meetings for CSOs to maximize active participation from NGOs in the region. IPEN also worked with all regional stakeholders (from government, intergovernmental organizations, industry, and civil society) to produce concrete and constructive outcomes from these meetings.

IPEN actively supported the drafting of the report on nanotechnologies and manufactured nanomaterials that was prepared by the SAICM Secretariat by providing contents and bibliographical elements to the consultant in charge of the report drafting. IPEN has also engaged a number of researchers from Latin America and the Caribbean (GRULAC), Africa, and the Asia Pacific regions in these SAICM discussions and projects. IPEN further collaborated



ReLANs, CSIR and IPEN joint publication on Nanotechnology in Africa

13 http://www.ingentaconnect.com/content/maney/oeh/2012/00000018/00000002/art00011

14 ICCM2 II/4E, SAICM/ICCM2.2/15, 2009

with UNITAR and other stakeholders in preparing guidelines for pilot projects to strengthen national capacities to address nanotechnology and manufactured nanomaterials, providing content and review of these guidelines.

To promote public awareness-raising on the issue, IPEN collaborated with the Latin American Nanotechnology and Society Network (ReLANS) and the Centro de Análisis y Acción sobre Tóxicos y sus Alternativas (CAATA) in the production and dissemination of a booklet entitled "*Social and Environmental Implications of Nanotechnology Development in Latin America and the Caribbean.*"[15] [16] The booklet, originally in Spanish and later translated into English and Portuguese, highlights the recommendations of the GRULAC countries to ICCM3. It has been widely distributed at the most significant congresses on nanotechnology in the region, among the Latin American and Caribbean governments, and among worker organizations, including the vital Unión Internacional de Trabajaores de la Alimentación, Agricolas, Hoteles, Restaurantes, Tabaco y Afines (UITA). IPEN, ReLANS, and the Council for Scientific and Industrial Research in South Africa have revised the booklet focusing on African countries. This booklet is entitled "*Social and Environmental Implications of Nanotechnology Development in Africa"* and was released in September 2012, prior to ICCM3.

In addition, public awareness-raising activities on nanotechnology have been part of workshops held by NGOs Association pour la Protection de l'Environnement et Développement Durable de Bizerte in Tunisia and Ecological Restorations in Ghana.

15 http://www.ipen.org/pdfs/Nanotechnology_en.pdf

16 http://www.ipen.org/pdfs/Nanotecnologia_es.pdf

PUBLIC INTEREST NGOS AND SAICM IMPLEMENTATION IN EIGHT IPEN REGIONS

The 2012 IPEN Citizens' Report focuses on developing countries and countries with economies in transition. This should not imply that developed countries have already met the 2020 goal.

ANGLOPHONE AFRICA

Contribution by
AGENDA, Tanzania
IPEN Anglophone Africa Regional Hub

SAICM implementation in the Anglophone Africa region has slightly improved since 2009. Some countries have initiated coordination mechanisms and activities involving various stakeholders, such as review of instruments on chemicals management, information-sharing sessions, and stakeholder meetings. Activities are both government- and NGO-led. A number of QSP-funded projects both by governments and NGOs are being implemented in individual countries or in a sub-region. However, further work needs to be done to bring in end users and vulnerable communities that are the most affected.

National SAICM Focal Points for Ethiopia, Kenya, South Africa, Tanzania, and Uganda have improved coordination and information communication with stakeholders. In Mauritius, the public is not well informed on most SAICM-implementation activities.

In Nigeria, the state of SAICM implementation is slow, although some key steps and actions are being taking in the area of institutional and legal arrangement.

NGO involvement in some activities and committees has improved in Kenya, Mauritius, Nigeria, Tanzania, and Uganda. The Focal Points in some countries are inviting NGO participation in meetings and workshops, and in drafting or commenting on projects and documents (including review of policies and laws). However, even in Nigeria, Tanzania, and Uganda, where NGO participation is improving, permanent institutional structures for NGOs have not been established. Therefore, even though NGOs are part of some national committees, including the National Steering Committees and Technical Committees, they are not backed by a legal framework.

Furthermore, the coordination between government institutions in some countries is not yet clear, although some committees from different government departments have been formed to address chemicals management. These committees mostly coordinate when there is a donor-funded project to implement.

In relation to mainstreaming chemicals management into development plans (budgeting), most countries have not yet done so,

but commit some funding to some specific activities or projects. In Ethiopia, the government appreciated the ISIP project on e-waste management initiated by IPEN and implemented by PAN-Ethiopia, and therefore financed PAN-Ethiopia for implementation of environmentally sound management of e-waste in four cities of Ethiopia (Addis Ababa, Bahir Dar, Dire Dawa, and Hawassa) for two years since January 2011. The government also financed PAN-Ethiopia to collect human breast milk samples for POPs analysis. Fifty samples from different parts of Ethiopia have since been collected and sent to the WHO laboratory for analysis.

In Tanzania, there are no defined budget items for chemicals management; however, the government has dedicated some funding in specific projects aiming to implement SAICM. Some negotiations are ongoing to include budget lines in chemicals management from the local to central government level.

In Uganda, the only funding that seems to be available for chemical issues is the one under the GEF framework; unfortunately, the government is not speeding the process to make it possible to access funds. In fact, most of the funding under the GEF has not been utilized in the recent past except for small funding under the Small Grants Programme (SGP).

In terms of stakeholder collaboration in the region, NGOs, academia, and other sectors participate in the development of position papers for negotiations in international meetings related to chemicals management, such as Conferences of Parties, Intergovernmental Negotiating Committee meetings, and the ministerial coordination mechanism and committee of SAICM implementation in Kenya. In Tanzania, NGOs and academia are working in partnership on some SAICM-related activities, including the review of policies and laws, and the translation of relevant documents to make them more user-friendly. In other cases, NGOs invite academia as facilitators to workshops and NGOs and academic organizations/institutions work in collaboration for common positions. In Uganda, coordination among the different partners is still lacking; however, one successful attempt came under the NGO Pro-Biodiversity Conservationists' SAICM project that promoted a national coordination unit composed of government, private sector, academics, and NGOs, although the project does not have a secured budget to regularly convene this unit.

GAPS

Despite some progress in SAICM implementation, significant gaps remain in the region. Some examples of continuing challenges include:

1. Inadequate human and financial resources, and technical capacity for implementation of projects for SAICM implementation
2. Uncoordinated implementation of chemicals management activities by different organizations, government, CSOs, and NGOs
3. Poor enforcement of legislative frameworks for environmental management, particularly chemicals management, leading to many chemicals-related accidents and incidents

Tanzanian field training promoting integrated pest management (IPM) techniques in Moshi, Tanzania.

SPEARHEADING A NATIONAL E-WASTE POLICY IN ETHIOPIA

Pesticide Action Nexus-Association noted the absence of e-waste management plans in the country and developed detailed inventories of computers, mobile phones, refrigerators, and televisions in four major Ethiopian cities. The results are being used to develop a national management plan for e-waste in the country that will include aspects of public awareness-raising and the establishment of e-waste sorting and collection sites.

This initiative began in 2010, when Pesticide Action Nexus-Ethiopia received an IPEN ISIP small grant for an e-waste management awareness-raising project. This proved to be an eye opener for stakeholders from the government, NGOs, academia, research, and private sectors. During the project, Pesticide Action Nexus-Ethiopia carried out a one-month consultation and assessment of the e-waste situation in the country and Ethiopia's national stand regarding e-waste management; a one-day national stakeholders' workshop; and visits to a computer refurbishment center. They also, by request of the government, developed a two-year project proposal on e-waste management in four cities of Ethiopia (Addis Ababa, Bahirdar, Diredawa and Hawassa), which was approved and is currently underway with the federal Environmental Protection Agency.

The small ISIP grant ended up creating a bridge between Pesticide Action Nexus-Ethiopia and the national SAICM focal point, which brought special attention to the emerging issue of e-waste, and motivated development of the larger, four-city e-waste project.

4. Lack of regulations to control and monitor importation and disposal of e-waste and near-end-of-life electronic equipment
5. Limited involvement of the general public, industry, private sector, NGOs, and public interest groups in the discussion and policy development processes, contributing to poor understanding and enforcement of the relevant instruments, including chemical conventions and SAICM
6. Insufficient and unavailable information on chemical safety issues, including insufficient labeling and a lack of information about potentially hazardous chemicals in products, including electronic waste, nanomaterials, the production and use of asbestos-containing products, and industrial releases
7. Insufficient research and promotion of alternatives to chemical pesticides in agriculture and health, including alternatives to the use of DDT for malaria control
8. Continued insufficient and unavailable information and data on chemical safety and toxicity, especially to the small-scale industry and informal sector and especially in a format that can be readily used
9. Lack of efforts to address acid mine drainage associated with mining activities, which is one of the greatest, current concerns in the region relating to groundwater resources
10. Continued large-scale use of pesticides without a meaningful take-back program and EPR implemented by the industry, creating problems with empty containers and obsolete stockpiles of pesticides on top of the existing stockpiles

Poster raising awareness about the the dangers of improper lead battery recycling, produced by Eco-Ethics, Kenya, for slum areas around Mombasa where lead battery recycling is performed.

SAICM IMPLEMENTATION BY NGOS IN ANGLOPHONE AFRICA

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction	Review of policies on mercury, awareness creation on the effects of mercury on human health, and information generation about effective handling of mercury in artisanal mining GPA items: 57	Ecological Restorations	Ghana
	Initiating the establishment of pesticide poisoning reporting chain to the Rotterdam Secretariat, in collaboration with the Ministry of Agriculture, Food and Agricultural Organization, and PAN-UK GPA items: 27, 77	Pesticide Action Nexus—Ethiopia	Ethiopia
	Reduction of HHP formulations through an integrated pest management approach, in collaboration with the Ministry of Agriculture, PAN-UK, and Institute for Sustainable Development GPA items: 27, 29	Pesticide Action Nexus—Ethiopia	Ethiopia
	Reducing impacts of pesticides on human health and the environment in the Ethiopian Rift valley, in collaboration with the Ministry of Agriculture, PAN-UK, and Institute for Sustainable Development GPA items: 24, 27	Pesticide Action Nexus—Ethiopia	Ethiopia
	Environmentally sound management of electrical and electronic waste, in collaboration with IPEN and Environmental Protection Agency GPA items: 69–70, 73	Pesticide Action Nexus—Ethiopia	Ethiopia
	Reducing or eliminating the use of agro-chemical pesticides for ecological organic agricultural production GPA items: 27, 29	Institute for Sustainable Development	Ethiopia
	Fish and community mercury monitoring project in Uganda GPA items: 57	Pro-Biodiversity Conservationists in Uganda	Uganda
	Promotion and organization of participatory trainings in integrated pest management alternatives and ecological agricultural practices, including bio-chemical alternatives to organic chemicals GPA items: 27, 29	Irrigation Training and Economic Empowerment Organization	Tanzania

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Promotion of waste prevention through encouraging reusable/recyclable consumer goods and biodegradable products GPA items: 70	Irrigation Training and Economic Empowerment Organization	Tanzania
	Promotion of integrated pest and vector management in communities and schools GPA items: 27, 29, 51	Tanzania Association of Public, Occupational and Environmental Health Experts	Tanzania
	Impact assessment of electronic waste handlers and their livelihood in Lagos, Nigeria GPA items: 47	Sustainable Research and Action for Environmental Development Nigeria	Nigeria
	Mercury-free healthcare in Nigeria: campaign for alternatives to mercury in the health care sector in Lagos State, Nigeria GPA items: 57	Sustainable Research and Action for Environmental Development Nigeria	Nigeria
	Control of effects of chemicals GPA items: 17, 27, 47, 51	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Capacity building on handling and final disposal of mercury-containing equipment in health facilities and educational centers in Tanzania GPA items: 57	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Training and promotion of best alternative technologies/best environmental practices applications GPA items: 43, 46	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Training of metal processing in an Export Processing Zone factory on the appropriate use of personal protective gears while at work; training residents on how to reduce their exposure to lead poisoning GPA items: 16, 57	Eco-Ethics International —Kenya	Kenya
	Assessment of national chemicals management to identify gaps and prioritize action GPA items: 45	groundWork	South Africa
	Decrease of pesticide use in agriculture GPA items: 51	Pesticide Action Network	Mauritius
	Mercury-free schools: awareness raising GPA items: 57	Pesticide Action Network	Mauritius

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Towards cleaner production for textile industries in Tanzania, in collaboration with Swedish Society for Nature Conservation GPA items: 43, 45	Environmental, Human Rights Care and Gender Organization (ENVIROCARE)	Tanzania
	Inventory verification of obsolete pesticides (farms and small scale) in Tanzania farms, in collaboration with the National Environment Management Council GPA items: 47	Environmental, Human Rights Care and Gender Organization (ENVIROCARE)	Tanzania
	Reducing the impacts of pesticide use in Kilimanjaro region, in collaboration with PAN-UK GPA items: 50–51	Envirocare	Tanzania
Knowledge and Information	Initiation of a study: Centers of power pesticides regulation in Kenya (at initiation stage) GPA items: 27, 85, 88	Centre for Environmental Justice and Development	Kenya
	Pesticide risk reduction: and the communication of strategy materials developed and used, in collaboration with PAN-UK and Ministry of Agriculture GPA items: 114	Pesticide Action Nexus—Ethiopia	Ethiopia
	E-waste management training and information materials developed and disseminated, in collaboration with IPEN and Environmental Protection Agency GPA items: 161	Pesticide Action Nexus—Ethiopia	Ethiopia
	Electronic and print media being used as a means to reach grass roots communities, in collaboration with PAN-UK, IPEN, and Environmental Protection Agency GPA items: 112, 114	Pesticide Action Nexus—Ethiopia	Ethiopia
	Coordinating the IPEN electronic products working group, in collaboration with IPEN GPA items: 88	Pesticide Action Nexus—Ethiopia	Ethiopia
	Human breast milk sampling as part of the Stockholm Convention report, in collaboration with Environmental Protection Agency, Ministry of Health, and World Health Organization GPA items: 76, 88	Pesticide Action Nexus—Ethiopia	Ethiopia
	Promoting indigenous knowledge on bio-pesticides GPA items: 51, 114	Institute for Sustainable Development	Ethiopia

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Awareness-raising and education on effects of hazardous consumer products to human health and environment in Kenya GPA items: 112	iLima Organization	Kenya
	Analysis of hydroquinone in skin lightening products in Africa and awareness-raising on effects of hazardous chemicals in products to human health and environment GPA items: 88, 112	iLima Organization	Kenya
	Awareness-raising on human exposure and monitoring of mercury emissions from hotspots using Lumex mercury monitoring as well as analysis of mercury content in skin lightening products in Africa GPA items: 85, 112	iLima Organization	Kenya
	Promoting chemical safety of children at work in rural agricultural communities GPA items: 13, 89	Pro-Biodiversity Conservationists in Uganda	Uganda
	Awareness-raising on the dangers of chemicals used in indoor residual spraying (IRS) for malaria control GPA items: 89	Uganda Network on Toxic Free Malaria Control	Uganda
	An assessment on the impact of DDT on malaria control in Oyam and Apac Districts in Northern Uganda GPA items: 114, 116	Uganda Network on Toxic Free Malaria Control	Uganda
	Organization of research results related to alternative pest control (both chemical and non-chemical) and crop protection measures GPA items: 114, 116	Irrigation Training and Economic Empowerment Organization	Tanzania
	Interpretation and application of knowledge into Kiswahili language on the hazards, risks and safe use of chemicals; and the collection, analysis, documentation, and publication of chemical safety-related information among social partners through public media GPA items: 112, 114, 116	Irrigation Training and Economic Empowerment Organization	Tanzania
	Community-based awareness-raising workshops on harmful effects of the re-use of chemical pesticides containers GPA items: 116	Sustainable Research and Action for Environmental Development Nigeria	Nigeria

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Global study to determine lead in paints in Nigeria and associated campaign for its removal GPA items: 89	Sustainable Research and Action for Environmental Development Nigeria	Nigeria
	Production and dissemination of public awareness-raising materials (including brochures, posters, and flyers) containing the message "Stop lead poisoning in slums" GPA items: 89	Eco-Ethics International —Kenya	Kenya
	Development of policy brief, posters, and flyers to inform communities and policymakers on hazards due to pesticides in Tanzania GPA items: 112, 114	Tanzania Association of Public, Occupational and Environmental Health Experts	Tanzania
	Publication of report on reduction of pesticide use in agriculture GPA items: 50, 51	Pesticide Action Network	Mauritius
	Design and production of training modules on mercury in secondary schools GPA items: 57, 112	Pesticide Action Network	Mauritius
	Demonstrating and promoting best techniques and practices for reducing health care waste to avoid environmental releases of dioxins and mercury GPA items: 112	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	NGOs contribution to African Stockpiles Project sustainability in Tanzania, training of local government officers, school teachers, and empty containers management and labeling GPA items: 51, 70, 112, 114	Africa Stockpiles Project (ASP) Network–Tanzania	Tanzania
	Preparation of training manuals on botanicals GPA items: 114	Environmental, Human Rights Care and Gender Organization	Tanzania
Governance	Involvement in the national discussion for the development of pesticide registration and control proclamation and regulation, in collaboration with the Ministry of Agriculture GPA items: 186, 195	Pesticide Action Nexus—Ethiopia	Ethiopia
	SAICM implementation in East Africa: Law reform and capacity building for sound chemicals management in Uganda, Tanzania, and Kenya GPA items: 19, 167, 186	AGENDA, iLima Organization, National Association of Professional Environmentalists	Kenya, Tanzania, Uganda

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Governance *cont.*	Provision of input to Federal Environmental Protection Agency for the formulation of national policy on life-cycle management of e-products, in collaboration with IPEN and Environmental Protection Agency GPA items: 195	Pesticide Action Nexus—Ethiopia	Ethiopia
	Participation as an observer to the 5th Joint Meeting on Pesticide Management and revision of the FAO code of conduct, in collaboration with PAN-UK GPA items: 186, 206	Pesticide Action Nexus—Ethiopia	Ethiopia
	Strengthening of representation in government committees and carrying out and monitoring of SAICM implementation plans GPA items: 186, 206	Irrigation Training and Economic Empowerment Organization	Tanzania
	Participation in stakeholder meeting to review pesticides legislation in Morogoro GPA items: 186, 206	Tanzania Association of Public, Occupational and Environmental Health Experts	Tanzania
	Implementation of regional project to develop appropriate strategies for identifying sites contaminated by chemicals listed in Annexes A, B, and/or C of the Stockholm Convention in Nigeria and Ghana GPA items: 47, 196	Sustainable Research and Action for Environmental Development Nigeria	Nigeria
	Collaboration with the National Environmental Management Authority in the inspection of a factory and advocating for better operation in compliance with the Environmental Management and Coordination Act of 1999 GPA items: 186, 206	Eco-Ethics International—Kenya	Kenya
Capacity Building	Education of small scale gardeners on safe pesticides management and handling along Lake Victoria, Kenya GPA items: 256	Centre for Environmental Justice and Development	Kenya
	Trainings on pesticide management and e-waste management in different parts of Ethiopia, in collaboration with PAN-UK, IPEN, Environmental Protection Agency, and Ministry of Agriculture GPA items: 214, 256	Pesticide Action Nexus-Ethiopia	Ethiopia

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Capacity Building *cont.*	Trainings about and support for integrated pest management (eco-toxicology skills) and alternatives to waste minimization and increasing resource efficiency, including zero waste resource management, waste prevention, and substitution to reduce the volume and toxicity of discarded materials GPA items: 214, 256	Irrigation Training and Economic Empowerment Organization	Tanzania
	Training community in self-surveillance and reporting of pesticide poisoning incidences in Lake Eyasi Basin, Karatu and Kilolo, Iringa GPA items: 256	Tanzania Association of Public, Occupational and Environmental Health Experts	Tanzania
	Training the residents of Owino Uhuru Slums and the workers of Metal Refinery Export Processing Zone (EPZ) on the health and environmental effects of lead, and the formation of a community group "Owino Uhuru Empowerment Group" to monitor the emission status of the factory located close to their residential area GPA items: 256	Eco-Ethics International—Kenya	Kenya
	Trained trainers on mercury health effects GPA items: 256	Pesticide Action Network	Mauritius
	Helped planters and agricultural workers in understanding the harmful effects of chemical pesticides on health and the environment GPA items: 256	Pesticide Action Network	Mauritius
	Trained farmers on preparation and use of organic pesticides GPA items: 256	Environmental, Human Rights Care and Gender Organization	Tanzania
Illegal Traffic	Assessment and notification of illegal pesticide trades and end of life electronics importation, in collaboration with Ministry of Agriculture and the Environmental Protection Agency GPA items: 272, 273	Pesticide Action Nexus—Ethiopia	Ethiopia

CENTRAL AND EASTERN EUROPE (CEE)

Contributions by
ARNIKA Association, Czech Republic
IPEN CEE Regional Hub

The IPEN CEE region is divided into two parts: EU member states and non-EU states. EU member states include Bulgaria, Czech Republic, Hungary, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia, and Slovenia. Non-EU countries include Albania, Belarus, Bosnia and Herzegovina, Croatia (EU accession country), Macedonia (EU accession country), Montenegro, Serbia (including Kosovo), and Turkey (EU accession country). While implementation of chemical safety legislation and its enforcement is governed according to EU rules in the northwestern and central part of our region, it is quite different in its eastern and southeastern part.

Generally NGOs in the CEE region are not usually part of a government implementation committee or process and the level of encouragement of their involvement is very limited. Involvement of NGOs in developing strategies and openness of governments to involve NGOs in their SAICM implementation activities are in general low. However, some NGOs have been carrying out activities directly focused on SAICM implementation in their countries and in the region.

According to experiences of NGOs from the CEE region, National SAICM Focal Points seem to be accessible. At the same time NGOs rarely contact them, as activities focused primarily and explicitly on SAICM implementation are not common in the region.

Aging pesticide storage, Durres, Albania

Also, the NGOs are probably not motivated to work with Focal Points or are not aware of possible benefits of communicating with the Focal Points. However, some NGOs do engage with them, for example, NGOs are in good contact with their national Focal Points in Hungary and Albania.

EU countries have to meet many obligations regarding chemical safety rules. There are specific EU directives (needed to be introduced into the national legislation by national laws) or regulations (directly applied to national legislation). This includes the regulation on Registration, Evaluation and Authorization of Chemicals known under its abbreviation as REACH. Unfortunately, it does not mean that SAICM is fully implemented in EU member states. For example, the Pollutant Release and Transfer Register (PRTR) in the Czech Republic is under continuous pressure from industry because it also requires chemical-specific reporting on wastes. Waste management regulation is under pressure within the EU in general (e.g., limit values for dioxins).

SAICM must also be viewed as a process by which developed countries improve chemicals management. All signatory countries of SAICM made a firm commitment in 2006 at ICCM in Dubai that the sound management of chemicals is essential to achieve sustainable development and that concerted actions need to be taken to reach the 2020 goal. This means that developed countries should be establishing inter-ministerial coordination committees, as well as involving civil society in decision-making, fully protecting industrial and agricultural workers, and implementing sufficient policies and programs to promote safe and effective alternatives and substitutes to persistent, bioaccumulative, and toxic substances (PBTs) as called for in the SAICM GPA, among others.

Chemical safety in the region is improving in general, but it could be faster, according to NGOs.

GAPS

A number of significant gaps for SAICIM implementation in the CEE region remain to be addressed. There are still sites contaminated by industrial activities where there is a need for cleanup. Contaminated sites include both working enterprises and obsolete factories and dumpsites. Many landfills in both EU and non-EU countries are in unsatisfactory conditions (for example, missing drainage systems), which is especially problematic when combined with the low level of hazardous waste separation. Clean-up activities can be considered slow and non-transparent due to insufficient enforcement and insufficient finances available. Also, there is a lack of compulsory action plans.

Inadequate waste management and weaknesses of new waste legislation regarding chemical safety are a significant problem. The waste framework directive and Persistent Organic Pollutants (POPs) regulations allow the release of high volumes of POPs through the waste flow, promotion of technologies producing new

POPs (such as incineration of wastes), and more open borders to waste movement. Also, e-waste is certainly an important issue, mainly in non-EU and new EU member countries. Procedures and facilities for adequate treatment for this emerging type of waste are still lacking and their enforcement is weak. Also in the EU, the procedures for collection and management of e-waste are sometimes not clear enough. A significant amount of e-waste continues to be mixed with municipal waste in both EU and non-EU countries.

Another example of a gap in handling waste properly is the European PRTR, in which waste is not required to undergo chemical-specific reporting, but only in total amounts of hazardous waste generated by facilities reporting to PRTR. European PRTR also does not cover all industries, but by majority only those for which Integrated Pollution Prevention and Control (IPPC) permits are required.

EU policy on POPs is heavily oriented on air releases mainly and does not pay enough attention to other pathways of pollution by POPs.

Additionally, there are still double standards in chemical policy between EU and non-EU countries. The non-EU countries still have different (usually weaker) legislative and other measures to control chemicals. In these countries, the lack of clear communication and information sharing procedures between various state institutions and the absence of an integrated program of chemicals management are problems.

Center for Environmental Solutions, conducting a press conference in Minsk, Belarus to launch a chemical safety info center

There is also a need for strengthening a multistakeholder approach to develop chemicals management strategies on national level. Although communication among stakeholders might be relatively vital, the tools and formal procedures for involvement of the public and NGOs in development of strategies are weak or lacking. This fact resonates with increasing lack of funding for civil society activities due to the economic situation of European countries. The lack of financial sources results in elimination of civil society services and activities. It is also an obstacle in building capacities of civil society and independent experts. This problem is compounded due to budget cuts in some countries' state environmental and/or health institutions.

Lack of regular monitoring data and their low accessibility by the public is common in most of the non-EU countries in the region. This is also due to the lower capacity of laboratories available in these countries. However, even the situation in some EU countries is not satisfactory. Usually there's a problem with a low emphasis on awareness-raising, the ability of public to use the information, and the adequacy of monitoring.

In general, there are still many HHPs being used; many hazardous substances (like EDCs) are on the market, in cosmetics, food, and other everyday products (pesticides, phthalates, triclosan, etc.); multiple pesticide residues can still be found in food (especially in food from non-EU countries) and substitution within REACH is not happening.

CIVIL SOCIETY PARTICIPATION IN BELARUS

The Belarusian NGO Center for Environmental Solutions (CES), in partnership with Arnika Association from the Czech Republic, have been implementing a project focused on strengthening public participation on environmental decision-making and SAICM implementation in Belarus. Through this project, a chemical safety consultation center that serves concerned citizens has been opened in Minsk, which is an important step forward in creating broader availability of information.

Furthermore, CES is working on the establishment of a network of environmental NGOs. One of the activities the network has focused on to date is the environmental and health hazards of incinerators. A meeting with officers of relevant ministries was held, a media event was organized, and a press release was circulated. These activities helped to postpone the building of a planned incinerator and supported aims of deeper environmental assessment.

As CES is an active NGO participating in the Belarusian National SAICM Committee, their work is especially vital in advancing robust civil society participation and contributions to the national SAICM implementation efforts.

SAICM IMPLEMENTATION BY NGOS IN CENTRAL AND EASTERN EUROPE

In general, actions of NGOs in the CEE region focused on the issues connected to SAICM are rather limited. We assume that this is mainly due to the low availability of funding for such activities and by the high popularity and attractiveness of other environmental issues (energy, global warming, etc.) among the public and NGOs in the region. However, there are still a number of NGOs systematically working on the issue of chemicals management. Most of the activities fall under the Knowledge and Information category, but there is also a significant amount of work focused on Capacity Building and Governance.

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction	Pilot project of e-waste collection in Minsk GPA items: 70,72, 73	Center for Environmental Solutions	Belarus
	Surface and drinking water monitoring (found illegal pesticide pollution in drinking water in Budapest) GPA items: 47	Clean Air Action Group and Centrum pre trvalo-udrzatelne alternativy (Center for Sustainable Development Alternatives)	Hungary, Slovakia
	Initiated EU infringement procedure against polluting red mud site at Almasfuzito soil and water measurements around red mud sites: Kolontar and Almasfuzito (found many polluted sites) GPA items: 78	Greenpeace CEE—HU	Hungary
	Project focused on chemicals in medical equipment and waste (EMAS for hospitals) GPA items: 54	Arnika	Czech Republic
	Waste prevention, a necessary step towards sustainable development in Visegrad countries GPA items: 73	Friends of the Earth—SPZ	Slovakia
	Training to farmers and to NGOs on pesticide reduction and pesticide alternatives GPA items: 51	Clean Air Action Group and Pesticide Action Network Europe	Hungary, other EU countries
Knowledge and Information	Research work on vaccines in Macedonia, resulting in preparing an issue paper GPA items: 82	Eco-Sense	Macedonia
	Development of five fact sheets on mercury GPA items: 82	Eco-Sense	Macedonia
	Conducting hair sampling of 33 people for mercury levels GPA items: 82	Eco-Sense	Macedonia

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Dissemination of consumer advice on lifestyle changes for natural decrease of mercury contamination GPA items: 82	Eco-Sense	Macedonia
	Study of public awareness about lead contamination around an old battery factory in Uznova GPA items: 157	EDEN Center	Albania
	Awareness-raising campaign for local inhabitants about risks connected to former used lead batteries factory in Berat GPA items: 157	EDEN Center	Albania
	Short investigative movie on Vlora PVC plant GPA items: 105, 109	EDEN Center	Albania
	Assessment of chemicals in food products and awareness raising campaign GPA items: 108, 111	EDEN Center	Albania
	Analyses of PVC wallpapers and floor coverings GPA items: 135	Arnika	Czech Republic
	Assessment of chemicals (PFCs, BFRs) in Czech fish and river sediments GPA items: 135	Arnika	Czech Republic
	Assessment report of the situation of e-waste management in Belarus GPA items: 85, 132, 135, 162	Center for Environmental Solutions	Belarus
	Awareness raising activities on e-waste GPA items: 112	Za Zemiata	Bulgaria
	Awareness-raising events and translation of Women in Europe for a Common Future's (WECF's) chemicals guides into local languages GPA items: 112	WECF, Baltic Environmental Forum, Women´s Movement for Integral Development, Journalists for Women and Children's Rights and Environmental Justice, Resource Center Leskovac	Albania, Macedonia, Serbia
	Establishment of a public information center for chemical safety GPA items: 163	Center for Environmental Solutions, Arnika	Belarus

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	The Fight to Know? Substances Of Very High Concern and The Citizens' Right To Know Under Reach (analyses for phthalates in consumer products and right to know exercise under REACH) GPA items: 89	Clean Air Action Group (part of larger EU report with BUND, SSNC, WECF and EEB)	Hungary
	Measurements and press action against illegal POP storage in Gdansk next to the Baltic Sea GPA items: 161	Greenpeace CEE—Poland	Poland
	Information to the public on pesticides, water, and drinking water pollution GPA items: 114	Clean Air Action Group and Centrum pre trvalo-udrzatelne alternativy (Center for Sustainable Development Alternatives)	Hungary, Slovakia
	Awareness-raising and a demonstration against the planned giant cyanide gold mine in Rosia MontanÐ GPA items: 135	Greenpeace	Romania
	Information on pesticide residues in food to the public, to supermarkets and to decision makers GPA items: 114	Greenpeace CEE-HU	Hungary
	NGO comments on the National Action Plan on Sustainable Pesticide Use GPA items: 160	Greenpeace CEE-HU and Clean Air Action Group	Hungary
	Multistakeholder trainings on products and chemical safety in Albania, Serbia, and Macedonia GPA items: 163	WECF, Baltic Environmental Forum, Women´s Movement for Integral Development, Journalists for Women and Children Rights and Environmental Justice	Albania, Serbia, Macedonia
	Four rounds of fruit and vegetable testing (for pesticides) GPA items: 114	Clean Air Action Group and Pesticide Action Network Europe	Hungary, other EU countries
Governance	Development of waste action plan for the city of Vrbovec GPA items: 69, 72–73, 262	Zelena Akcija	Croatia
	Assessment of effects of Croatian membership in EU on issues of health and environment GPA items: 165	Zelena Akcija	Croatia

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Governance *cont.*	Campaign against reduction of the Czech Integrated Pollution Register GPA items: 206	Arnika	Czech Republic
	Meetings with Belarusian authorities regarding public involvement in decision-making about planned building of incinerators GPA items: 206	Center for Environmental Solutions, Arnika	Belarus
Capacity Building	Seminar with four lectures on pesticides prevention and integrated pest management followed by a booklet for farmers GPA items: 223, 255	Institute for Rural Development and Ecology	Croatia
	Development of a 23-page manual on integrated pest management for producers GPA items: 255–256	Institute for Rural Development and Ecology	Croatia
	Waste management symposium and waste action plan workshop GPA items: 262	Zelena Akcija	Croatia

EASTERN EUROPE CAUCASUS AND CENTRAL ASIA (EECCA)

Contributions by
Eco-Accord
IPEN EECCA Regional Hub

Since 2009, EECCA countries shifted to a qualitatively new level of implementation of SAICM. In the period of 2006-2009, SAICM-related activities were of a rather fragmentary nature, and only separate projects were implemented that were heavily dependent on available funds. Projects generally ceased after termination of their financing. In the majority of cases, the countries lacked understanding of the need to apply a more comprehensive and structured approach for achievement of sound chemicals management. However, the situation started to improve gradually after the second session of the International Conference on Chemicals Management in 2009.

In several EECCA countries, coordination centers for SAICM implementation were established under ministries and agencies in charge of chemicals management. Some coordination centers seek to cooperate with NGOs.

EECCA countries also started to develop their national legislation for long-term strategic planning in to advance chemical safety. National environmental policy strategies incorporate objectives, key priorities, and dimensions of national environmental policy and are accompanied by development of draft long-term National Environmental Action Plans.

The development of national chemical management profiles was an important step in the establishment of national chemical security policies – the profiles entail comprehensive surveys or existing national legal, institutional, administrative, and technical infrastructures associated with rational use of chemicals. Such profiles were developed in Armenia, Belarus, Georgia, Kyrgyzstan, Kazakhstan, Moldova, and Uzbekistan. In those countries, development of national profiles allowed the governments to ascertain/identify existing and potential chemicals-related problems, as well as available options to address the problems. The national profiles also allowed identification of gaps or shortcomings of existing systems, thus making initial steps in defining areas for future efforts to improve national legislative frameworks. The profiles revealed potential duplicities in control systems and other manifestations of inefficiency hindering rational use of already available resources.

A major step forward in realization of counties' abilities to implement SAICM was made in the course of national assessments of SAICM implementation capacity (National SAICM Capacity Assessments). Such assessments were produced in Georgia, Kyrgyzstan, Kazakhstan, and Uzbekistan. Relevant documents incorporate Assessments of National Management Frameworks and Assessments of Capacity to Address Priority Problems of Sound Chemical Management.

In recent years, NGOs were increasingly active in implementation of SAICM-related projects. Since 2009, 16 projects were implemented in EECCA countries, including Armenia, Azerbaijan, Georgia, Moldova, Ukraine, Russia, Tajikistan, Kazakhstan, Kyrgyzstan, and Uzbekistan.

NGOs often initiated mobilization of funds of international donor institutions for their countries. As an example, we may refer to the initiative of NGOs of Tajikistan and Kyrgyzstan for development of national systems of chemical classification and labeling with their eventual harmonization with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). These projects were approved by the Trust Fund of the SAICM QSP. Besides that, in response to an initiative of Tajikistan NGOs, the GEF SGP approved a project on analyzing and strengthening the national environmental policy on mercury pollution. These three projects were supported by national SAICM coordinators of Kyrgyzstan and Tajikistan.

Intensive activities of NGO-run SAICM focal points promoted the growing attention of governments to problems of toxic environmental contamination. As a result, Chemical Safety Commissions were established in several EECCA countries with the participation of NGO representatives. For example, in 2009, in Armenia, a SAICM Steering Committee was established under the Ministry of Nature Protection, and a specialized commission was established under the Ministry of Emergency Response to address safety problems of the burial site of obsolete and banned pesticides. The Ministry of Urban Development of Armenia established a commission in charge of municipal waste collection, transportation and neutralization. It is worth emphasizing that representatives of NGOs were incorporated into all the above Armenian commissions. In July 2012, in Kyrgyzstan, a Coordination Commission was established to facilitate safe management of chemicals. In addition to the first deputy PM and other deputy ministers, the commission also includes representatives of NGOs.

Such active participation of NGOs in activities of governmental chemical safety commissions promotes higher awareness of NGOs and the general public on different on-going and planned national processes and improves transparency of the decisions made. In addition, NGOs have opportunities to promote their opinions actively and to insist on their positions at the high governmental level. For example, the Russian NGO Eco-Accord developed recommendations for public awareness-raising on POPs; the recommendations were incorporated into the Russian National Implementation Plan of the Stockholm Convention. In particular, Eco-Accord proposed to establish an Information Consortium on POPs and Implementation of the Stockholm Convention with participation of national authorities, NGOs, representatives of

industries, local authorities, academic community, and international organizations. Eco-Accord's recommendations particularly focused on synergies of chemical conventions and SAICM. These materials were presented at the session of the Interagency Working Group on the Stockholm Convention in March 2012 and were included into the draft of the Russian National Implementation Plan under the Stockholm Convention on POPs.

NGOs participated actively in the development and discussion of papers on chemical safety during the establishment of the regulatory framework of the EurAsEC Customs Union. In particular, the Center "Cooperation for Sustainable Development," being part of the Working Group on the safety of chemical products, was involved in the development of technical regulations of the EurAsEC Customs Union for the safety of chemical products (which introduces the basic principles of the GHS within the Customs Union), the safety of synthetic detergents, as well as paints and varnishes. In the latter document, proposals on the elimination of lead in paint were made.

In October 2010, NGO «Ecoproject» (Belarus), Local Self-Government Development Centre (Kazakhstan), «Independent Ecological Expertise» (Kyrgyzstan), and Eco-Accord (Russia) initiated a CSO Forum on Strengthening Capacities of Civil Society Organizations for National and Regional SAICM Implementation in the EECCA region. More than 40 NGOs working on SAICM implementation participated in the Forum. The discussion was based on the following main documents: Needs Assessment and Identification of Mechanisms for Efficient Dissemination of Information on SAICM among the General Public of the Republic of Belarus, Kazakhstan and Kyrgyzstan; Introduction to SAICM and latest achievements; SAICM and three chemical conventions, synergy and COP outcomes; EECCA NGO participation in the implementation of SAICM at the international, regional, national, and local level; NGO position at SAICM regional meetings and other meetings related to SAICM implementation; and NGO resolutions on SAICM emerging policy issues. In addition, a strategy for involvement of NGOs from Belarus, Kazakhstan, and Kyrgyzstan on SAICM implementation for the period of 2011-2020 was presented. A resolution was signed as the forum outcome which was further presented to the EECCA Ministers on Environment at the Ministerial Environment for Europe Conference held in September 2010 in Astana.

In October 2011, Independent Ecological Expertise NGO (Kyrgyzstan) developed its draft Concept for Development of Comprehensive Measures for Kyrgyz Republic for Mercury Management at All Stages of its Life Cycle. The document was circulated among CSO representatives and submitted to the government for review. Later on, the draft concept was posted on the web-site of the KR State Agency for Environment and Forestry and other websites.[1] [2]

1 www.nature.kg

2 www.caresd.net, www.ekois.net, www.eco-expertise.org, www.nature.kg

FIRST STUDY OF BISPHENOL A IN FOOD IN RUSSIA

Prior to a study carried out by the NGO Chapaevsk Medical Association, data about bisphenol-A (BPA) in products sold to the public was unavailable in Russia. The Chapaevsk Medical Association therefore measured the endocrine disrupter BPA in 21 samples from three cities.

They first developed an assay using Gas Chromatography-Mass Spectrometry (GC-MS) for BPA analysis with good sensitivity and accuracy. Following this, they collected food samples from grocery stores in Moscow, Samara, and Chapaevsk.

The analysis of the food samples showed that BPA was identified in 17 of 21 samples (81%), noting the highest levels were found in canned (tin) food.

High levels of BPA were also found in baby food and in a baby's dummy (pacifier / soother) (17,04 ng/g). None of the samples were labeled to indicate the presence of the toxic chemical.

Chapaevsk Medical Association compared the results to a study published in Canada and learned that the average level of BPA in Russia was similar (slightly higher) to that of the level of BPA for beverages and infant formulas in Canada.

Chapaevsk Medical Association reported the results to the authorities from the Ministry of Natural Resources and the Environment as well as to experts from the Ministry of Health and Social Development.

GAPS

Notwithstanding some progress of activities to advance chemical safety efforts in EECCA region, there are some specific problems that need to be addressed urgently. Main problems that prevent efficient SAICM implementation in many EECCA countries include the following:

1. Lack of national SAICM coordinators that might bridge efforts of different agencies and organizations for development of chemical safety systems.
2. Lack of national centers for synergies of chemical conventions and SAICM.
3. Poor coordination of activities of different ministries, agencies and organizations in charge of chemical management and ensuring chemical safety.
4. Gaps in collection, exchange, and provision of information

on chemicals in relations between different agencies and organizations and in the provision of the information to the general public.

5. Low public participation in substantive decision-making on matters related to ensuring chemical safety.
6. Lack of monitoring of chemical contamination of the environment as well as timely and accurate information on hazardous emissions and discharges from fixed pollution sources to air, water, and soils.
7. Lack of systems for inventorying, classifying, recycling, neutralizing, and eliminating industrial waste (including chemicals waste) that often pose public health hazards and contaminate the environment. Substantial accumulation of stockpiles of chemical waste is observed (including toxic waste).
8. Lack of systems for classification and labeling of chemicals, as well as registers of potentially hazardous chemical and biological substances, such situations substantially complicate mitigation of adverse health and environmental impacts of hazardous toxic substances.
9. Poor technological and laboratory capacity, preventing epidemiological research studies on health impacts of chemicals and analysis of toxic contents in products (including consumer goods). The countries have almost never assessed risks of health impacts of hazardous chemicals, and as a result people are more vulnerable to impacts of some chemicals.

While numerous national level programs and projects were initiated in EECCA countries, general results to ensure chemical safety in the region still remain poor. The underlying causes are associated with uncoordinated activities of governmental agencies, their reluctance to share information and duplication of many efforts – all these factors hinder progress in addressing the problem. On the one hand, the case of the destroyed pesticide burial site in Armenia may be considered as a positive example – monitoring was ensured and the burial site was temporarily sealed after its destruction. However, on the other hand, the case demonstrated how long it took to adequately respond to a threat that entailed serious environmental contamination.

Chapaevsk Medical Association sampled foods for bisphinal A (BPA) finding the highest levels of BPA in baby foods and canned foods.

The majority of EECCA countries lack mechanisms to discuss lessons learned in the course of implementation of projects and programs. All EECCA countries conducted primary inventories of their stockpiles of banned and obsolete pesticides in the early years of this century but later work in this area declined. Repeated inventories in some countries revealed substantially higher amounts of banned and obsolete pesticides compared to earlier data. NGOs provided substantial information about real amounts of obsolete pesticides. Projects that helped NGOs to provide additional information on obsolete pesticides were implemented in Armenia, Azerbaijan, Russia, and Ukraine. However, the situation is still far from being settled. No complete elimination of big obsolete pesticide burial sites and stockpiles has been conducted. It is still necessary to focus on problems of long-term pesticide contamination of soil, water, and food caused by numerous pesticide storages at national territories, as well as the elimination of large-scale pesticide burial sites.

Environmental agencies of EECCA countries have difficulty controlling the import of hazardous chemicals and contamination of national territories by pesticides and other chemicals, including phenols, heavy metals, etc. It is necessary to address the problem of management of medical, household, and electronic waste, as well as the problem of control of quality of imported food products, toys, and consumer goods.

The problem of mining and export of raw materials is equally grave in EECCA countries. For example, Geopro Mining, Vallex Group, Allumin Corporation, Geotim, Deno Gold Mining, and Cronimed Mining extract mineral resources in Armenia causing economic and irreparable environmental damages. These companies operate open cast mines with all associated consequences, including the contamination of soils, air, and water, as well as adverse health impacts. It is worthwhile to note a new and disturbing trend observed in Armenia: new mining sites are launched in protected territories and in forested areas. The industry receives licenses for new mining facilities without prior consultation with the general public and local residents, thus ignoring the human right to safe and healthy environments.

Another important chemical security problem is associated with regular releases of toxic chemicals to the ambient air and the accumulation of toxic waste. For example, according to the State Committee for Statistics of Uzbekistan, the annual generation of consumption and production waste in the country reaches more than 100 million tons, with over 14% comprised of toxic waste. In Ukraine, according to expert estimates, the overall amount of accumulated industrial waste reaches more than 25 billion

tons, covering an area of over 160 thousand hectares. The level of industrial pollution (waste per land area) in Ukraine is 6.5 times higher than in the U.S. and 3.2 times higher than in EU countries. The situation in Azerbaijan is also serious. According to findings of a project implemented by NGOs in the framework of SAICM, the country annually generates over 1.5 million burned, broken, and unusable fluorescent bulbs. However, these mercury-containing devices are still disposed of in municipal landfills (sometimes even in illegal waste dumps), where they are broken and release their mercury contents into the soil.

The problem of mercury contamination by broken mercury-containing instruments is rather acute in all EECCA countries. In particular, according to the Institute of Mineralogy, Geochemistry, and Crystal Chemistry of Rare Elements in Russia, every year from 1998 to 2002 up to nine million mercury-containing thermometers were broken, releasing about 18 tons of metal mercury. Application of mercury-containing bulbs and thermometers in household settings and childcare and public health facilities results in numerous cases of mercury contamination. As budgetary facilities (education, public health, and culture facilities) lack sufficient funds, they cannot transfer burned mercury-containing fluorescent bulbs to specialized utilization facilities. As a result, these bulbs are accumulated and stored in inadequate sanitary conditions. A similar situation is observed at many industrial facilities that accumulated serious stockpiles of such bulbs for several years (from 150 to several thousand bulbs).

The problem of collection and recycling of e-waste is also very serious in the EECCA countries. In particular, in Kazakhstan, producers and suppliers of electrical and electronic waste are not responsible for collection and disposal of waste. As a result, e-waste ends up in municipal landfills and continuously pollutes groundwater and air during smoldering and toxic chemical degradation. In the meantime, citizens and business companies are interested to delivering e-waste to companies that recycle. To address the issue of sound e-waste management, the principle of EPR should be included into national legislation of all EECCA countries.

Uncontrolled waste collection and processing pose serious health and environmental hazards, as does the incineration of municipal, industrial, and medical waste (a source of releases of dioxins and furans). Many EECCA countries still lack facilities for organized waste collection, separation, and processing. All types of waste (including wastes with hazardous substances) are collected in major cities at landfills, then covered by soil or incinerated. In many EECCA states, there is no system of waste inventory or waste classification, nor is there waste recycling and safe disposal. In some countries, the problem of organic waste at landfills was partially resolved by methane generation and its use as a fuel, but inorganic waste continues to accumulate, facilitating infiltration of hazardous substances to soil and then to water.

The problem of stockpiles of obsolete pesticides in EECCA countries is associated with a grievous heritage of political leadership of the former USSR who sought to ensure total "chemicalization" of all economic sectors. Many countries of the region inherited tens of thousands of tons of obsolete pesticides that, like "delayed action bombs," now pose serious health and environmental hazards to all EECCA countries and their neighbors. From 2008 to 2010, research studies were conducted in the course of the World Bank project "Obsolete pesticides technical study in Kyrgyz Republic, Republic of Tajikistan and the Republic of Uzbekistan" at burial sites of obsolete pesticides "Navruz" and "Yangibazar" in Surkhandaryinskaya and Navoinskaya oblasts of Uzbekistan. The studies revealed serious problems, including the technical quality of pesticide storages and 13 burial sites, the quality of packaging materials for hazardous chemicals, cases of intrusion into burials, and the application of pesticide packaging for household purposes. It is clear that awareness-raising activities in the sphere of chemical safety are ineffective and local residents are not duly informed of the adverse health and environmental impacts of pesticides.[3] The problem of pesticide-contaminated drums is considered as a serious one in EECCA. Local citizens often use empty drums to store potable water, vegetable oil, or flour, as well as other types of food and animal feedstuff. Drums are partially thrown to the landfills, including illegal landfills. There have been cases of acute poisoning among people who used pesticide-contaminated drums for their household needs. Livestock poisoning was also registered in Tajikistan as a result of pesticide-contaminated drums use. According to the available information in Tajikistan, local citizens use about 40,000 pesticide-contaminated drums. In the frame of GEF/UNEP project on the development of National Implementation Plan to the Stockholm Convention on POPs in Tajikistan, 264 samples of missed pesticides and contaminated soils were analyzed. Mainly DDT and its metabolites were diagnosed in the samples. In some regions, many samples also contained aldrin, dieldrin, endrin, HCB, and heptachlor. Thus preliminary inventory revealed 17.55 tons of DDT as well as 8,266.6 kg of other POPs pesticides. Further inventory is needed to obtain more accurate data as well as analyze the health status of people affected by obsolete pesticides. In the frame of the IPEN project in Tajikistan, a pesticide burial site (including DDT-based pesticides) in Vakhsh district of the country was observed. The fairly poor state of the site was revealed: the burial site was looted and the toxic chemicals are easily accessible. The burial site was not guarded, and it was not even fenced.

Particular concerns are associated with practically inactive systems of public information on hazardous toxic chemicals in consumer goods, including items for children and toys. Huge amounts of substandard goods reach EECCA countries by different ways, including children's toys and other items for children's use; however, almost no information is available on

3 http://www.adb.org/documents/translations/russian/lss-strategy-ru.

contents of hazardous chemicals in these goods. The EECCA market is dominated by imported Chinese toys. Most often the consumers complained of the following: bad smell, "easily crumbled," "electrical disturbance," "flammable," and color loss. Usually toys are only analyzed for the presence of toxic chemicals after consumer request. In the majority of EECCA countries, regulation allows both uncontrolled operations of minor producers and import of small number of toys by private businessmen. The same troubling situation is observed in the case of cosmetics. For example, according to results of a research study conducted by Armenian Women for Health and Healthy Environment NGO, mercury was found in 82 of 100 samples of cosmetic items (skin-bleaching creams, soap, etc.), but the packaging provided no information on mercury contents.

Having serious concerns in connection with inflow of toys and other goods for children containing hazardous chemicals to EECCA markets, NGOs of the region issued a Statement to governments of EECCA countries, requesting:

- to ensure that national legislative acts meet the needs of guaranteed chemical, toxicological, and hygienic safety of toys' contents
- to ensure availability of a sufficient laboratory capacity allowing to control compliance of all batches of children's toys with the due applicable regulations
- to ensure marking of toys with clear description of their chemical composition and recommendations on their safe use and disposal
- to maintain strict control of toys' contents, to control safety of toys regularly and carefully, covering products of both national and foreign producers
- to prevent entry of children's toys with hazardous chemical components to national markets
- to abandon the practice of selling children's toys at uncontrolled marketplaces, to provide preconditions for their sale in specialized sales facilities only
- to establish a regional working group for development of a system of notification on presence of hazardous chemicals in toys at all stages of their production and use, from producers of toys to consumers and to the disposal (recycling) of waste
- to implement a broad public information campaign in the countries on the safety of children's toys
- to ensure involvement of all stakeholders into the campaign

The Statement was submitted to representatives of EECCA countries in the course of Environment for Europe Conference in September 2011. Notwithstanding the importance of the problem highlighted by NGOs, it is still not incorporated into the range of priorities of EECCA countries.

Chemicals in products booklet produced by Independent Ecological Expertise, Kyrgyzstan with other EECCA regional partners

SAICM IMPLEMENTATION BY NGOS IN THE EECCA REGION

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS:	NAMES OF NGOS	COUNTRY
Risk Reduction	Facilitate the promotion of non-combustion technologies of obsolete pesticide phase-out in Russia GPA items: 47–48, 68	Volgograd-Ecopress	Russia
	Survey of bisphenol A in Russian foods GPA items: 44, 54, 108, 111	Chapaevsk Medical Association	Russia
	Alternatives to medical waste management GPA items: 44, 57, 59, 66, 82, 166	Armenian Women for Health and a Healthy Environment	Armenia
	Investigation of mercury in skin lightening creams GPA items: 44, 54, 108, 111	Armenian Women for Health and a Healthy Environment	Armenia
	Heavy metals in fish products GPA items: 44, 54, 108, 111	ECOTOX	Moldova
	Role of NGO in prevention of mercury pollution in Azerbaijan GPA items: 44, 57, 59, 66, 82, 166	Ruzgar	Azerbaijan
	Global Mercury Monitoring Project GPA items: 44, 54, 108,111	Armenian Women for Health and a Healthy Environment, ECOTOS, Volgograd-Ecopress	Armenia, Moldova, Russia
	Global Lead in Paint Project GPA items: 44, 54, 108, 111	Eco-Accord, Greenwomen, HAZER	Kazakhstan, Russia, Armenia
	Introducing Code of Conduct In Order To Reduce The Environmental and Health Risks From Pesticides GPA items: 27, 29-30, 51, 66	Armenian Women for Health and a Healthy Environment	Armenia
	Elimination of acute risks of obsolete pesticides in Ukraine GPA items: 47, 68, 70	UNENGO “MAMA-86”	Ukraine
	Elimination of toxic pesticides in Lviv region GPA items: 27, 29-30, 51, 66	Environment-People-Law (EPL)	Ukraine

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS:	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Preliminary inventory of POPs and other chemicals, and analysis of chemical contamination of food products GPA items: 47, 68	Surhan, Forish, Ecoservice, Chance, Women for Sustainable Development (Insenim)	Uzbekistan
	Waste to profit: sound municipal waste management GPA items: 68–72	Armon, Consumer Rights Protection	Tashkent, Uzbekistan
Knowledge and Information	Public Participation in the Civil Society Forum on Involving civil society and business community into "green growth" policy promotion: Priorities, solutions, perspectives GPA items: 164, 206	Eco-Accord, Greenwomen	Russia, Kazakhstan
	Toxic Free Toys Information Campaign GPA items: 44, 54, 108,111	Eco-Accord, Armenian Women for Health and a Healthy Environment, Center for Environmental Solutions, Greenwomen, Independent Ecological Expertise, MAMA-86	Armenia, Belarus, Russia, Kazakhstan, Kyrgyzstan, Ukraine
	Mercury country situation report and awareness-raising on SAICM implementation in Ukraine GPA items: 44, 57, 59, 66, 82, 157, 166	Mama-86-Kharkiv	Ukraine
	Awareness-raising campaign on SAICM implementation in Ukraine (2010-2012) GPA items: 164, 206	UNENGO "MAMA-86"	Ukraine
	How Much Do We Know About POPs in Eastern Europe and Russia? GPA items: 164, 206	Chapaevsk Medical Association	Russia
	Consultations and information meetings on asbestos GPA items: 11–20	Eco-Accord, Volgograd-Ecopress, SPES, Novorossiysk children, Novorossiysk youth organization "Centre of Environmental Education"	Russia
	Side event on Green Mechanisms and Green Decision in Mining: Move to Green and Sustainable Economy at Asia and Pacific Region Ministerial Conference in Astana in 2010 GPA items: 164, 206	Eco-Accord, Ecoforum NGO Kazakhstan, WECF	Kazakhstan, Russia, Germany
	Raising awareness on legal environmental rights; Educational module on environmental legislation for local communities in rural areas GPA items: 164, 206	Armon	Uzbekistan

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS:	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	High-level conference on asbestos GPA items: 11–20	Mama-86	Ukraine
	Raising public awareness on chemical impact on human health-seminars for students GPA items: 164, 206	Hazer, Armenian Women for Health and a Healthy Environment	Armenia
	Seminars on chemicals and health and SAICM requirements GPA items: 164, 206	Armenian Women for Health and a Healthy Environment	Armenia
	Educational modules on SAICM GPA items: 164, 206	Independent Ecological Expertise	Kyrgyzstan
	Educational modules: PRTR development, and Toxic Free Future Goal GPA items: 124, 126	Greenwomen	Kazakhstan
	Video materials, documentaries on toxic chemicals and wastes GPA items: 164, 206	Armon	Uzbekistan
Governance	Development a Communication Strategy for the Russian National Implementation Plan to the Stockholm Convention on POPs GPA items: 165–167	Eco-Accord	Russia
	Synergy of three conventions: workshop on SAICM and three chemical conventions, and elaboration of recommendations GPA items: 171–173	Eco-Accord, SPES, Ecotox, MAMA-86, Independent Ecological Expertise	Russia, Moldova, Ukraine, Kyrgyzstan
	Development of the National NGOs Action Plan on SAICM implementation in Kazakhstan GPA items: 165–167	Greenwomen	Kazakhstan
	Participation in the development of the National Chemical Profile and SAICM Capacity Assessment in Uzbekistan GPA items: 165–167	Armon, Eco-Accord	Uzbekistan, Russia
	National Action Plan for Khaidarkan mercury mining: Strengthening Environmental Policy and Implementing Outreach Campaign in Kyrgyzstan GPA items: 165–167	Independent Ecological Expertise	Kyrgyzstan
	To promote sound chemical management at the regional level to prevent mercury pollution of the Volga river and Caspian coastal area GPA items: 47–48	Volgograd-Ecopress	Russia

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS:	NAMES OF NGOS	COUNTRY
Governance *cont.*	Analysis of electronic and electric waste disposal system in the Republic of Kazakhstan GPA items: 69–71	Social Fund "Promotion of Sustainable Development"	Kazakhstan
	Improving waste management legislation GPA items: 69–71	Environment-People-Law (EPL), "MAMA-86"	Ukraine
Capacity Building	NGO Forum "Strengthening Capacities of Civil Society Organizations for National and Regional SAICM Implementation in the EECCA Region" GPA items: 154–155, 163-164	Ecoproject, Independent Ecological Expertise, Greenwomen, Centre of Development of National Self , Governance, Eco-Accord	Belarus, Kyrgyzstan, Kazakhstan, Russia
	A side event on chemical safety and green growth during the 7th Ministerial Conference "Environment for Europe" GPA items: 154-155, 163-164	Eco-Accord, Independent Ecological Expertise	Russia, Kyrgyzstan
	Chemical education in the context of chemical safety: problem and perspectives GPA items: 164, 206	Mama-86	Ukraine
	International High Level Expert Conference on Chemical Safety and Rotterdam Convention: Policies and Practices (2012) GPA items: 11-20	Mama -86	Ukraine
	Analyzing the Situation of Asbestos Use and its Health Impact in Russia GPA items: 11-20	Eco-Accord, Volgograd-Ecopress, Eco-SPES NGO, Novorossik children and youth organization "Centre of Environmental Education"	Russia
	Capacity building on Obsolete and POPs pesticides GPA items: 68-70	Armenian Women for Health and a Healthy Environment	Armenia
Illegal Traffic	Investigation of illegal toxic waste import to Ukraine GPA items: 268-271	Bureau of Environmental Investigation (BEI)	Ukraine
	Illegal pesticide use in Central Asia: Sirdarinsky region, Uzbekistan GPA items: 268-271	Armon	Uzbekistan
	Transboundary obsolete pesticide pollution in Uzbekistan from Suzaksky stockpiles (Kyrgyzstan) and Kanibadamsky stockpile GPA items: 268-272	Armon	Uzbekistan

FRANCOPHONE AFRICA

Contributions by
Centre de Recherche et d'Education pour le Développement, Cameroon
IPEN Francophone Africa Regional Partner

Countries in the region have many challenges and priorities. However, despite these challenges, improvements in chemical safety are occurring through the combined efforts of various stakeholders including governments and public interest NGOs.

In general, work in Benin, Cameroon, and Senegal indicates that SAICM implementation is being done by countries with the participation of CSOs. For example, Pesticide Action Network Africa has carried out various activities in several countries of West Africa that fall within the objectives of SAICM (see table below). Colleagues in Togo and Cote d'Ivoire are still working to assess overall implementation of SAICM in the country.

SAICM implementation has provided the opportunity to raise and bring to the table many issues related to the problem of toxic chemicals, including lead, mercury, dioxins and furans, HHPs, old batteries, and chemical safety in waste management including electronic wastes. In several countries, SAICM has actually helped create an appropriate framework with the participation of many stakeholders interested in the issue of chemicals management (i.e., public and private services, industrial development corporations, research institutes, universities, NGOs). Information seminars, workshops, and capacity building sessions have allowed actors to be informed on issues and have the tools to integrate the management of toxic chemicals and hazardous electronic waste in their various activities. Discussions are often conducted with SAICM national focal points, including personnel in Mali and Senegal in particular, through the implementation of the proposed PAN Africa project funded by the SAICM QSP.

In Cameroon, although the key sectoral ministries, such as those in charge of agriculture, environment, public health and industry, contribute significantly to the implementation of activities consistent with the objectives of SAICM, NGOs such as Centre de Recherche et d'Education pour le Développement (CREPD) and Cameroon Pesticide Action Network (CAPANET) benefited earlier from financial support for the implementation of SAICM on the problems of lead paints and HHPs, respectively.

The government began SAICM activities four months ago with the support of the United Nations Environment Programme (UNEP) and UNITAR. CREPD strongly contributed to the SAICM focal point and in partnership with UNITAR for the development of a government project entitled *"Enabling Activities for Development of a SAICM implementation plan through integrated sound management of chemicals and support of capacity building of the GHS in Cameroon"* NGOs (CREPD and Yaoundé Initiative Foundation or YIF) are members of the National Coordinating Committee of SAICM and partners in implementation activities. CREPD is deeply involved in the process of inventory of dioxins and furans as well as awareness-raising. YIF handles most of the components of inventory of pesticides. The National Committee for Implementation of SAICM in Cameroon includes all key stakeholders in the management of chemicals and wastes (public and private services, ministries, industries, NGOs, research centers, universities). These partners are chosen on the basis of their past activities relating to chemical and environmental issues.

The government of Cameroon through the Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED) contributes to the QSP Trust Fund to fund the implementation of SAICM through counterpart funding provided by the Ministry. It is early to assess the state of coordination between the Ministries of Environment and Health on the management of chemicals within the strict framework of SAICM.

The NGO CREPD, through the implementation of its SAICM project on lead paint, has had the experience of good coordinated work between NGOs, government, local authorities, standards agency and faculties of medicine in different local universities, association of consumers, paint manufacturers, wholesalers, and importers of paints. This project also benefitted from a successful collaboration between Northern NGOs (Occupational Knowledge International, USA), and Southern NGOs (CREPD) in line with paragraph 16n of the SAICM OPS.

In Senegal, PAN Africa is a member of the National Commission for Management of Chemicals (CNGPC) set up by the authorities to advise them on the management of chemicals. The ministries in charge of health, environment, trade, industry, and transport, as well as industries, private companies, associations, and NGOs are represented in the CNGPC. The community monitoring of pesticide impacts on health in the cotton zones of Senegal and Mali is an example of partnership between PAN Africa and community based organizations in both countries.

In Mali, artisanal mining is a serious environmental problem, noting that contraband mercury is widely used and presents a real danger to vulnerable populations. One of the missions of the SAICM focal point in Mali is to reduce (eliminate) the use of mercury in artisanal mining. Moreover, NGO efforts have attracted the attention of groups concerned with children exposed to mercury. The NGO Fondation pour le Développement au Sahel (FDS) conducted a case study on small-scale mining in 2010, which was later references in a Human Rights Watch report on which investigates mercury exposure and child labor

Fondation pour le Développement au Sahel staff interviewing small-scale gold miners in Mali to assess mercury use and exposure, and to educate them about the dangers of mercury use in gold mining.

as it relates to small scale gold mining.[1] In addition, PAN Mali also participates in the National Commission for Management of Chemicals, which addresses management activities of hazardous pesticides in Mali.

In Tunisia, special attention is given to the management of chemicals and especially to chemical pollution generated by industries. We note that NGOs are not part of a governmental committee or process for implementation of SAICM; however, the National Focal Point accessible to NGOs. Cooperation between the Ministry of Environment and Ministry of Health already exists independently of SAICM but this cooperation could help further the objectives of SAICM. The government presented a project on implementation of SAICM in which it will participate in kind. The emphasis of the project is research on the elimination of POPs. At present, activities are limited to awareness-raising. This strong government involvement will support food safety through the development of agricultural practices that respect the environment and consumers.

Similar agricultural activities make up most of the work conducted in Cameroon by Cameroon Pesticide Action Network (CAPANET). They have developed activities in accordance with FAO's good phytosanitary practice guide, contributing to the elimination of pesticides and encouraging the adoption of sustainable agriculture practices.

In Benin, cooperation between the government and NGOs on issues of chemical safety is a advancing. This is illustrated in the project on the inventory of chemicals in both the agricultural and industrial sectors through the implementation of the Stockholm Convention (POPs) in Benin, with a particular focus on raising awareness on chemical safety. Within the framework of a "demonstration project *"of a sub-regional approach to environmentally sound management of PCBs and equipment contaminated with PCBs*," Benin has developed a "*strategy and communication plan and stakeholder awareness*" that was validated in May 2012 in Abidjan by 14 African members of the project. Benin is preparing to assist other countries in developing their strategy. NGO Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA) led, with funding from IPEN's ISIP project, studies on the impact of POPs (endosulfan and others) on the health of farmers and artisans of mattress makers in Benin and Togo, and worked to raise awareness of good practice. With funding from Global Greengrants Fund (GGF) and the technical support of PAN-Africa, GAPROFFA also trained 60 technicians and held training workshops for agricultural producers on international management and best practices of agricultural chemicals. With technical support from UNITAR, GAPROFFA and the National Focal Point have developed a project entitled "Development of an Integrated National Programme for the Sound Management of Chemicals and Supporting GHS Capacity Building in the Republic of Benin," financed by the SAICM QSP Trust Fund. The project's launch is planned for September 2012.

GAPS

There are still real difficulties impeding the implementation of all five objectives of the SAICM OPS and in some countries activities are limited to only one or two objectives. The difficulties can be grouped into three main categories: economic, infrastructural, and institutional.

1. Economic difficulties: The low level of funding and resources given despite the numerous problems identified is a very obvious problem, observe NGOs from Cameroon, Senegal and Tunisia. Cameroonian farmers cite lack of finances often results in purchase of smuggled or reconditioned expired pesticides.
2. Infrastructure challenges: The lack of adequate laboratories for investigation and enforcement inspections is well known. Those that exist are often under-equipped.
3. Institutional challenges: The National Commissions for Chemicals Management are struggling to function properly given the institutional problems and inadequate resources. For example, there are few seminars, even though NGOs active in the environmental sector want to be informed on the implementation of SAICM. In addition, there is a lack of involvement of research institutions and industrial participation in the implementation of SAICM. In Cameroon, there are deficiencies in the regulation of chemicals management which is added to low level of enforcement of existing laws

1 http://www.hrw.org/sites/default/files/reports/mali1211_forinsertWebUpload_0.pdf

4. and regulations. As a result of these deficiencies on one hand, and because of ignorance of producers on the other, pesticides are circulating and large stocks are listed. Finally, producers are using them in a very inadequate way.

Priority emerging issues identified by NGOs in the Region that require immediate action actions include:

1. the use of energy-saving lamps (LBC) containing mercury
2. the use of mercury in artisanal small scale gold mining
3. the use of cosmetic products containing toxic chemicals
4. the recycling of batteries containing lead
5. the development of alternatives to hazardous chemicals
6. awareness of nanotechnology and nanomaterials
7. the widespread use of electronic products and wastes containing lead
8. the import, production, and distribution of lead paint
9. synergy of actions between NGOs and the implementation of international conventions on chemicals

Youth awareness campaign about the threat of mercury exposure, conducted by Jeunes Volontaires pour l'Environnement Côte d'Ivoire (JVE)

PROMOTING POLICIES TO PROTECT CHILDREN FROM LEAD PAINT IN CAMEROON

The NGO Centre de Recherche et d'Education pour le Développement (CREPD) conducted a study of paint sold in Cameroon to gauge the number that contained lead-based paint. From the shops and wholesalers participating, 60 samples of new paintings, 14 samples of liquid dyes, 16 samples of scales of old paintings, and 9 samples of dust in residential schools were surveyed. Five young people were trained in rigorous collection and preparation of paint samples. Once the samples were analyzed, the results showed that about 67% of new oil paintings contained lead-based paints (containing over 90 ppm of lead, which is the reference standard). All the old paintings collected contained lead-based paints.

Based on these findings, CREPD carried out awareness-raising workshops and trainings of key stakeholders at the national level to highlight the dangers of lead. Press releases, radio and TV programs, and more awareness-raising activities (including distribution of brochures, posters, and leaflets) were undertaken in ten regions of Cameroon.

This project catalyzed the development of a national framework law for the protection of the consumer; the establishment of a Technical Committee by the Agency for Standards and Quality to develop a mandatory standard limiting the amount of lead in paint in Cameroon. In addition, CREPD engaged the Ministry of Public Health to support the rapid development of a standard; the faculty of medicine is also developing a project on the analysis of blood lead levels among children in the city of Yaoundé. This project was financed by the SAICM Quick Start Programme.

SAICM IMPLEMENTATION BY NGOS IN FRANCOPHONE AFRICA

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction	Reducing the use of POPs in the city of Bohicon; and in the agricultural sector in Allahé, Ganhoua, and Za-Kpota villages using public aware-raising for behavior change GPA items: 54, 56, 114	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Benin
	Awareness-raising of civil society actors, NGOs, farmer association, phytosanitary firms, and the Minister of Agriculture and Rural Development (MINADER) on the dangers of pesticides; FAO Code implementation of pesticide use; training in good agricultural practices; and training in developing alternative, local, herbal insecticides GPA items: 31, 50—53	Pesticide Action Network Cameroon (CAPANET)	Cameroon
	Production, collection, and dissemination of information on the dangers of lead paint on health and the environment; and national and regional workshops to raise awareness of lead paint GPA items: 2, 57, 60	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Collection and storage of stocks of premium pesticides and their packaging GPA items: 32, 68	Yaoundé Initiative Foundation (YIF)	Cameroon
	Training of 35 persons on the manufacture of biological pesticides with support from the Entomology Laboratory of the University of Lomé GPA numbers: 51, 116, 158	Jeunes Volontaires pour l'Environnement (JVE); Asssociation de Secours et d'Orientation Lisungi du Togo (ASOL)	Togo
	Promotion of sustainable agriculture (reduced use of pesticides and chemical fertilizers) with women's groups in the prefectures of Kpele and Vo GPA items: 116	Jeunes Volontaires pour l'Environnement	Togo
	Production of leaflets on alternatives to chemical pesticides to control locusts; and workshop information and awareness on pesticides used for locust control and stockpiles GPA items: 163	Pesticide Action Network Mali; Pesticide Action Network Africa; Association d'Éducation Environnementale et de Protection des Oiseaux au Maroc (SEEPOM)	Francophone West Africa, Morocco

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Study on the ban of endosulfan by the member countries of Comité permanent inter-État de lutte contre la sécheresse au Sahel (CILSS) GPA items: 15	Pesticide Action Network Africa	Francophone West Africa
	Conducting a nationwide awareness campaign on the effects of mercury on both health and the environment GPA items: 57—58, 60	Jeunes Volontaires pour l'Environnement	Ivory Coast
	The implementation of a project on the application of alternatives to pesticides and chemical fertilizers as part of the educational program with the Ministry of Education and Agriculture; promotion of the reduction of health and environmental risks through the reuse of organic waste at a minimum to reduce domestic waste; the use of scientific approaches in the context of environmental and sustainable agriculture; awareness of the Stockholm Convention on POPs; raising awareness of college students through an educational program to reduce the end of poisoning caused by various chemicals; educating students on mercury; and raising awareness on obsolete pesticides GPA items: 51, 116, 155, 158	Association de l'Education Environnementale pour les Futures Générations; Association Tunisienne pour l'Agriculture Environnementale; Association Provinciale des Eleveurs et Détenteurs de Bétail; Agir en Faveur de l'Environnement	Tunisia
Knowledge and Information	Production of leaflets, T-shirts, caps, posters, and banners on community monitoring of pesticide impacts GPA items: 2,155	Pesticide Action Network Mali; Pesticide Action Network Africa	Mali, Senegal
	Case study of small-scale gold miners and mercury use and exposure GPA items: 2,155	Fondation pour le Développement au Sahel (FDS)	Mali
	Production and distribution of posters on the risks associated with pesticide use on health and the environment, but also on sustainable alternatives GPA items: 2, 155	Pesticide Action Network Africa	Senegal, Francophone West Africa
	Information days and awareness of farmers' organizations about the risks associated with the use of pesticides and empty pesticide containers GPA items: 2, 155	Pesticide Action Network Mali; Pesticide Action Network Africa	Mali, Senegal
	Dissemination of leaflets (English and French) on environmental strategies to replace DDT and malaria control in collaboration with PAN offices in Germany and North America GPA items: 2, 155	Pesticide Action Network Africa	Francophone West Africa

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Radio programs (French and local languages) for communities and authorities on various pesticides topics, DDT, malaria, etc. GPA items: 2, 155	Pesticide Action Network Africa; Pesticide Action Network Mali	Mali, Senegal
	Information Handbook for NGOs on the African Programme on stocks of obsolete pesticides (produced as part of the Africa stockpile program and in collaboration with PAN UK) GPA items: 2, 155	Pesticide Action Network Africa	Francophone West Africa, Morocco, Tunisia
	Consolidated Guide on the codes and conventions on chemicals (produced as part of the Africa stockpile program in collaboration with PAN UK and Ecosphere) GPA items: 2, 155	Pesticide Action Network Africa	Francophone West Africa, Morocco, Tunisia
	Making a film in French about the environmental strategies of the fight against malaria without DDT in a village in Senegal, in collaboration with PAN Germany and North America) GPA items: 2, 155	Pesticide Action Network Africa	Senegal, Francophone West Africa
	Organizing a multistakeholder seminar on sustainable agriculture; producing posters and flyers outlining the dangers of pesticides; mapping of obsolete pesticide stocks on national territory; and demonstrating correct use of processing equipment and EPI GPA items: 2, 155	Pesticide Action Network Cameroon (CAPANET)	Cameroon
	Production and distribution of leaflets, posters, and brochures of information to assist in the removal of lead paint on the basis of scientific data from work done or bibliography; and publication of press releases, press articles and radio show on the results of analysis of the paintings sold in Cameroon; and work in collaboration with OK International GPA items: 2, 155	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Making a film on the invasion of locusts in the Sahel in 2003-2005 and the fight against locusts in Senegal, in collaboration with PAN UK GPA items: 2, 155	Pesticide Action Network Africa	Senegal
	Survey on producers' perceptions on the risks related to the use of endosulfan in Benin and Togo; and contribution to the study of the issue of handling of chemicals (POPs) by mattress artisans in Benin and Togo GPA items: 2, 155	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Benin

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Governance	Production and dissemination of leaflets, t-shirts, video, banners, and posters on the theme "Be conscious of mercury effects" GPA items: 2, 155	Jeunes Volontaires pour l'Environnement	Ivory Coast
	Demonstration project of a sub-regional approach to environmentally sound management of PCBs and PCB-contaminated equipment; and stakeholder awareness GPA items: 195	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune	Benin
	Seminar on the implementation of the FAO Code of Conduct GPA items: 23	Pesticide Action Network Cameroon (CAPANET)	Cameroon
	Preparation of the draft (first draft) standard limiting the amount of lead in paint sold in Cameroon, in collaboration with OK International; and the establishment of the National Alliance for the Elimination of lead paint in Cameroon GPA items: 186—187, 195	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	National workshops, including modules for capacity building of actors (five key ministries, industrial painters, general public, and pediatricians) on exposures and effects of lead on the health of vulnerable groups (children under six years, women of childbearing age), in collaboration with OK International; and training of five children, two young boys and three girls, on sampling techniques paints and lead-contaminated dust, and packaging techniques for analysis GPA items: 163, 186—187, 195	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Sending a letter of recommendation to decision makers and funders (government departments and UN agencies) March 30, 2012, for the establishment of committees for management of chemicals GPA items: 167	Jeunes Volontaires pour l'Environnement (JVE); Asssociation de Secours et d'Orientation Lisungi du Togo (ASOL)	Togo
	International Workshop: Water and water pollution by pesticides in Africa GPA items: 196	Pesticide Action Network Africa	Francophone West Africa, Morocco, Tunisia
Capacity Building	Training modules on community monitoring of pesticide effects on human health and the environment, in collaboration with PAN UK and Asia Pacific GPA items: 163	Pesticide Action Network Africa	Francophone West Africa

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Capacity Building *cont.*	Three-day multistakeholder seminar for capacity building of producers; raising awareness of MINADER for better orientation of the legislation; and raising awareness of firms for better management of pesticides GPA items: 212, 216	Pesticide Action Network Cameroon (CAPANET)	Cameroon
	Organization of two training days at the location of the different players who can work with people and provide information on the various issues of pesticides; and training focused on the risks to human and environmental health by pesticides, and showing participants the misdeeds of unregistered pesticides and poor marketing practices around these products GPA items: 212	Jeunes Volontaires pour l'Environnement (JVE); Asssociation de Secours et d'Orientation Lisungi du Togo (ASOL)	Togo
	Use of chemical pesticides: training workshop for the Southern Benin market gardeners supervising staff GPA items: 212	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune; Pesticide Action Network Africa	Benin
	Case study of small-scale gold miners and mercury use and exposure GPA items: 212	Fondation pour le Développement au Sahel (FDS)	Mali
	Training of facilitators in community monitoring GPA items: 212	Pesticide Action Network Africa	Senegal
	Training of field guides on the techniques and monitoring tools GPA items: 212	Pesticide Action Network Mali; Pesticide Action Network Africa	Mali, Senegal

LATIN AMERICA AND THE CARIBBEAN

Contributions by
Red de Accion en Plaguicidas y sus Alternativas (RAPAM)/ Centro de Análisis y Acción en Tóxicos y sus Alternativas (CAATA), México
IPEN Latin America Regional Hub

The impact of actions carried out around SAICM on national chemicals management policies in countries in the region has moved forward but it has not been significant enough to transform the institutional framework in order to allow progress toward reaching the 2020 goal. Although most Latin American and Caribbean governments have developed activities related to some of the elements of the implementation of the SAICM GPA, the number and scope of these activities is uneven throughout the region. These activities include first time development or updating of national chemicals inventories, contaminated sites inventories, the ban of some HHPs in some countries, strengthening chemicals management institutions, projects to implement the GHS, the implementation of discussion or diagnostic workshops on some of the new emerging issues like nanotechnology, and even a Regional SAICM Implementation Plan for Central America, among other actions. In recent years, some of these actions have even received support from the QSP with backing from UNITAR, UNIDO, and UNDP agencies (see complete list in SAICM/ICCM.3/INF/16). Without disavowing the positive contribution of many of these activities, these actions however have not been sufficient to have a significant impact on national chemicals management policies to transform the institutional framework so that they may move towards reaching the general objective of SAICM and thus meet the 2020 goal.

Significant work needs to be done to implement the chemical safety agenda with a multisectoral approach and coordinated and effective participation of other authorities involved in the chemical products life cycle. In practice, the SAICM theme is considered to be an issue that is mainly the responsibility of the technical authorities in charge, usually environmental authorities. In addition, the national SAICM implementation plans often do not include policies with clear goals.

Public budgets allocated to the chemical safety agenda are insufficient. This results from the fact that the so-called "gray agenda" regarding chemicals management ranks extremely low within the priority policies of the environmental agenda. It ranks even lower in the national development plans, compared to the importance granted to the commitments to adapt and mitigate climate change or the green agenda linked to biodiversity protection. As a result, there is generally low public investment in the chemical safety agenda. The problems of full SAICM implementation can be further aggravated by neoliberal macroeconomic policies that reduce public expenditure and continue to privilege foreign investment protection regimes.

No proposals exist for the private sector to contribute fiscal participation towards public expenditure in chemicals management. On the other hand, no fiscal cost recovery measures have been promoted in the region to increase private sector taxation by the main users of chemicals and those who are responsible for environmental pollution. It would be important to explore successful experiences articulating priority chemical substance reduction policy goals selected by volume and toxicity, taxes on chemical substance use, and the creation of an independent fund to support an institute specializing in toxic chemicals use reduction. This institute would provide services to industry in order to achieve

REGIONAL NGO COORDINATION TO PHASE-OUT AND PROMOTE ALTERNATIVES TO ENDOSULFAN

From 2009 to 2011, the Latin American Action Network on Pesticides and their Alternatives (Red de Acción en Plaguicidas y sus Alternativas en América Latina / RAP-AL) carried out research, public dissemination, and awareness-raising activities on the health and environmental effects of endosulfan and its substitution possibilities, particularly with agro-ecological alternatives. Throughout this campaign, a broad alliance with scholars, producers, and environmental organizations was achieved in different countries of the region. Awareness-raising workshops, national consultation meetings, and mass media dissemination work was carried out.

The information gathered during the course of the campaign was sent to IPEN and Pesticide Action Network representatives participating on the Stockholm Convention's POPs Review Committee (POPRC). In April 2011, the POPRC recommended global elimination of endosulfan at the Fifth Conference of the Parties (COP5) in Geneva, Switzerland. This recommendation also included the implementation of a program that contains alternatives, as well as non-chemical control alternatives.

Phase-out of or ban on endosulfan has been attained in Argentina, Brazil, Chile, Paraguay, and Uruguay. The Stockholm Convention's COP5 listed endosulfan for global elimination with a few temporary crop and pest-specific exceptions. A follow-up on compliance of the ban with all countries in the region is still pending, as is updating information on the non-chemical alternatives POPRC will be recommending.

input substitution, redesign processes and products as well as higher efficiency. It would be useful to examine, for example, the experiences of the Toxic Use Reduction Institute in the U.S. state of Massachusetts, among others examples worldwide.

More work needs to be done to change the dominant modes of production and consumption as well as the search for and implementation of alternatives. Chapter 19 of Agenda 21 adopted at the 1992 Earth Summit highlighted the un-sustainability of the dominant modes of production and consumption. However, 20 years later, the dominant production and consumption modes remain unsustainable. This is aggravated by a financial crisis that can reduce social, economic, and environmental rights acquired in recent decades. On a broader scale, restrictions to public expenditure can restrict development support and the contribution of donor countries to multilateral environmental conventions, including SAICM.

The deep link between chemical safety and sustainable development is not only an issue of mainstreaming SAICM themes into the national development plans, but also one of asking what kind of "development" should be promoted and what macroeconomic policies should be established in order to reach "development." In this sense, CSOs are questioning both the economic policies and the extractive model based on the exportation of raw materials, such as oil or valuable minerals, to the international market without sufficient assessment of its social, environmental, and health impact, and without answering the question of who will mainly benefit from these investments.

GAPS

Except for rare exceptions, there are no ongoing civil society participation structures capable of developing and carrying out SAICM activities with the participation of health and environmental protection organizations, consumers, and local social organizations.

Children spraying pesticides in Mexico

Greater coordination as well as the participation of local and regional authorities (state or provincial authorities, depending on how they are referred to in each country) is required in the national committees or national working groups dedicated to discussing SAICM and in the National SAICM Implementation Plan activities. The reinforcement of citizen participation mechanisms at a local level is also required.

It is important to notice that in the context of Rio+20, the governments of Costa Rica, Dominican Republic, Ecuador, Jamaica, Mexico, Panama, Paraguay, Peru, and Uruguay urged increased commitments on Principle 10 on access to information, justice, and public participation, and stated their commitment to drafting and implementing a Plan of Action 2012-2014, with the support of the Economic Commission for Latin America and the Caribbean (ECLAC). In their statement, they requested ECLAC (CEPAL in Spanish) to act as the technical secretariat and to conduct a study on the best practices and requirements on access to information, justice, and participation on environmental issues in Latin America and the Caribbean. This may represent an opportunity to include chemical management and policy in this study.[1]
HHPs promoted by production strategies based on single-crop farming are still being used in the region with serious adverse impacts on worker and community health, affecting biodiversity and scarce strategic resources like water, and encouraging a dependence on fossil fuel consumption. This situation is aggravated by the promotion of herbicide-resistant genetically-modified crops, such as transgenic glyphosate- and 2, 4-D-resistant soybeans. It is necessary to promote policies and programs that change pest control strategies to rely more heavily on more sustainable agroecology-based proposals, reduce energy costs in transportation that favor both the domestic market and the local supply chains, and prevent water pollution, rather than merely responding to the demands of the global market.

Proposals to strengthen the FAO Code of Conduct must be supported in order to include the possibility of substituting HHPs defined by criteria that not only consider higher acute toxicity (1a and 1b in the WHO classification), but also by criteria related to chronic health effects, like cancer, harm to reproductive development, and greater environmental concerns like those included in the Stockholm and the Rotterdam Conventions. The List of Highly Hazardous Pesticides developed by the Pesticide Action Network in Germany is a useful tool for a first diagnosis.[2] This list can be compared to the list of pesticides registered in the country, thus obtaining a hazard profile for the authorized HHP. This profile should be complemented with information on current use and location in top national priority areas. Knowledge of both volume

1 For more info see http://sids-l.iisd.org/news/ten-latin-american-and-caribbean-countries-commit-to-drafting-plan-of-action-on-principle-10/

2 http://www.pan-germany.org/download/PAN_HHP-List_1101.pdf

and location of HHPs must be recognized as a public right as it has so far been confidential information that only the pesticide chemical industries can access.

It is essential to recover the proposals of the 2010 International Assessment of Agriculture Science and Technology for Development (IAASTD), which has been the broadest and most rigorous agricultural assessment so far. It highlights the imperative need to make radical changes in agricultural policies and business practices, as well as to count on the support of small farmers to create the vigorous, fair and sustainable food systems that the world needs. The IAASTD Report highlights the contributions made by agro-ecology to assessing agricultural system multifunctionality, productivity, resilience, sustainability, and equity vis-à-vis the challenges of environmental crises and the environmental pressures agriculture faces in the 21st century. Several useful references are available.[3] [4] [5]

Institutional reforms are needed to achieve integrated effective policies on chemical safety. According to the *Bahia Declaration, Chemical Safety* can be understood as a preventive approach to health and environmental harm caused by chemicals. Several assessments consider that some countries need to create a general law on chemicals that allows more efficient management control throughout the life cycle, or that other countries must create unique public agencies to supervise the life cycle so as to avoid overlapping functions and regulatory gaps.

In institutional and regulatory adjustments, it is important to apply the general principles of prevention, and substitute the chemicals of highest concern. If the idea is to keep on marketing the products, then the burden of testing must be transferred to the producer rather than to the public sector. This would be an adaptation of the "no data, no market" principle used in REACH European legislation.

It is also necessary to reinforce the national capacity to carry out an independent assessment of hazardous properties and the potential risks of both chemicals themselves and chemicals in products in order not to exclusively depend on information provided by industry.

The revision of the legislative framework regarding themes related to responsibility and damage repair in case of accident and polluted sites must be broadened on order to ensure clean sites and care for victims, themes that are also linked to access to environmental justice, which is included below.

Access to public information throughout the life cycle of chemical substances must be broadened. Within the labor sphere it is necessary to strengthen access to hazardous material data safety sheets as well as worker participation in commissions ensuring appropriate protection and accident prevention. It is worrisome that these conditions deteriorate above all in countries that adopt the so-called "flexibility measures" in labor contracting conditions, thus weakening the capacity of worker organizations and labor authorities to inspect and correct the problems**.**

Brazilian NGO workshop, which established a Brazilian chemical safety/toxics-free NGO network with members from several provinces.

With regard to the development of PRTRs by industrial sources, these registers must be updated with new available scientific information in order to expand both the list of chemical substances that must be declared and the tolerance thresholds. Access to environmental information must be broadened to include the more hazardous chemicals in relation to use, volume, type, and location. HHPs must be included, linking them to goals regarding pesticide use reduction in ecosystems and communities where there is greater negative impact.

Actions should be taken to phase-out PBTs, which cause chronic harm to health, and greater emphasis should be placed on the clean production of safer alternatives. Governments face limitations not only in developing a hazardous chemicals use inventory based on data provided by industry but also in designing policies that promote both use reduction and substitution in order to allow a transition towards cleaner forms of production.

Greater participation of health authorities is required so that they can contribute with the toxicological information pertaining to each chemical to the national inventory of chemical substances, including acute toxicity and chronic effects (carcinogenesis, mutagenesis, and reproductive effects, affecting both the nervous system and the immune systems, among others). Epidemiological information must also be included focusing on the most polluted sites or places with a higher incidence of chronic diseases of concern.

Some citizen organizations in industrial corridors have obtained updated and regular information from epidemiological

3 www.agassessment.org

4 http://www.panna.org/science/agroecology/science

5 http://www.agroeco.org/socla

surveillance registers regarding certain chronic diseases per location, particularly cancer. This allows that diseases can be located geographically and the development of geo-referenced maps. However the information about the industrial use of these carcinogenic chemicals is often not required by authorities and this prevents the development of programs to reduce their use and to substitute them in industrial processes for cleaner forms of production.

New reduction strategies in residue generation should move toward a Zero Waste Approach. The increasing generation of solid waste in cities continues to be a serious environmental problem that is being faced through false solutions such as incineration and similar technologies (e.g., gasification and pyrolysis) in waste-to-energy projects that generate new pollutants. A change of strategy is required in order to promote chemicals management that emphasizes reducing waste generation, adequate waste separation at source, and reuse and recycling measures. This change of strategy must be accompanied by compulsory measures of EPR throughout the product life cycle so that waste recollection and management costs are not transferred to local authorities and consumers, and it must include the promoting of product re-design for greater reuse and recycling, as well as the elimination of hazardous chemicals and materials substitution.

Measures need to be implemented that insure effective access to justice, enforcement, and environmental justice. Unless legislation is enforced and appropriate surveillance and sanctioning mechanisms are created, it is not enough to improve the regulatory aspect in chemicals management throughout their life cycle**.** Otherwise, the poorest and most vulnerable sectors will continue to pay the highest costs through their health and deterioration of their environment. Greater efforts are required to fight environmental corruption and impunity. Autonomous justice administration bodies must be strengthened with effective reporting mechanisms in the labor, environmental, public health, and chemical emergency response spheres.

It would be useful to see collaboration possibilities between SAICM and the *Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice* with different groups of interest in Latin America in order to strengthen this aspect of chemical and environmental governance. SAICM goals for addressing the harms of toxic metals contrast with the growth of large-scale metal mining exploration and exploitation projects. Mining is one of the main sources of territorial environmental conflict in the region, not only because of the extension of the affected surfaces and impact on the use and pollution of scarce strategic resources such as water, but also because of the use of toxic chemicals like cyanide and the release of mercury into the environment. The enormous volumes of material removed in the extraction and thermal treatment processes during mineral refining are responsible for the release of mercury as by-products. Conflicts increase when the ancestral rights of indigenous communities over their territory are infringed as well as when this infringement places fragile ecosystems at risk. An extractive growth model is not environmentally sustainable and generates greater social inequality as well as environmental conflicts in the region. Several references are available on the impact of mining.[6] [7] [8]

6 El cianuro, la cara tóxica del oro" (Cyanide: Gold's Toxic Face) written by William Sacher from Canada at: http://es.scribd.com/doc/54235978/Cianuro-cara-Toxica-Del-Oro

7 See Observatory of Mining Conflicts in Latin America (Observatorio de Conflictos Mineros en América Latina / OCMAL) at: http://www.conflictosmineros.net/

8 Mexican Network of People Affected by Mining (Red Mexicana de Afectados por la Minería / REMA) at: http://rema.codigosur.net/

SAICM IMPLEMENTATION BY NGOS IN LATIN AMERICAN AND THE CARIBBEAN

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction	Public information national and regional campaign on the harmful effects of the pesticide endosulfan on health and the environment from 2009 to 2011 and dissemination of information on alternatives, in coordination with IPEN and PAN through their participation in the POP Review Committee (POPRC) GPA items: 1, 2, 23, 27, 29, 51	Red de Acción en Plaguicidas y sus Alternativas de América Latina (RAPAL)	Argentina, Brazil, Costa Rica, Cuba, Chile, Ecuador, Mexico, Paraguay, Uruguay
	Substitution of mercury-based medical devises in the health sector GPA items: 2, 18, 57, 59, 61	Health Without Harm (Salud Sin Daño)	Argentina, Brazil, Costa Rica, Chile, México, and Nicaragua
Knowledge and Information	Quarterly publication of a journal called Revista Enlace that includes news and fact sheets regarding different HHPs, for example endosulfan, carbendazim, methomyl, methamidophos, acephate, iprodine, and atrazine, among others GPA items:105–106, 109, 112, 114- 116, 146, 160	Red de Acción en Plaguicidas y sus Alternativas de América Latina (RAPAL)	Argentina, Brazil, Chile, Costa Rica, Cuba, Ecuador, Honduras, México, Paraguay, Uruguay
	Dissemination of the brochure An NGO Guide to SAICM prepared by IPEN and issued in Spanish in November 2008. GPA items: 105–106, 109, 163	IPEN	GRULAC and SAICM national meetings in 2010 and 2011
	2010-2011 Participation in the Global "Mercury-Free: You, Me and the Babies" Campaign with the dissemination of the Spanish version of the book "An NGO Introduction to Mercury Pollution," prepared by IPEN throughout Latin American countries, and the brochure on IPEN Views on a Global Mercury Treaty GPA items: 105–106, 109, 112, 140, 141 Organization of national brochures and collective petitions to ban mercury thermometers and submit letters to support negotiations towards a Mercury Convention launched by the UNEP GPA items: 105, 106, 109, 112, 140, 141	IPEN members; Red de Acción en Plaguicidas y sus Alternativas de América Latina (RAPAL); Associação de Proteção Meio Ambiente de Cianorte (APROMAC); Centro de Análisis y Acción en Tóxicos y sus Alternativas (CAATA)	Latin America, Brazil, México
	Participation in the project coordinated by IPEN Arnika with GRS on the market analysis of some mercury-based products and mercury-free alternatives, in March 2010, with batteries, skin-lightening creams, thermometers, and dental amalgams analyzed GPA items: 82, 87	Associação de Proteção Meio Ambiente de Cianorte (APROMAC); Centro de Análisis y Acción en Tóxicos y sus Alternativas (CAATA)	Brazil, México

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Mercury: Preparation of information sheets on environmental and health risks from mercury exposure plus other discussion themes in negotiating the UNEP call for a Mercury Convention GPA items: 105–106, 109, 112, 140–141	Asociación Argentina de Médicos por el Medio Ambiente (AAMMA)	Argentina
	Presentation of the epidemiological report of cancer morbidity and mortality by department from 2003 to 2008, generated by the Cancer Register of the Santa Fe Province with geo-referencing, and GPS map location, and presented to the Health Ministry of the Santa Fe Province; along with the Health Ministry presenting a second report locating cases in each of the cities in Gran Rosario and a study of the province GPA items: 2, 81, 87, 106	Taller Ecologista, and Taller Permanente de la Mujer del Cordón Industrial de la Cd. de Rosario	Argentina
	Weekly information on SAICM-related themes in a special one-page section in a Venezuelan national newspaper (called Tal Cual) since 2007, radio programs and interviews, a 22-week course for journalists and NGOs with legal and technical elements regarding the human right to a healthy environment recognized by the Monte Avila University GPA items: 106, 109, 112, 163	Aguaclara Foundation	Venezuela
Governance	Participation in different institutional consultation mechanisms for capability assessment or discussions on the National SAICM Implementation Plan or specific themes such as the National Profile of Chemicals, Pesticides and Mercury GPA items: 169, 170, 174, 206, 207	Asociación Argentina de Médicos por el Medio Ambiente (AAMMA)/Intl. Society of Doctors for the Environment (ISDE)-Alianza por una Mejor Calidad de Vida-Red de Acción en Plaguicidas y sus Alternativas de América Latina (RAPAL) Chile; Red de Accion en Plaguicidas y sus Alternativas (RAPAM)/ Centro de Análisis y Acción en Tóxicos y sus Alternativas (CAATA) Mexico; Fronteras Comunes México; Associação de Proteção Meio Ambiente de Cianorte (APROMAC)/ Toxisphera Brazil.	Argentina, Brazil, Costa Rica, Chile, México, Paraguay

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Governance *cont.*	Participation in 2012 in a working group with scholars, industry, and environmental authorities to update the Pollutant Emission and Transfer Register/Registro de Emisiones y Transferencia de Contaminantes (RETC), and as a result, a proposal to improve regulations of an increasing number of chemicals was developed, and reporting thresholds were reinforced GPA items: 177	Fronteras Comunes; Unión de Científicos Comprometidos con la Sociedad (UCCS)	México
	The information campaign in Chile regarding HHPs (i.e., endosulfan, aldicarb, and other organochlorine pesticides (chlordecone, Alpha-HCH, Beta-HCH, pentachlorobenzene, and related isomers)) GPA items: 25, 55, 164, 169, 194	Alianza por una Mejor Calidad de Vida-Red de Acción en Plaguicidas y sus Alternativas de América Latina (RAPAL) Chile	Chile
	Participation in the Zero Waste Regulation Follow-up Commission for reducing waste generation at a municipal level in Ciudad de Rosario GPA items: 206	Taller Ecologista	Argentina
	Participation in the Federal Resolution 362/2005 Permanent Monitoring Group on used or polluted lubricant oil management issued by the National Environment Council/ Consejo Nacional del Ambiente (CONAMA), which produced manuals on used lubricant oil management and provided consultation services, workshops, and a piece of research in 2009–2010 to identify state of compliance GPA items: 2, 12, 45, 67, 70, 72, 76, 78, 119–122, 163, 224, 231, 236, 241, 258, 273, 166,186–188, 190–191, 193–194, 196–197, 199, 204–205	Associação de Proteção Meio Ambiente de Cianorte (APROMAC)-TOXISPHERA	Brazil
Capacity Building	Promotion workshops on agro-ecological pest control alternatives and the risks of exposure to HHPs GPA items: 255–256	Red de Acción en Plaguicidas y sus Alternativas de América Latina (RAPAL)	Argentina, Brazil, Chile, Costa Rica, Cuba, Ecuador, Honduras, México, Paraguay, Uruguay

MIDDLE EAST

Contributions by
IndyACT, Lebanon
IPEN Middle East Regional Partner

Most of the countries in this region have ratified the Basel, Stockholm, and Rotterdam Conventions and are signatories to SAICM. Therefore most countries in the region are aware of the dangers of toxic substances and materials and should try to regulate and ban their use.

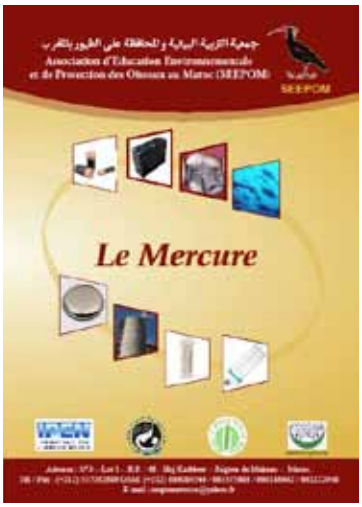
Currently, there is national cooperation between governments and NGOs on chemical safety issues in most Arab countries. However, there is a lack of laws regulating toxics in the majority of the Middle East countries and there is limited to no media or public discussion on toxic hazards. SAICM implementation is advancing slowly.

Nonetheless NGOs in the region continue raise awareness and try to improve the situation, by organizing workshops, conferences, awareness-raising campaigns, and trainings. Most notably, efforts to eliminate mercury in the health sector have advanced swiftly.

People are slowly starting to be more aware of the harm of toxics. For example, numerous NGOs in the region (in Egypt, Jordan, Lebanon, Morocco, Tunisia, and Syria) have carried out awareness-raising activities on the health and environmental harms of mercury. In Tunisia, NGO AREMEDD (Association for Sustainable Development) carried out SAICM awareness-raising activities in eight states throughout the country, reaching 52 schools, 1,600 students, 450 educators, 37 NGOs, 300 women, and the media. In Syria, a workshop conducted with Al Akram Red Crescent Medical Center resulted in a signed statement with the Syrian Red Crescent leadership and Al Akram Medical Center to replace mercury medical equipment with mercury-free alternatives, conduct an inventory of mercury-containing equipment in the medical center, research reliable mercury-free devices, and deliver old mercury-containing equipment to the Ministry of Environment for disposal. In addition the Al Akram Red Crescent Medical committed to eliminate the use of amalgam filling.

Youth mercury awareness workshop, organized by APEDDUB, Tunisa

There are, however, projects done by governments, such as a project that the Ministry of Environment in Lebanon carried out in 2011 under the name of "Demonstrating and Promoting Best Techniques and Practices for Reducing Health-Care Waste to Avoid Environmental Releases of Dioxins and Mercury." The project aimed at demonstrating and promoting best practices and techniques for health-care waste management, evaluating commercially available, non-incineration healthcare waste treatment technologies, introducing and evaluating the use of mercury-free devices in model facilities, and establishing or enhancing training programs to build capacity for the implementation of best practices and technologies both within and beyond the model facilities and programs.



Mercury awareness flyer produced by SEEPOM, Morocco

GAPS

There are many gaps in the Middle East that are hindering the implementation of SAICM. The major ones are:

1. the lack of permanent and sustainable financial mechanisms
2. variations in the implementation of international conventions
3. the lack of financial assistance
4. the lack of assistance obtaining data about chemicals
5. difficulty in prioritizing issues to concentrate on specific work areas
6. limited or no information about chemicals
7. insufficient access to safer technologies and alternatives to chemicals
8. the lack of clear and accessible information about chemicals and toxics

Also, there is no communication, cooperation, or coordination between National SAICM Focal points and NGOs working on SAICM Issues.

PROMOTING MERCURY-FREE PRODUCTS AND HEALTHCARE IN TUNISIA

The Association pour la Protection de l'Environnement et Développement Durable de Bizerte (APEDDUB) in Tunisia carried out a project titled: "Tunisia Mercury Situation Report - Awareness-raising campaign about mercury: hazardous for health and the environment." The project targeted students, teachers, dentists, doctors, nurses, industrial workers and journalists. APEDDUB held a local conference in the city of Bizerte to highlight the impact and damage of mercury to health and environment. Almost two hundred people attended the conference, learning about the potential harms of mercury.

In addition, ABEDDUB carried out many presentations in schools and children's clubs in the area, where posters, stickers and folders were distributed. In these schools and clubs ABEDDUB launched a local campaign to collect products containing mercury (thermometers, piles, batteries, economic and fluorescent lamps) for safe disposal and replacement with alternatives.

Two important results came from this project: many dentists in the city of Bizerte have stopped using dangerous mercury-containing amalgam for fillings and are demanding alternatives for it, and the regional hospital of CNSS in Bizerte is stopping the purchase of mercury-containing products.

SAICM IMPLEMENTATION BY NGOS IN THE MIDDLE EAST

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction	"Zero Mercury Conference" on the use of mercury in the healthcare sector, the harm it causes and alternatives to it, and raising awareness among dental students of the complications resulting from amalgam GPA items: 2, 17, 57–58	IndyACT	Lebanon
	Regional Awareness Campaign on PCBs , Dioxins and Furans GPA items: 2, 54, 70	Biblos Ecolgia—Jbeil, Mount Lebanon	Lebanon
	Regional Awareness Campaign on POPs GPA items: 2, 54, 70	The Association for Environmental and Traditional Protection-AETP Nabatieh, South Lebanon	Lebanon
	National Awareness Campaign to Eliminate Harmful Chemicals in Compounds in Children's Toys in Tunisia GPA items: 44, 54	Association pour la Protection de l'Environnement et Développement Durable de Bizerte (APEDDUB)	Tunisia

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Tunisia Mercury Situation Report - Awareness-raising campaign about mercury including: hazardous for health and the environment; including a conference with presentations in schools; posters, stickers, and a brochure were created; dentists committed to stop the use of amalgam; the regional hospital of CNSS in Bizerte is stopping the purchase of Hg-containing products; students are engaged to collect the Hg-containing products; workshop attendees learned about Hg-spill clean-up; and the president of APEDDUB being interviewed by the local radio station about the health and environmental impacts of mercury GPA items: 1, 44, 57, 59, 66	Association pour la Protection de l'Environnement et Développement Durable de Bizerte (APEDDUB)	Tunisia
	Reduce, Eliminate, and Replace Mercury in Healthcare Facilities GPA items: 44, 54, 57, 59	Environmental Protection and Sustainable Development Society	Syria
Knowledge and Information	Advantages and Disadvantages of Nanotechnology, with workshop participants have increased awareness about nanotechnology GPA items: 89, 105, 106, 135, not specifically in GPA	Association pour la Protection de l'Environnement et Développement Durable de Bizerte (APEDDUB)	Tunisia
	Testing lead in paint on the public market GPA: 81, 85, 89, 150	IndyACT; Land and Human to Advocate Progress (LHAP)	Lebanon, Jordan
	Intoxication by Heavy Metals and the need for better medicine to deal with it, with local newspapers reporting on the workshop and people became more aware of the dangers GPA items: 112	Moroccan Society for Clinical and Analytical Toxicology (SMTCA)	Morocco
	Awareness Campaign to Educate Community about the Hazards of Mercury to Health and Environment; a regional workshop held for 40 participants representing NGOs, media, experts, and parliamentarians from eight Middle East and North African countries to enhance the international efforts towards reducing Hg usage; and a mercury country situation report was prepared GPA items: 163	Arab Network for Environment and Development (RAED)/ Arab Office for Youth and Environment (AOYE)	Egypt
	Current Status of Mercury in Jordan; a mercury country situation report was prepared GPA items: 82, 84, 87	Baytuna Society	Jordan

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Information and awareness-raising on Hg meant for government, NGOs, professional organizations, and the press; a national workshop on Hg, in collaboration with the National Drinking Water Office, IPEN, PAN Morocco, and Day Hospital, aimed to develop the current status of mercury both at the national and international level and to discuss issues related to the production, uses, emissions, and alternatives of Hg, and its risks on health and the environment, as well as national and international action to implement Hg sustainable solutions in order to protect health and the environment; participation of 27 experts and managers; and the developing of brochures and press releases and conducting of radio and newspaper interviews conducted. GPA items: 84, 87, 105–106, 109	Association d'Education Environnementale et de Protection des Oiseaux au Maroc (SEEPOM)	Morocco
	Electrical and Electronic Waste: a New Emerging Danger: E-waste National Awareness Campaign; an assessment of electrical and electronic (EE) waste in Jordan; distribution of questionnaires (to schools and electronic shops) to measure knowledge on e-waste; development of a brochure that contains basic info on EE-waste for the purpose of raising community awareness; and organization of community consultations to present the facts derived from the assessment study and discuss possible actions and recommendations GPA items: 82, 87, 112	Land and Human to Advocate Progress (LHAP)	Jordan
	Awareness raising in schools on SAICM and chemicals; awareness-raising programs throughout eight states; discussion of chemical hazards of pesticides, POPs, and used batteries (heavy metals) via workshops, presentations, brochures, publications, and photos; and collection of used batteries for safe disposal GPA items: 87, 112	Association for Sustainable Development (AREMEDD)	Tunisia
	Campaign and policy dialogue for action to remove the Saida Waste Dump; meetings with the local municipality of Saida, Ministry of Environment officials, and agents for tourism in order to put together a plan and action to minimize the dump; and distribution of informational leaflets to the public GPA items: 161–162	AMWAJ of the Environment	Lebanon

SOUTH ASIA

Contributions by
Toxics Link, India
IPEN South Asia Regional Hub

All the countries in the South Asia region signed the SAICM declaration in 2006 and abide to take steps to minimize harmful effects of chemicals on human health and the environment. During the last three to four years, the countries in the region have made some efforts to move the chemical safety issues forward to achieve the 2020 goal. However, the approach and state of the progress to achieve SAICM goals varies from country to country in the region.

In Bangladesh, the Ministry of Environment and Forest is the focal point for SAICM and responsible for implementation of SAICM goals. The government has intervened in some issues; however, the impacts are not visible. The point person in the ministry responsible for the implementation has also been frequently shifted, thus creating a serious bottleneck in the implementation of SAICM. The lack of a dedicated SAICIM implementation budget has also made it difficult for any meaningful action by the national focal point. Bangladesh has strong CSOs and many are engaged on issues of chemicals management and continue to do excellent work in this direction. However, the government has not been able to create any platform for active interaction and involvement of NGOs, so involvement of NGOs in governmental SAICM implementation has been minimal. The overall chemical safety situation in Bangladesh has not witnessed any significant changes since 2009.

Select public interest NGOs in Bangladesh have tried to formulate their own arrangements to take up the issues in association with the concerned stakeholders, among others. They have intervened on a wide range of issues, from e-waste, lead in paints, and pesticides to workers' safety from chemicals exposures, as per the mandate of SAICM. Some of these civil society interventions have also received support and encouragement from the government. The public interest NGOs have been consistent in creation of new data and in creating conversations with various stakeholders aiming for full implementation of the Strategic Approach.

Bhutan is committed to the SAICM declaration; nevertheless, chemical safety issues are not very high on the priority of the government. Chemical issues are in their infancy in the country and there is very little capacity among stakeholders to understand the issue in detail. There is a common perception that the country does not produce chemicals and its usage is also very limited; hence, they are not a high priority of the government. However, the Bhutan government is implementing a project in the QSP called "Strengthening National Capacities for Sound Management of Priority Carcinogenic Chemicals in Bhutan." As chemical safety issues are very new in Bhutan, NGOs do not have adequate capacities to take them up.

India is an important country in the SAICM development process. However, the progress of SAICM implementation in India has been slow and no established system exists for public interest NGO participation in the SAICM process. The government has notified Hazardous Materials (Management, Handling, and Transboundary Movement) rules and e-waste rules for electronic waste management. In addition, the government has notified a draft Pesticides Management Bill and draft National Chemical Policies-2012 for India. Despite this, there are many gray areas related to chemicals management and a critical need to build capacity and deeper understanding among regulators, industry, and public interest NGOs. These policies and regulations require further strengthening and operationalizing across the country. The lack of coordination among the concerned Ministries is also one of the factors responsible for slow implementation of the rules in India.

In spite of the lack of an official participatory process that is managed by the government, many public interest NGOs have taken new initiatives to implement SAICM goals.

Nepal has been passing through political instability in the past few years, which has impacted governance in the country. However, the Nepalese government has taken steps to achieve some of the SAICM goals. There are discussions at the government level about bringing about new policies on these issues. Though there is no established mechanism in place by the government to coordinate

PROMOTING PCB-FREE ALTERNATIVES

In Nepal, PCB-contaminated oil from old transformers was very commonly used for welding machines. The NGO Center for Public Health and Environmental Development (CEPHED) therefore conducted a study on the health impact of PCBs on grill workers (metal fabricators), and met with them to raise their awareness about the impact of PCBs on their health and the environment. At the same time, CEPHED also pushed for the best alternative, environmentally-friendly technology, which had the potential to replace the existing welding machines. CEPHED organized meetings and campaigned rigorously on the issues involving the stakeholders. Finally, the efforts of CEPHED led to the adoption of a new, environmentally-friendly technology: dry wielding machines. The new dry machine is now becoming increasingly popular among grill workers in Nepal.

with public interest NGOs for SAICM interventions, there are examples of public interest NGO participation in the implementation and decision-making process. The NGOs are quite accessible to the focal points and regularly in dialogue to take issues forward. The relationship between government, public interest NGOs, and other stakeholders is very much cordial and symbiotic in nature. The government has even financed some of the initiatives undertaken by the NGOs on these issues.

Through the support of the QSP Trust Fund, Nepal is developing a national chemicals management profile and a national SAICM capacity assessment and holding a national SAICM priority setting workshop. However, there are some hindrances in the SAICM implementation process in Nepal. Apart from political instabilities, the lack of adequate financial resources, the inaccessibility to the technology, and limited policy interventions are posing bottlenecks in implementing SAICM goals to the fullest.

In Sri Lanka, implementation of SAICM is not a high priority for the government. There has not been very active involvement of public interest NGOs in the SAICM decision-making and implementation process because there is neither an established mechanism for public interest NGO participation nor a dedicated budget for SAICM implementation.

The government has undertaken two projects funded by the SAICM QSP: "Strengthening National Capacities for Sound Management of Priority Industrial Carcinogens and Updating National Chemicals Profile in Sri Lanka" and "Chemical Accident Prevention and Preparedness Programme for Sri Lanka." Public interest NGOs have not been consulted or involved in either of these projects and are not part of the implementation process. The government has also initiated measures for work on mercury, asbestos, and the safe handling of electronic waste, and measures for the elimination of lead in paints.

Center for Environment and Justice (CEJ), the NGO focal point for SAICM in Sri Lanka, has organized a capacity-building workshop to take up the issues with the stakeholders, including academics. Furthermore, CEJ has also undertaken projects for SAICM implementation in a GEF-SGP Project. Like colleagues in other South Asian countries, public interest NGOs are critical in Sri Lanka for the improvement of the national chemical safety situation.

GAPS

During the period of 2009-2012, efforts have been made by the governments and the NGOs in the region to intervene on chemical safety issues in order to achieve SAICM goals. The governments of the region have tried to address the challenges through suitable policies and on-the-ground interventions. The QSP has helped the government to intervene in some countries and build capacities of regulators and policy makers on chemical safety issues.

Public interest NGOs have also developed capacities to undertake new interventions to achieve SAICM goals. Some NGOs also have access to resources to carry out activities on SAICM issues. The activities of public interest NGOs have helped communities and other stakeholders such as health professionals, media, and academics to access new information and create awareness on SAICM issues. Networks have been set up among public interest NGOs and other stakeholders to exchange information. Information sharing and exchange between the public interest NGOs of the North and South have helped to build confidence among NGOs in the region.

Preparing to spray pesticides in India

Nevertheless, in totality, the governments of the region have been slow in initiating major interventions towards achieving SAICM goals. With the exception of Nepal, government engagement with public interest NGOs in SAICM implementation has been slow and inadequate. The problem is exacerbated by the fact that no country in the region has set up an intersectoral committee to look into specific SAICM issues. More work is needed to build synergy among the public interest NGOs and the governments. There is also a further need to upscale knowledge and information on these issues for effective implementation of SAICM processes.

There is a lack of understanding among all stakeholders on chemicals issues in the region and therefore a need to build capacity. There are serious gaps in the regulatory framework in almost all countries of the region, which requires immediate attention. The governments of the region need to put chemicals management at a higher priority and act on some of the identified gaps. The region also has a high population density and a high growth rate, both leading to progressively higher consumption of chemicals. The demand for higher consumption will have to be met through domestic production and through some international trade of chemicals; hence, there is an urgency to more fully develop sound chemicals management that involves all stakeholders. The countries of South Asia will need to draft improved laws and also effectively implement these laws. In addition, the South Asian region is particularly vulnerable to climate change, and attention is required to conduct more research and information linking chemical safety issues and climate change. Specific required actions need to be undertaken, as the vulnerable populations and weaker sections of societies in the region bear the brunt of the growing climate crisis. This should also be part of SAICM implementation in the region. Finally, there is an urgent need to improve and strengthen overall environmental governance by the respective countries of the region to achieve SAICM goals.

E-waste youth education session, organized by ESDO, Bangladesh

There are some specific gaps in the region that require adequate attention to achieve the desired results:

1. establishing a participatory process for meaningful involvement of public interest NGOs in government activities to implement SAICM
2. allocating a governmental budget for SAICM implementation
3. developing and implementing mechanisms for information exchange on SAICM between stakeholders
4. implementing a sound monitoring system for chemical safety initiatives and laws involving all stakeholders
5. creating and implementing an inter-ministerial, intersectoral, and multistakeholder coordination committee for SAICM implementation
6. insuring adequate legal and institutional infrastructure is in place for upstream and downstream solutions
7. increasing the capacity and knowledge of the regulators, policy makers and public interest NGOs
8. implementing proactive and responsible initiatives from the industry to achieve SAICM goals
9. Creating transparency in decision-making processes
10. enhancing stakeholders' participation in policy decisions
11. developing and implementing suitable policies and regulations

SAICM IMPLEMENTATION BY NGOS IN SOUTH ASIA

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction	Campaign to phase out of mercury from health sectors in India; guidelines issued for the Ministry of Health of India to phase out mercury from hospitals and managing the mercury bearing wastes; many hospitals are shifting to mercury free in Delhi GPA items: 57	Toxics Link	India
	Campaign for Lead Free Paints in South Asia Region GPA items: 85 152	Environment and Social Development Organization; Toxics Link, Center for Public Health and Environmental Development (CEPHED)	Bangladesh, India, Nepal
	Promotion of dry welding machine over wet welding machine using PCB contaminated transformer oil GPA items: 54	Center for Public Health and Environmental Development (CEPHED)	Nepal
	Program to phase out mercury from health care in some Uttar Pradesh districts, India GPA items: 57, 216	Youth Round Table Society (YRT)	India
	Campaign to phase out of hazardous pesticides in Bangladesh GPA items: 27, 29, 51, 66, 68	Bangladesh Occupational Safety, Health and Environment Foundation (OSHE)	Bangladesh
	Workshops; mercury-free health care system in some districts of Gujarat, India GPA items: 57	Paryavaraniya Vikas Kendra	India
	Program to phase out mercury from hospitals in Coimbatore, Tamil Nadu GPA items: 57	Arulagam	India
	Campaign for Mercury Free Dentistry in Bangladesh GPA items: 57	Environment and Social Development Organization (ESDO)	Bangladesh
Knowledge and Information	Study, Awareness Raising and Capacity building about Electronic Waste in Nepal GPA items: 121	Center for Public Health and Environmental Development (CEPHED)	Nepal
	Study of lead in children's jewelry GPA items: 152	Toxics Link	India

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Estimation of mercury use in health care sectors and dental sectors in India GPA items: 57, 89	Toxics Link	India
	Research on mercury content in CFL bulbs GPA items: 57, 89	Toxics Link, Center for Public Health and Environmental Development (CEPHED)	India, Nepal
	Research on Recycling of Brominated Flame Retardant Contaminated Plastics GPA items: 89	Toxics Link	India
	Waste Electrical and Electronic Equipment: The EU and India sharing best practices GPA items: 119	Toxics Link	India
	Mercury monitoring through hair and fish samples GPA items: 57, 85	Center for Public Health and Environmental Development (CEPHED), Toxics Link	India, Nepal
	Study of Lead in cosmetics and Artificial Jewelry GPA items: 80–81, 85	Center for Public Health and Environmental Development (CEPHED)	Nepal
	Report on the breakage of mercury appliances in hospitals and health clinics GPA items: 57, 85	Centre for Environmental Justice (CEJ)	Sri Lanka
	Study on mercury level in working environment and aquatic environment to promote alternatives to mercury GPA items: 57, 85	Health Care Foundation Nepal (HECAF)	Nepal
Governance	Campaign for e-waste and EPR rule for a sound e-waste management in India GPA items: 195–196	Toxics Link	Sri Lanka
	Strengthening Governance and Accountability on SAICM in Nepal GPA items: 206	Forum for Justice	Nepal
	Raising awareness and making policy intervention for reduction of mercury in health sector and safe handling of mercury in institution laboratories in West Bengal GPA items: 57, 195	Society for Direct Initiative for Social and Health Action (DISHA)	India

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Capacity Building	Capacity building workshop on SAICM in Sri Lanka GPA items: 57, 195	Center for Environmental Justice (CEJ)	Sri Lanka
	Capacity building of farmers for ecological agriculture; farmers clubs formation and capacity building on organic agriculture, farmers' setting up of composting units GPA items: 51, 114, 160	Parivartan Pariharpur Sansthan, LokKalyan Samajik Sanstha	India
	Sharing E-waste information among the young communities in Bangladesh GPA items: 258	Environment and Social Development Organization (ESDO)	Bangladesh
	Advocacy and awareness campaign on mercury GPA items: 57, 216	Centre for Environmental Justice (CEJ)	Sri Lanka
	Awareness and Learning Initiative of E-waste Hazard in Bangladesh GPA items: 216, 260	Environment and Social Development Organization (ESDO)	Bangladesh
	Awareness Programme on Mercury Hazards in Health and Education Sectors GPA items: 57,150, 216	Society for Direct Initiative for Social and Health Action (DISHA)	India
	National Conference on Persistent Organic Pollutants GPA items: 54, 216	Toxics Link	India
	Farmer awareness of judicious use of pesticides and adoption of organic agriculture; 300 farmers and 42 sprayers benefitted by the training GPA items: 51, 114, 160	Indian Agricultural Development Foundation	India
	Capacity building programs on the impact of heavy metals GPA items: 216	Center for Public Health and Environmental Development (CEPHED)	Nepal
	Training programs for preventing the exposure of waste handlers and recyclers, particularly waste scavengers, to hazardous chemicals and waste GPA items: 161	Environment and Social Development Organization (ESDO)	Bangladesh
	Raising awareness among informal e-waste recyclers for and providing support to bring them in formal channel in Kolkata GPA items: 161–162	Toxics Link and Society for Direct Initiative for Social and Health Action (DISHA)	India

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Capacity Building *cont.*	State level capacity building workshop of stakeholders on mercury; initiative to issue guidelines for mercury free hospitals by State PCB, in Manipur state of India GPA items: 57, 214	Rural Health Organization	India
Illegal Traffic	Mobilization Against Arsenic Poisoning due to illegal pesticides use in Sri Lanka GPA items: 266	Centre for Environmental Justice (CEJ)	Sri Lanka
	Study on illegal trafficking of e-waste from China and India. GPA items: 272–273	Center for Public Health and Environmental Development (CEPHED)	Nepal
	Strengthen national strategies for prevention, detection and control of illegal trans boundary movements of waste GPA items: 272–273	Environment and Social Development Organization(ESDO)	Bangladesh

SOUTHEAST ASIA AND EAST ASIA

Contributions by
Southeast Asia POPs Elimination Network, Philippines
IPEN Southeast Asia Regional Hub

Southeast Asia and East Asia is economically and politically diverse. This leads to different types of challenges and needs with respect to chemical safety and this has been evident in how SAICM has been implemented in the region. Overall, the speed of SAICM implementation has been unhurried and uneven and, in most cases, still evolving and far from being complete and effective. Progress in elevating chemical safety as an integral piece of any national agenda and plan of action for socially just and sustainable development has been slow and gradual.

Several countries in the region have moved toward SAICM implementation in a variety of activities. Thailand has incorporated SAICM into the country's National Master Plan on Chemical Safety and has set up a corresponding national coordinating committee that includes representatives from government, industry, and civil society. Korea has fully analyzed the GPA and developed an implementation plan and a coordinating committee that includes two public interest NGO representatives. Most governments have initiated measures to strengthen sound chemicals management that have yet to be concluded. For instance, Malaysia has drafted a Chemical Classification, Labeling and Safety Data Sheet regulation and an Environmentally Hazardous Substances Notification and Registration Scheme that have yet to be approved. In 2012, Indonesia formed a technical committee that will work toward the establishment of a National Hazardous Chemical Substances Commission as directed by a government regulation that was issued in 2001. In 2011, the Philippines decisively resumed a process that has been idle since 2007 that will adopt a Chemical Control Order for lead and lead compounds, which will, among others, prohibit lead-added decorative paints.

While several countries in the region have severely restricted or banned some HHPs, much remains to be done to enforce such directives. Regional information sharing on HHP bans and their rationale could be helpful to governments in the region who seek to address HHPs in their country. Attention must be given to the registration review process to phase out HHPs and to prevent new ones from entering the market. Also, government policies aimed at reducing HHPs should include promoting toxic-free, sustainable agriculture and providing incentives to farmers to move away from harmful chemicals. An alarming issue is the illegal movement of pesticides from manufacturing countries across the long porous borders of countries that have a long tradition of sustainable agricultural practices and which do not manufacture synthetic agrochemicals. A regional mechanism could help ensure that pesticide manufacturing countries respect pesticide bans of other countries.

As in other regions, waste management is a key issue in Southeast Asia and East Asia. There are increasing public and governmental concerns with POPs, metals, and other types of toxic chemicals from municipal and hazardous waste management, cement kilns, and various types of incineration including waste-to-energy incinerators. SAICM stakeholders anticipated this problem when they proposed GPA item 258, which calls for implementing "capacity building programs on waste minimization and increased resource efficiency, including zero waste resource management, waste prevention, substitution and toxics use reduction, to reduce the volume and toxicity of discarded materials."

NGOs have worked actively to help implement SAICM in the region by working alongside impacted communities and many

TESTING FOR TOXIC HEAVY METALS IN TOYS

The NGO EcoWaste Coalition initiated a project to measure toxic metals in children's products; to our knowledge, the first publicly available investigation of toxic metals in children's products in the Philippines. EcoWaste Coalition representatives, together with an IPEN Advisor, visited numerous different kinds of stores in Cebu, Davao and the metro Manila area, where they purchased toys to be analyzed. In total, 435 products were tested. The measurements were performed using a hand-held X-ray fluorescence analyzer (XRF) and focused on antimony, arsenic, cadmium, chromium, lead, and mercury. Approximately 29% of the products contained at least one toxic metal above levels of concern. The data revealed 67 products (15%) that contained lead at or above the US regulatory limit. Fifty-seven samples (13%) contained more than one toxic metal. The study also found children's toy cosmetics with mercury levels ranging from 4 – 77 times higher than the regulatory limit in the Philippines. The findings raised safety concerns for exposure in children and highlighted the need for protective national regulatory policies. Vast numbers of media stories were circulated about the project and its findings, and government decision-makers were motivated to further investigate toys' ingredients and propose regulatory actions. Since the initiation of this project in August 2011, the Food and Drug Administration of the Philippines have acquired their own XRF analyzer to conduct on-site rapid assessment monitoring for toxic heavy metals in products in stores in Manila.

other sectors. Their efforts have ranged from conducting creative and evidence-based information and education activities, sampling and data analyses, initiating chemicals policy reforms, providing policy papers, and addressing SAICM's emerging policy issues.

GAPS

Despite the steady efforts of countries in Southeast Asia and East Asia to promote the sound management of chemicals since SAICM was adopted in 2006, gaps still remain in implementation. These gaps include:

1. insufficient financial resources to fully and effectively implement SAICM and related multilateral chemicals and environmental agreements, nationally and at the ASEAN-level
2. a lack of concrete efforts to mobilize additional resources from the chemicals industry to pay for the costs of sound chemicals management
3. weak incorporation of the precautionary principle and other essential tools in current or emerging chemicals policies such as "no data, no market," toxics use reduction, materials substitution, "polluters pay," and "right to know," among others
4. slow progress in crafting national chemicals profiles and frameworks for the sound management of chemicals throughout their life cycle
5. a lack of a holistic mechanism or system for inter-agency coordination on chemicals management in terms of data collection and repository, information sharing, enforcement, compliance measures, etc.
6. inadequate infrastructure and personnel to effectively enforce bans and/or restrictions on the trade, sale, use, and disposal of chemical substances, products, and wastes of concern, including inefficient customs control to prevent illegal traffic in dangerous and toxic goods
7. a lack of an ASEAN-level policies and corresponding cooperative plans to respect national pesticide bans and prevent transboundary movement of banned pesticides
8. a lack of robust and unified legislations, and general as well as specific regulations, to advance the goals of chemical safety and sustainable development in agriculture, industry, and commerce
9. insufficient assessment and guidance on the use of nanomaterials and nanotechnology, and their impact on human health and the environment
10. a lack of documentation on the health, environmental, and economic impacts of HHPs and other products and wastes of equivalent concern
11. ineffective policies to prevent and reduce the growing volume and toxicity of discards and establish functional systems for the environmentally-sound management of municipal solid waste, healthcare waste, and hazardous waste
12. poor public access to essential information, such as chemicals transported, used, and stored industrial facilities, as well as chemicals discharged from pollution sources, chemicals in products, chemicals in wastes, chemicals poisonings, etc.
13. a lack of effective civil society engagement and participation in the implementation of SAICM, especially at the policy level

Informal recycler in the Philippines breaking apart a CFL (compact florescent light) bulb, as a young boy watches.

Press conference where the Foundation For Consumers and the Ecological Alert and Recovery-Thailand (Earth) released the results of their study of 47 different skin lightening creams that they tested for mercury in various markets in Thailand. 20% of the products contained mercury at levels above concern.

SAICM IMPLEMENTATION BY NGOS IN SOUTHEAST ASIA AND EAST ASIA

CSOs affiliated to IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction	Contributed to the development of a national chemicals profile GPA items: 1, 165	Ban Toxics, EcoWaste Coalition, Health Care Without Harm	Philippines
	Participated in government-initiated policy discussions on developing chemicals laws and regulations GPA items: 12	Ban Toxics, Centre d'Etude et de Développement Agricole Cambodgien , EcoWaste Coalition, Health Care Without Harm	Cambodia, Philippines
	Promoted phase out and ban on major chemicals of public health concern (i.e., asbestos, HHPs, phthalates, toxic metals) GPA items: 20, 54	Consumers' Association of Penang, EcoWaste Coalition, Pesticide Action Network - Asia Pacific	Malaysia, Philippines
	Collaborated with the government on a megaposter on pesticide and chemical fertilizer GPA items: 52, 54	Centre d'Etude et de Développement Agricole Cambodgien	Cambodia
	Conducted air, water, sediment, fish and hair sampling to determine mercury levels in hotspots and encourage action to curb mercury pollution GPA items: 57	Balifokus, Ban Toxics, Ecological Alert and Recovery-Thailand, EcoWaste Coalition, Global Alliance for Incinerator Alternatives, Health Care Without Harm	Indonesia, Philippines, Thailand
	Mercury monitoring in artisanal small-scale gold mining hotspots in West Java, Central Palu, and West Lombok to develop health and environmental indicators, identify feasible non-mercury extraction, and explore phytoremediation approach to clean up the contaminated sites; in collaboration with Bandung Institute of Technology, Tadulako University, and Mataram University GPA items: 57	Balifokus	Indonesia
	Conducted studies on mercury in cosmetics and personal care products such as skin whitening creams GPA items: 57	Ecological Alert and Recovery-Thailand, EcoWaste Coalition, Green Beagle	China, Philippines, Thailand
	Conducted paint sampling activities to know lead levels in decorative paints and organized awareness-raising activities based on the findings GPA items: 88–89, 108, 157	Balifokus, Ecological Alert and Recovery-Thailand, EcoWaste Coalition	Indonesia, Philippines, Thailand

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Conducted heavy metals study and monitoring near hotspots (hazardous waste landfills and gold and zinc mining sites) GPA items: 57, 69, 76	Ecological Alert and Recovery-Thailand	Thailand
	Promoted non-incineration alternatives to managing industrial, hazardous, healthcare, and municipal waste GPA items: 54, 70, 258	Balifokus, Bangon Kalikasan Movement, Cavite Green Coalition, Community Sanitation and Recycling Organization, Consumers' Association of Penang, Ecological Alert and Recovery-Thailand, Renewal EcoWaste Coalition, Global Alliance for Incinerator Alternatives, Green Beagle, Indonesia Toxics-Free Future Network, Interface Development Interventions, Korea Zero Waste Movement, Greenpeace, Mother Earth Foundation, Philippine Earth Justice Center,Wuhu Ecology Center and many other groups in China	Cambodia, China, Indonesia, Malaysia, Philippines, South Korea, Thailand
	Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Centre d'Etude et de Développement Agricole Cambodgien, Research Centre for Gender, Family and Environment in Development, Gita Pertiwi, Pesticide Action Network-Asia Pacific, Pesticide Action Network Philippines, Pesticide Eco-Alternatives Center, Sustainable Agriculture and Environment Development Association, Tenaganita	Cambodia, China, Laos, Indonesia, Malaysia, Philippines, Vietnam, Asia-wide
	Performed information, education, and research activities on healthcare waste management and non-incineration alternatives GPA items: 54, 56, 70, 84, 119, 162, 258	Balifokus, Consumers' Association of Penang, EcoWaste Coalition, Health Care Without Harm	Indonesia, Malaysia, Philippines

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Centre d'Etude et de Développement Agricole Cambodgien, Research Centre for Gender, Family and Environment in Development, Gajad Muda University, Gita Pertiwi, Pesticide Action Network-Philippines, Pesticide Eco-Alternatives Center, Sustainable Agriculture and Environment Development Association, Tenaganita	Cambodia, China, Indonesia, Laos, Malaysia, Philippines, Vietnam
	Organized training on health and environmental risks of pesticides GPA items: 46, 112	Research Centre for Gender, Family and Environment in Development, Pesticide Action Network-Philippines, Pesticide Eco-Alternatives Center	China, Malaysia, Philippines, Vietnam
	Campaigned against paraquat and endosulfan, sent out information to governments in the region, presented risks of paraquat use to Institute for the Control of Agrochemicals, Ministry of Agriculture GPA items: 27	Pesticide Action Network—Asia Pacific, Pesticide Eco-Alternatives Center	China, Asia-wide
	Organized knowledge sharing activities, trainings, and demonstrations on ecological agricultural practices, including health effects of pesticides, chemicals-free farming, and benefits of organic food GPA items: 51, 54, 56, 112, 160	Centre d'Etude et de Développement Agricole Cambodgien, Research Centre for Gender, Family and Environment in Development, Consumers' Association of Penang, Pesticide Action Network Asia Pacific, Pesticide Action Network Philippines, Pesticide Eco-Alternatives Center, Sustainable Agriculture and Environment Development Association, Research Center for Rural Development	Cambodia, China, Laos, Malaysia, Philippines, Vietnam, Asia-wide
	Participated in multistakeholder project to develop a national framework on chemical accident prevention and preparedness GPA items: 71	EcoWaste Coalition	Philippines

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Risk Reduction *cont.*	Developed guidelines for hazardous substances such as boric acid, chlorinated paraffin, ethanol amine, and alkyl phenol in metalworking fluids, in collaboration with eight manufacturers with 80% of the market share GPA items: 3, 6, 13, 20–21	OUR Network; Korean Steelworkers Union	South Korea
Knowledge and Information	Monitored compliance of FAO Code of Conduct in pesticide retail shops GPA items: 23	Pesticide Action Network Philippines	Philippines
	Organized information, education, and communication activities to promote community and consumer right to know and be protected against harmful chemicals in products, toxic releases in industrial processes, and environmental pollutants from waste treatment and disposal facilities GPA items: 72, 105, 124, 147, 150, 161, 163, 177, 187	Consumers' Association of Penang, Ecological Alert and Recovery—Thailand, EcoWaste Coalition, Greenpeace	Malaysia, Philippines, Thailand
	Organized sampling activities to determine the presence of harmful chemicals like toxic metals in children's products such as toys and school supplies, and conducted awareness-raising and policy activities based on data generated GPA items: 88, 150, 245	EcoWaste Coalition, Greenpeace East Asia, Yayasan Lembaga Konsumen Indonesia (Indonesian Consumer Association)	China, Indonesia, Philippines
	Investigated bisphenol A in canned foods used in Korean public schools and conducted public awareness-raising with parents GPA items: 88, 150, 245	OUR Network	South Korea
	Implemented mercury inventory and mercury storage project; in collaboration with Bandung Institute of Technology, Ban Toxics, Health Care Without Harm, PPLi (Waste Management International) GPA items: 57	Balifokus	Indonesia, Philippines
	Initiated risk communication and conflict mediation regarding industrial pollution and community livelihood and sustainable solutions GPA items: 105–106, 109–110	Ecological Alert and Recovery-Thailand	Thailand
	Developed and distributed fact sheets and monographs on HHPs (i.e., endosulfan, paraquat, glyphosate, chlorpyrifos, fipronil) and safer alternatives GPA items: 81, 89, 114	Research Centre for Gender, Family and Environment in Development, Pesticide Action Network Asia Pacific, Pesticide Action Network Philippines, Pesticide Eco-Alternatives Center	Cambodia, China, Laos, Malaysia, Philippines, Vietnam, Asia-wide

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Organized activities with consumer brigades, schools, consumers and nature environment clubs to promote consumer information and education GPA items: 112	Consumers' Association of Penang	Malaysia
	Translated and published Thai version of "In Harms' Way" to educate Thai health professionals and public about the impact of chemicals on child development, and collected relevant reports in Thailand on chemicals and children's health GPA items: 150	Ecological Alert and Recovery-Thailand	Thailand
	Organized workshop series on the precautionary principle, chemical safety and children's health GPA items: 150	EcoWaste Coalition	Philippines
	Held regional workshop on curriculum development for community education on pesticide risk reduction GPA items: 112	Research Centre for Gender, Family and Environment in Development, Pesticide Eco-Alternatives Center	Cambodia, China
	Contributed to the Report by the Special Rapporteur to Right to Health GPA items: 149	Pesticide Action Network Asia Pacific	Malaysia
	Conducted local radio shows to highlight ecological agricultural practices including bio-diversity based ecological agriculture GPA items: 159	Centre d'Etude et de Développement Agricole Cambodgien	Cambodia
	Sent out 2704 short messages to farmers, consumers and partner CSOs regarding risks of endosulfan GPA items: 119, 140	Pesticide Eco-Alternatives Center	China
	Distributed 1000 calendars with information on pesticide risk to farmers and government officials GPA items: 119, 140	Research Centre for Gender, Family and Environment in Development, Pesticide Eco-Alternatives Center	China, Vietnam
	Risks of paraquat were presented in Institute for the Control of Agrochemicals, Ministry of Agriculture in 2011 GPA items: 27, 119	Pesticide Eco-Alternatives Center	China
	Organized public awareness-raising and media activities on the ecological management of spent mercury-containing fluorescent lamps to combat unsafe recycling and disposal GPA items: 57, 69	EcoWaste Coalition	Philippines

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Knowledge and Information *cont.*	Co-organized with the FTA Watch a review of the social and environmental challenges under the ASEAN Economic Community (AEC) policy, and the problems with transboundary transfer or trade of hazardous waste from Japan to ASEAN countries and/or from other industrial countries through the economic agreement GPA items: 163–164, 268, 273	Ecological Alert and Recovery-Thailand	Thailand
	Workshop on mercury-free health care in collaboration with Ministry of Health and medical device industry GPA items: 57, 59	Global Village of Beijing	China
Governance	Participated in public hearings and technical working group meetings on the banning of endosulfan; lobbied the local and national authorities to ban the aerial spraying of agrochemicals GPA items: 196	EcoWaste Coalition, Interface Development Interventions, Pesticide Action Network Philippines, various community and farmer groups	Philippines
	Contributed to the development national strategy to environmentally sound management of mercury in Indonesia GPA items: 59, 165, 170, 176	Balifokus	Indonesia
	Lobbied for the ecological management of mercury-containing lamp waste GPA items: 57, 69	EcoWaste Coalition	Philippines
	Campaigned for the development and implementation of PRTR GPA items: 177–179	Ecological Alert and Recovery-Thailand, EcoWaste Coalition, Greenpeace	Philippines, Thailand
	Participated in the development, implementation and/or review of Stockholm Convention's National Implementation Plans (NIPs) GPA items: 206, 211	EcoWaste Coalition, PAN Philippines	Philippines
	Filed a legal complaint in order to assert the genuine representation of the public interest in the National Hazardous Substance Commission GPA items: 164, 188	Ecological Alert and Recovery-Thailand	Thailand
Capacity Building	Conducted trainings and provided inputs and suggestions on chemical conventions addressing human and environmental impacts of pesticides GPA items: 225	Research Centre for Gender, Family and Environment in Development, Pesticide Action Network Philippines, Pesticide Eco-Alternatives Center	China, Vietnam, Asia-wide

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Capacity Building *cont.*	Organizing training activities on community environmental and health monitoring GPA items: 227	Ecological Alert and Recovery-Thailand	Thailand
	Provided training opportunities on hazard classification and GHS GPA items: 249	EcoWaste Coalition	Philippines
	Carried out capacity building programs and projects on waste prevention and reduction, including zero waste resource management, and more sustainable consumption practices GPA items: 258	Cavite Green Coalition, Consumers' Association of Penang, EcoWaste Coalition, Mother Earth Foundation	Malaysia, Philippines
	Conducted seminars and workshops to equip informal waste recyclers with information and knowledge on chemical hazards and basic exposure prevention tips GPA items: 260	EcoWaste Coalition and informal recyclers' groups	Philippines
	Organized a survey and capacity building workshop on better management of e-wastes GPA items: 260	Institut Hijau Indonesia in cooperation with local waste recyclers in Jakarta	Indonesia
	Launched E-Waste Action Now, produced e-waste advocacy documentary and conducted awareness raising activities, including seminars and media events GPA items: 260	Ban Toxics, EcoWaste Coalition, Greenpeace, Philippine Earth Justice Center	Philippines
Illegal Traffic	Conducted a survey to assess the transboundary movement of pesticides with focus on banned pesticides GPA items: 265–269	Centre d'Etude et de Développement Agricole Cambodgien, Pesticide Action Network Asia Pacific, Sustainable Agriculture and Environment Development Association	Cambodia, Laos
	Organized policy advocacy and public pressure to repatriate the contaminated imported metal scraps from the UK and the Netherlands GPA items: 268, 272, 273	Indonesia's Toxics-Free Network (Balifokus, Indonesian Centre for Environmental Law, Yayasan Lembaga Konsumen Indonesia (Indonesian Consumer Association), Wahana Lingkungan Hidup Indonesia, Gita Pertiwi and Greenpeace Indonesia)	Indonesia

SAICM OBJECTIVE	NGO ACTIVITY AND GPA ITEMS	NAMES OF NGOS	COUNTRY
Illegal Traffic *cont.*	Raised concern, disseminated information, and conducted investigative work on illegal shipment of dangerous and toxic wastes GPA items: 268, 272–273	Balifokus, Consumers' Association of Penang, Ecological Alert and Recovery-Thailand	Indonesia, Malaysia, Thailand
	Promoted media efforts to alert customs authorities on possible entry of illegal products containing lead, mercury and other toxic metals GPA Item: 273	EcoWaste Coalition	Philippines

SAICM IN DEVELOPED COUNTRIES

Some developed countries appear to view SAICM as an issue only for developing and transition countries despite agreeing to the Strategic Approach in Dubai. In fact, in a number of developed countries there remain significant gaps in implementing SAICM and considerable work is still needed to achieve the SAICM goal. This appears to reflect a low political priority on SAICM implementation and few actions to ensure the implementation of the OPS and GPA in their own countries.

Many developed countries have not yet established inter- ministerial coordination committees as recommended by the SAICM agreement, and there is a serious lack of public awareness or involvement in SAICM national implementation. In many developed countries, workers and the public still cannot access adequate information on toxic chemicals, their impacts and where and how they are used. Industrial and agricultural workers in particular continue to suffer serious and irreversible impacts of toxic chemicals. Research into alternatives to chemical pesticides in agriculture is not well supported nor is there sufficient policies and programs to promote safe and effective alternatives and substitutes to persistent, bioaccumulative, and toxic substances (PBTs) as called for in the SAICM GPA. Ironically, some developed countries have some of highest levels of PBT contamination in their human populations in the world.

SAICM cannot be viewed as a process by which only developing and transition countries improve chemical management. All signatory countries of SAICM made a firm commitment in Dubai that the sound management of chemicals is essential to achieve sustainable develop- ment and that concerted actions need to be taken to reach the 2020 goal.

CONCLUSION

SAICM implementation by IPEN Participating Organizations increased during the period of 2009-2012. In part this was due to the SAICM Global Outreach Campaign and parallel efforts that helped broaden the awareness of SAICM in all regions during the period of 2006-2009. IPEN Participating Organizations have implemented over 300 activities in over 50 countries from the local to the international level to promote chemical safety. Activities include work on all areas of the OPS, work on all four SAICM emerging policy issues, and building national support for a strong mercury treaty during the ongoing negotiations. To advance chemical safety at Rio+20, more than 1000 public interest NGOs and CSOs signed on to the *Global Common Statement for a Toxics-Free Future*.

SAICM implementation has advanced in the period of 2006-2009 but the pace needs to quicken to meet the 2020 goal. SAICM implementation needs a sustainable financial mechanism and strong links to sustainable development. In the SAICM Dubai Declaration, governments acknowledged that public health and environmental NGOs, trade unions and other CSOs have made important contributions to promoting chemical safety, and they stated their intent to engage actively in partnerships with civil society in SAICM implementation. This requires financial resources to build NGO capacity and to support SAICM activities so that the commitment of civil society to chemical safety can be harnessed to accomplish the 2020 goal.

ANNEX 1: NGO/CSO GLOBAL COMMON STATEMENT FOR A TOXICS-FREE FUTURE

NGO/CSO Global Common Statement for a Toxics-Free Future

We, (*Name of organization*), a civil society organization, join in the global campaign for a toxics-free future where exposure to toxic and hazardous chemicals is no longer a source of harm and where people have the right to enjoy healthy and sustainable green livelihoods that do not harm their bodies or the environment. Green livelihoods encompass the right to safe and secure communities and workplaces that are free from toxic threats to people, surrounding environments and to future generations. This is the sustainable future we want for the world and our children.

We further affirm our obligation to intergenerational equity and the protection of all children's right to a safe environment, recognizing their unique vulnerability to hazardous chemicals.

We recognize that fundamental changes are needed in the unsustainable patterns of consumption, production, resource extraction and disposal that dominate the world economic system. We further, recognize that '*fundamental changes are needed in the way that societies manage chemicals,*' including their design, use and 'end of life.'[1] We note that the large majority of the pesticides and industrial chemicals currently in production and use have still not been adequately tested for their impact on human health and the environment, particularly in the area of emerging concerns that challenge the central dogma of toxicology such as endocrine disruption, epigenetics[2], ongoing low dose exposures, and the impacts of chemicals mixtures.

Furthermore, we recognize that diseases such as cancer, heart disease, reproductive and developmental disorders, asthma, autism, diabetes, degenerative diseases and mental health illnesses have been shown to have links to the pollution of air, water, soil and food, as well as toxic consumer products and wastes.[3]

We stress that peoples' right to green livelihood and a sustainable future are being affected by exposure to toxic chemicals in the workplace, schools, agricultural areas and in the home, and that this may cause serious and irreversible damage such as cancer, birth defects, impaired development, negative impacts in the immune system, neurotoxicity and metabolic impairment.

We stress with concern that persistent and bioaccumulative chemicals remain in the human body long after exposure and can be passed from mother to baby, in utero and via breast milk, and further cross the blood brain barrier to affect a child's central nervous system and its development.

We uphold the 2009 SAICM NGO Global Statement and the World Summit on Sustainable Development's 2020 goal and affirm that '*living in a pollution-free world is a basic human right*' and that the '*fundamental right to life is threatened by exposures to toxic chemicals, hazardous wastes, and contaminated drinking water and food.*'[4]

We acknowledge that the sound management of chemicals including much needed chemical reform is '*essential to achieving sustainable development, including the eradication of poverty and disease, the improvement of human health and the environment and the elevation and maintenance of the standard of living in countries at all levels of development,*' consistent with the Millennium Development Goals. [5]

We stress that meaningful and active participation including the right to free, prior and informed consent by all sectors of civil society, particularly women, workers and indigenous peoples, is essential in regulatory decision-making related to chemical safety, and recognise the urgent need for *"information and knowledge on chemicals throughout their life cycle, including the risks that they pose to human health and the environment"*[6]

We acknowledge that the chemical industry plays a significant role in the global economy with annual sales of over 3,000,000,000,000 U.S. dollars. We note with concern that a steadily increasing share of the world's chemical production is shifting to developing and transition countries with limited capacity to manage and regulate these operations and without the compliance mechanisms to mitigate risks to human health and the environment.

1 Para 7 Dubai Declaration on International Chemicals Management, Strategic Approach to International Chemicals Management Dubai, 2006 http://www.saicm.org

2 Epigenetics is the study of heritable alterations in gene expression caused by mechanisms other than changes in DNA sequence. An epigenetic trait is a stably inherited phenotype resulting from changes in a chromosome without alterations in the DNA sequence. www.sciencedaily.com/releases/2009/04/090401181447.htm

3 WHO Media Release 'Almost a quarter of all disease caused by environmental exposure' 16 June 2006, Geneva Available at http://www.who.int/mediacentre/news/releases/2006/pr32/en/index.html

4 Press Release, 27 Apr 2001 'Living In A Pollution-free World A Basic Human Right' Available at http://www.grida.no/news/press/2150.aspx

5 Para 1 Dubai Declaration

6 Para 21 Dubai Declaration

We note that almost all countries are increasing their use of synthetic pesticides and industrial chemicals, including hazardous substances and nanomaterials contained in consumer products. Yet, the majority of countries especially developing and or those with economies in transition do not have adequate infrastructure or resources to ensure the sound management of pesticides, industrial chemicals and their subsequent wastes. This is particularly so for the escalating quantities of electronic wastes; the ever increasing solid and liquid wastes from mining and petroleum and gas extraction; obsolete pesticides and their containers; and the vast hazardous industrial waste stockpiles – the toxic legacy of our past.

And we recognize the cost of inaction on chemicals is not fully quantified but substantial. We take note of the World Health Organization's conservative estimate that industrial and agricultural chemicals and acute chemical poisonings are responsible for 1.2 million deaths per year and at least 1.7 percent of the global burden of disease.[7] The significant costs that these deaths and disease place on individuals, communities and nations (particularly their poor and most vulnerable) are not borne by the chemical producers or shared down the production supply chains. Instead, they impose an unacceptable burden on developing and transition countries.

In response, we:

- Support the demands and struggles of workers, women and children, indigenous peoples, peasant farmers, consumers and communities affected by toxic chemicals in their exercise of their rights for a healthy environment, worker protection, right to know, fair compensation, medical treatment and environmental justice
- Commit our organizations to curb the rising tide of toxic chemicals building up in our bodies, and those of our children, which threaten the health and sustainability of the next generation and beyond
- Commit to the principles that underpin our toxics-free future mission: precaution, right to know, no data— no market, substitution and elimination of hazardous substances, polluter pays, and extended producer responsibility.
- Recognize that to achieve a sustainable future, a profound transformation of the chemical industry is fundamental and where the protection of workers, indigenous peoples, community health and the environment are not sacrificed to profit.
- Stress that a sustainable and responsible chemical industry must have the goal of eliminating all pollution and pay the true cost of its products throughout their life cycles. Cost internalization mechanisms and fiscal reforms, which truly reflect ecological values can assist in this and help provide the resources needed for the development of sound chemicals management policy, assessment, monitoring and practices.
- Support clear criteria and policies that encourage investments in a sustainable chemical industry to help phase out the production of unsustainable chemicals; to support green design and green chemistry; to fully assess using a life cycle approach all new technologies prior to their entering the market, and to protect developing and transition countries from unfair health, environmental and economic burdens.
- Recognize that to achieve a sustainable future in which everyone can have access to safe, nutritious food, a profound transformation of agriculture to biodiversity-based ecological agriculture is fundamental.
- Noting the threats posed to consumers globally from unregulated toxic product ingredients, we support and promote the implementation of precautionary, cradle to cradle, life cycle approaches to product design as well as green procurement policies, preferably with third party certification, so that toxic chemicals do not find their way into consumer products and the ensuing wastes; and we call for mandatory labeling of hazardous substances in products and in the workplace, ensuring the protection of all people and the environment.
- Support full chemical and material ingredient transparency and information access throughout supply chains and with the public.
- Work to achieve a global phase-out of hazardous, unmanageable chemicals including highly hazardous pesticides, persistent bioaccumulative toxins (PBTs), very persistent and very bioaccumulative substances (vPvBs), genotoxins, carcinogens, chemicals affecting reproduction, the immune and nervous systems, endocrine disruptors, substances that undergo long-range transport, toxic metals such as mercury, cadmium, and lead, and hazardous nanomaterials. A global phase out is essential in order to avoid banned and restricted chemicals from one country being sold or dumped in another, particularly in those countries that do not have the capacity to enforce sound management of chemicals.
- Commit ourselves and call upon all stakeholders including governments, non-governmental organizations, businesses, private sector institutions, academia, intergovernmental organizations, media, and others to work together to urgently reform and harmonize chemicals assessment, regulation and management internationally, regionally, and domestically so as to achieve a toxic free future for all. We call for a recommitment to SAICM at the highest political level and urge governments and stakeholders to fundamentally increase financial support to the implementation of SAICM and the multilateral chemical and waste agreements.

7 A. Pruess-Ustun, C. Vickers, P. Haefliger, and R. Bertollini, "Knowns and Unknowns on the Burden of Disease due to Chemicals: A Systematic Review", Environmental Health, 10: 9, 2011.

ANNEX 2: PROJECT ACTIVITIES SUPPORTED BY THE INTERNATIONAL SAICM IMPLEMENTATION PROJECT

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Albania	EDEN Centre	How safe are our food products?
Albania	EDEN Centre	Lead battery recycling plants and raising community health and safety awareness
Albania	EDEN Centre	Raising public awareness and generation of new data about HG pollution in Albania
Argentina	Taller Ecologista with GAIA collaboration	Zero Waste videos
Argentina	Asociación Argentina de Médicos por el Medio Ambiente (AAMMA)	Strengthening info to civil society to protect health from mercury exposure w/ a focus on vulnerable populations
Armenia	Armenian Women for Health and Healthy Environment (AWHHE)	Introducing Code of Conduct In Order To Reduce The Environmental and Health Risks From Pesticides
Armenia	Armenian Women for Health and Healthy Environment (AWHHE)	Health and Environmental Hazards of Mercury in Fish in Armenia
Azerbaijan	Ecological Society "Ruzgar"	No Mercury "Hot-Spots" in Azerbaijan
Bangladesh	Environment and Social Development Organization (ESDO)	Awareness and Learning Initiative of E-waste Hazard in Bangladesh
Bangladesh	Environment and Social Development Organization (ESDO)	E-Waste Education for the Next Generation
Bangladesh	Occupational Safety, Health and Environment Foundation (OSHE)	Organizing the multistakeholder national workshop on use of Chemical Pesticides in Agriculture: Reality and Way forward towards Phasing-out hazardous pesticides from Bangladesh
Belarus	Center for Environmental Solutions	Preparation of the assessment report and conducting awareness raising activities on E-waste and batteries management in Belarus
Belarus	Center for Environmental Solutions	Preparation of the assessment report and conducting awareness raising activities on E-waste and batteries management in Belarus (extension of ISIP 1 project)
Benin	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Market analysis of certain medical devices containing mercury and their alternatives in cities with special status (Cotonou, Porto-Novo, and Parakou) in Benin

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Brazil	Associação de Proteção ao Meio Ambiente de Cianorte (APROMAC)	Civil Society Participation in CONASQ – National Commission on Chemical Safety
Brazil	TOXISPHERA	Building a Website for Raising Awareness on Chemicals in Brazil
Brazil	Associação de Combate aos Poluentes (ACPO)	Civil Society capacities towards the National and International Chemicals Policies
Burkina Faso	Association pour la Recherche et la Formation en Agro-écologie (ARFA)	Implementation of agronomic trials in order to create a network for the promotion and distribution of bio-pesticides based on Trichoderma harzianum in Burkina Faso
Cameroon	Cameroon Pesticide Action Network (CAPANET)	Contributing to training in IPM and safe occupational practices in support of improved implementation of the Code
Chile	Alianza por una Mejor Calidad de Vida	Awareness among legislators, rural workers, and the general public on phase-out of highly hazardous pesticides
Chile	Acción Ecológica	E-Waste Proposals for the New Chilean General Waste Act
Chile	Observatorio Latinoamericano de Conflictos Ambientales (OLCA)	Mercury: Byproduct and Source of Contamination of Large-Scale Gold and Silver Mining
Costa Rica	Red de Acción en Plaguicidas en America Latina (RAPAL) Costa Rica	Fish and Community Mercury Monitoring Project in Costa Rica
Cote d'Ivoire	Jeunes Volontaires pour l'Environnement Côte d'Ivoire (JVE)	Be Conscious of Mercury Effects
Croatia	Zelena Akcija	Vrbovec Waste Project
Croatia	Zelena Akcijia	Waste action plan for City of Vrbovec (an extension of the ISIP 1 project)
Croatia	Institute for Rural Development and Ecology (IRRE)	The future of IPM in Croatia
Czech Republic	Arnika	Waste Incineration Residues, a Significant Source of POPs in the Czech Republic
Egypt	Arab Network for Environment and Development (RAED) / Arab Office for Youth and Environment (AOYE)	Awareness Campaign to Educate Community about the Hazards of Mercury to Health and Environment

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Ethiopia	Pesticide Action Network Ethiopia / Institute for Sustainable Development (ISD)	Awareness Raising on E-Waste Management in Ethiopia
Georgia	ECOVISION - the Union for Sustainable Development	Promoting pesticide pollution prevention programs to reduce exposure and to improve national regulatory frameworks.
Ghana	Ecological Restorations	POPS Pesticide Elimination Strategy for Vegetable Production in Tuba
Ghana	Ecological Restorations	Awareness creation on the effects of mercury on human health and the environment in Ghana.
India	Society for Direct Initiative for Social and Health Action (DISHA)	Awareness Programme on Mercury Hazards in Health and Education Sectors
India	Youth Round Table Society	Awareness to phase out Mercury in Health care in some districts of Uttar Pradesh (India)
India	Paryavaraniya Vikas Kendra	Promoting mercury-free health care systems in two districts of the Gujarat state of India
India	Parivartan Pariharpur Sansthan	Promotion for Chemical-Free Agriculture for Ecological Balance
India	Toxics Link	Compile and produce an information booklet on POPs for the general community in India
Indonesia	Gita Pertiwi	Monitoring on Advertisements and Distribution of a Restricted Pesticide in Indonesia
Indonesia	Balifokus	Medical Waste Management and Mercury Devices in Health Sector Assessment and its Alternatives in Bali, Indonesia
Indonesia	Gita Pertiwi	Participatory Monitoring of banned household pesticides (Diclhorvos and Chlorpirifos) by Consumers Group in Solo City and Boyolali District
Indonesia	Balifokus	Assessment of the Socio-Economic Impact and Human Rights Aspect of Mercury Use in Artisanal and Small-Scale Gold Mining Hotspots in Indonesia

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Jordan	Land and Human to Advocate Progress (LHAP)	Electrical and Electronic Waste: a New Emerging Danger: E-waste National Awareness Campaign
Jordan	Baytuna Society	Current Status of Mercury in Jordan
Jordan	Land and Human to Advocate Progress (LHAP)	Phasing out Lead in Paint through Advocacy and Awareness Raising
Kazakhstan	Greenwomen	Public Participation (Civil society and public interest NGO participation)
Kazakhstan	Greenwomen	Public Participation in the Civil Society Forum at the 6th Asia and the Pacific Ministerial Conference where National NGOs Action Plan on SAICM implementation were presented
Kazakhstan	The Center "Cooperation for Sustainable Development" (CSD)	Analysis of electrical and electronic equipment waste management system in the Republic of Kazakhstan
Kenya	Eco-Ethics	Reducing exposure of slum dwellers to lead in Mombasa
Kenya	Eco-Ethics	Addressing Lead Poisoning Exposure Problem in Ownio Uhuru Slums, Mombasa (extension of previous project)
Kenya	iLima	Fish and Community Mercury Monitoring Project in Kenya
Kyrgyzstan	Independent Ecological Expertise	National Action Plan for Khaidarkan mercury mining: Strengthening Environmental Policy and Implementing Outreach Campaign in Kyrgyzstan
Lebanon	AMWAJ for the Environment	Campaign and Media Activities to eliminate Saida Waste Dump
Macedonia	Eco-Sense	Disseminating information on chemicals in Macedonia
Macedonia	Eco-Sense	Raising awareness on mercury
Macedonia	Eco-Sense	Raising awareness on Mercury (extension of the ISIP 2 project)
Mali	Fondation pour le Développement au Sahel (FDS)	Mercury use in Mali : case study of artisanal and small scale gold miners
Mauritius	Pesticide Action Network Mauritius	Mercury-Free Campaign in Schools

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Mexico	Centro de Diagnostico y Alternativas para Afectados por Tóxicos (CEDAAT)	Children's Neurotoxicity in communities exposed to cement and other industries in Apaxco-Atotonilco
Mexico	Red Latinoamericana de Nanotecnología y Sociedad (ReLANS)	Societal and Environmental Implications of Nanotechnology development in Latin America and the Caribbean
Mexico	Fronteras Comune	Tóxicos en el Hogar 2 (Toxic Chemicals at Home)
Moldova	Association of Ecotoxicologists from Republic of Moldova (ECOTOX)	Heavy metals in fish products
Morocco	Association d'Education Environnementale et de Protection des Oiseaux au Maroc (SEEPOM)	Information and awareness-raising on mercury meant for government, NGOs, professional organisations and the press
Nepal	Center for Public Health and Environmental Development (CEPHED)	Study, Awareness Raising and Capacity building about Electronic Waste in Nepal
Nepal	Forum for Justice	Advancing the SAICM Mission: Convening Multi-Sectoral National Nepalese SAICM Implementation Forums
Nepal	Center for Public Health and Environmental Development (CEPHED)	Biomonitoring of Mercury Contamination in Nepal
Nigeria	Sustainable Research and Action for Environmental Development (SRADev)	Impact Assessment of Electronic Waste Handlers and Livelihood in Lagos, Nigeria
Nigeria	Sustainable Research and Action for Environmental Development (SRADev)	Mercury- Establishing framework for "Mercury free healthcare in Nigeria": Campaign for Alternatives to Mercury in the Health Care Sector in Lagos State, Nigeria
Paraguay	Altervida	Conducting of a Seminar called "Very dangerous, obsolete pesticides and towards the removal of Endosulfan" and lobbying before the national authorities
Philippines	Citizens Unified for Sectoral Empowerment - Davao del Sur (CAUSE-DS)	Community Action Monitoring and Education Campaign on Highly Hazardous Pesticides in Davao del Sur
Philippines	Cavite Green Coalition (CGC)	Strengthening Community Participation for Safety against Chemical Pollution

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Philippines	Citizens Unified for Sectoral Empowerment - Davao del Sur (CAUSE-DS)	Community Action Monitoring and Education Campaign on Highly Hazardous Pesticides in Davao del Sur (extension of ISIP 1 project)
Philippines	Pesticide Action Network Philippines	Preliminary investigation on the health effects of paraquat in Mindanao, Philippines
Russia	Chapaevsk Medical Association	Survey of bisphenol a in Russian foods
Russia	"Volgograd-Ecopress"	Facilitate the promotion of non-combustion technologies of obsolete pesticide phase-out in Russia
Russia	"Volgograd-Ecopress"	To promote proper management of mercury containing equipment at the regional level to prevent mercury contamination of the Volga river and Caspian coastal area
Russia	Nizhegorodskaya regional public organization "Ecological Center "Dront"	Tackling Mercury in Local Waste Streams: Review and Recommendations for managing waste - lamps containing Mercury
Russia	EcoSPES	Toxic contamination of surface water reservoirs and small farms located in the vicinity of chemical enterprises which are sources of POPs and heavy metal pollution in Dzerjinsk
Senegal	Association pour la Défense de l'Environnement et des Consommateurs (ADEC)	Mobilize consumers' participation for different ways of managing waste
Serbia	Resource Centre Leskovac	Fostering Importance of Chemical and Product Safety in Local Communities
South Africa	groundWork	Understanding and Phasing out of Pesticides in Small Scale Farming in South Africa
Sri Lanka	Centre for Environmental Justice (CEJ)	Advocacy and awareness campaign on Mercury
Sri Lanka	Centre for Environmental Justice (CEJ)	National SAICM Forum: Promoting a Civil Society and Government Dialogue on Chemical Safety
Sri Lanka	Center for Environmental Justice (CEJ)	Mobilizing People on Arsenic Poisoning due to Illegal Pesticides Use in Sri Lanka

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Syria	Environmental Protection and Sustainable Development Society (EPSDS)	Reduce and Eliminate and Replace Mercury in Healthcare Facilities
Tanzania	Tanzania Association of Public Occupational and Environmental Health Experts (TAPOHE)	Situational Analysis of Morogoro Hotspot Area in Tanzania for Persistent Organic Pollutants
Tanzania	Agenda for Environment and Responsible Development (AGENDA)	Awareness-raising on lead paint poisoning in Tanzania
Thailand	Ecological Alert and Recovery, Thailand (EARTH)	Survey and Policy Advocacy on the Management of Used Cellphone Batteries
Thailand	Ecological Alert and Recovery, Thailand (EARTH)	Mapping toxics in surrounding of Phuket as a contribution to global debate about POPs in wastes
Thailand	Ecological Alert and Recovery, Thailand (EARTH)	A Study of Mercury Contamination in Face Whitening Products in Thailand
Tunisia	Mediterranean Network Association for sustainable Development (AREMEDD)	Awareness raising in schools on SAICM and chemicals
Tunisia	Association pour la Protection de l'Environnement et Développement Durable de Bizerte (APEDDUB)	Tunisia Mercury Situation Report - Awareness-raising campaign about mercury: hazardous for health and the environment
Tunisia	Association pour la Protection de l'Environnement et Développement Durable de Bizerte (APEDDUB)	National Awareness Campaign to Eliminate Harmful Chemicals in Compounds in Children's Toys in Tunisia
Uganda	Pro-biodiversity Conservationists in Uganda (PROBICOU)	Country Level Assessment for Mercury in Uganda
Uganda	Uganda Network on Toxic-Free Malaria Control (UNETMAC)	Collection of Lead Based Paint Samples in Uganda
Uganda	Pro-biodiversity Conservationists in Uganda (PROBICOU)	Fish and Community Mercury Monitoring Project in Uganda
Ukraine	Ukrainian National Environmental NGO (UNENGO) "MAMA-86"	Mercury country situation report and awareness-raising on SAICM implementation in Ukraine
Uruguay	Red de Acción en Plaguicidas en America Latina (RAPAL) Uruguay	Fish and Community Mercury Monitoring Project in Uruguay

COUNTRY	ORGANIZATION	TITLE OF PROJECT
Uruguay	Red de Acción en Plaguicidas en America Latina (RAPALI Uruguay	Press events related to mercury testing and participation in mercury negotiations
Uzbekistan	ARMON Women Environmental Centre	Identification of pesticide hotspots in Sirdarinsky region, Uzbekistan

ACKNOWLEDGEMENTS

IPEN would like to thank the hundreds of NGOs, CSOs, labor groups, and health groups around the world for their contributions to SAICM implementation. IPEN gratefully acknowledges the financial support for various SAICM implementation activities from the governments of Sweden and Switzerland, the UNEP, the Swedish Society for the Conservation of Nature, several charitable foundations, and others. We would like to acknowledge the SAICM Secretariat for their efforts to foster SAICM as an open, transparent and inclusive multistakeholder process. The content and views expressed in this report, however, are those of the authors and IPEN and not necessarily the views of the institutions providing management and/or financial support.

PHOTO CREDITS:

Front Cover: www.Ban.org (top right), ESDO, Bangladesh (bottom left) • Page 3: John Wickens • Pages 13, 14: EcoWaste Coalitions, Philippines Page 15: www.ban.org • Page 20: AGENDA, Tanzania • Page 21: Eco-Ethics, Kenya • Page 29: EDEN Center, Albania • Page 30: ARNIKA, Czech Republic • Page 45: Fondation pour le Développement au Sahel Page FDS Mali • Page 46: Jeunes Volontaires pour l'Environnement Côte d'Ivoire Page 53: CAATA, Mexico • Page 54: John Wicken • Page 59: APEDDUB, Tunisa • Page 64: Toxics Link, India • Page 65: ESDO, Bangladesh Page 71: *(left)* Thony Dizon, *(right)* Apichit Jinakul

a toxics-free future

www.ipen.org
ipen@ipen.org