



a toxics-free future

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ipen@ipen.org

International SAICM Implementation Project (ISIP)

In 2010, in an effort to demonstrate SAICM implementation via IPEN Participating Organizations, IPEN launched an International SAICM Implementation Project, also known as ISIP. 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 Overarching Policy Strategy.

In particular, the ISIP supports the Governance objective of SAICM's Overarching Policy Strategy 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 the 2008-2009 Global SAICM Outreach Campaign to raise awareness about SAICM and strengthen collaboration among the public interest, health and labor sectors.

ISIP Objectives

ISIP's four objectives include:

- Promoting the need for sound chemicals management
- Advancing National SAICM Implementation
- Promoting global SAICM implementation by global civil society
- Building capacity among NGOs developing countries and countries with economies in transition

Title of activity: Reducing exposure of slum dwellers to lead in Mombasa

NGO: Eco-Ethics International-Kenya

Country: Kenya

Date: May, 2011

Elements of SAICM Covered:

Participation in activities related to the Global Partnership to Eliminate Lead Paint including identifying potential lead exposure, raising awareness of toxicity to human health and the environment and alternatives, prevention programs to reduce exposure, and promotion of national regulatory frameworks; Follow up recommendations and options for the SAICM OEWG and ICCM3 (57, 157, ICCM2 decision II/4)

Description of the harms of lead exposure, including suspected harm:

Lead is known to exhibit several unwanted effects on the environment and human health. The harms of Lead exposure include: disruption of the biosynthesis of haemoglobin and anaemia; rise in blood pressure; kidney damage; miscarriages and subtle abortions; disruption of nervous systems; brain damage; declined fertility of men through sperm damage; diminished learning

abilities of children; behavioural disruptions of children such as aggression, impulsive behavior and hyperactivity. Furthermore, Lead can enter a foetus through the placenta of the mother where it can cause serious damage to the nervous system and the brains of unborn children.

In Kenya, particularly the area where this project was being implemented, several cases of Lead exposure were cited. Women complained about miscarriages, parents complained of abnormalities by their children including fatigue, diminishing learning abilities, weak joints and bones, and reduced senses, among others.

Description of the Global Partnership and decision taken at ICCM2, including any national initiatives to advance this decision:

Resolution II/4 B on Lead in Paint, called for the establishment of a joint initiative “Global Alliance to eliminate lead paints” by UNEP and WHO to prevent children’s exposure to lead from paints containing lead and to minimize occupational exposures to lead paint. The broad objective is to promote a phase-out of the manufacture and sale of paints containing lead and eventually eliminate the risks from such paint.

The initiative to phase out lead in gasoline could be termed as a national initiative that advances the decision taken at ICCM2. According to recent research findings, two grades of gasoline [leaded and unleaded] are supplied in the Kenyan market and they retail at the same pump price, suggesting that price is not a deciding factor in the consumers’ choice between the two grades. The leaded gasoline is supplied by Kenya’s only oil refinery while the unleaded grade is imported. However, since the introduction of unleaded gasoline, there has been no [and there is still no] conscious effort by the government or the importers to actively market the new product or inform consumers of the availability of unleaded gasoline as a substitute for leaded gasoline. This exposes the gaps in this initiative.

Description of any existing national laws or policies about lead or lead in paint:

There are presently no national laws or policies specifically about lead/lead in paint in Kenya. Although some initiatives have been witnessed on phasing out lead in gasoline in the near past, no policies have been developed to guide those initiatives. The regulation of toxic and hazardous metals including lead is just mentioned in part in the Environmental Management and Coordination Act.

Description of types of products available on the market that contain lead:

Car batteries, paints, gasoline

Description of levels of lead release and exposure:

High levels of lead emissions in Kenya occurs mainly in urban centers where there are more industries, high levels of fumes from motor vehicles as well as large dumping sites. Kimani (2005) found significant exposure to high levels of environmental lead in Nairobi. Activities to blame include spray painting, panel beating, metal cutting, and welding and motor vehicle mechanics. Njoroge *et al* (2008) identified occupational lead exposure to be at alarming levels in Nairobi, Kenya.

A study in the year 2007 at the areas surrounding Dandora slums in Nairobi, found half the children tested had blood lead levels equal to or exceeding the internationally accepted action levels of 10 micrograms per deciliter of blood, including two children with concentrations of over 29 and 32 micrograms. Tests also showed 42 percent of soil samples had lead levels 10 times higher than what is considered unpolluted soil - more than 400 parts per million (ppm), compared to a safe level of 50 ppm.

Lead levels found on the dumpsite were 13,500 ppm compared to the action levels in The Netherlands of 150 ppm (ENS 2007). In Kisumu, a study by Selimo *et al* in 2008, found out that Lead content in samples of tap water and other surface water ranged from 140 to 260, and 140 to 690 ($\mu\text{g/g}$), respectively. All the tap water samples had lead content above 10 $\mu\text{g/g}$, the

maximum WHO limit for lead in drinking water. The lead content in vegetables and fish ranged between 0.0 to 2.9 and 1.0 to 3.3 ($\mu\text{g/g}$), respectively. All the fish samples had lead levels above the WHO maximum limit of 0.2 ($\mu\text{g/g}$). Lead content in soil samples ranged from 0.2 to 3.9 ($\mu\text{g/g}$). These results indicate that there is considerable risk of lead poisoning from drinking water and eating some foods from these sites.

Description of the concentrations of lead you tested:

Our project did not focus on testing the concentrations of lead either in the environment or the residents of Owino Uhuru slums. However, results of a previous diagnosis of three children by the government chemist showed high lead concentrations in their blood of $12\mu\text{g/m}^3$, $17\mu\text{g/m}^3$ and $23\mu\text{g/m}^3$. Testing was one of the major emerging issues/demands during the implementation of the project.

Project Outcomes:

Description of the activity conducted:

Our project sought to reduce exposure of vulnerable people (residents of Owino Uhuru slums, and employees of the nearby Metal Refinery Company-Export Processing Zone) to lead. This was through education and awareness creation on the environmental and public health effects of lead, and exposure pathways with emphasis on lead extraction from used car batteries, developing and strengthening strategic public campaigns and lobbying forums especially through community action units for by-laws enforcement.

In its implementation, the project started with two common planning meetings where four community representatives who hold opinions and influential personalities participated. The meetings slotted tentative dates for the various activities and came up with various roles and responsibilities for different players in the project.

Later, we organized for a briefing meeting at the project site. A total of 29 residents in Owino Uhuru attended the meeting where they were briefed on the project, touching on the approaches to be employed, activities to be conducted, expected results and how the community should engage in the project.

Afterwards, we initiated development of ICT materials including 50 t-shirts, 3 banners, and 50 posters. Concurrently, we hired an expert to translate selected sections (principles, objectives, community roles and rights to health and safe environment) of the Environmental Management Coordination Act 1999 (EMCA).

Then, we organized for a sensitization workshop for 30 community members drawn from Owino Uhuru slum area. In the workshop, we invited the ministry of health through the public health officer for Changamwe District to lead a discussion on the health and environmental effects of lead.

Another discussion involving Environmental Management and Coordination Act was lead by the enforcement officer from National Environmental Management Authority (NEMA). The community demanded their involvement in the subsequent environmental impact audit exercises.

Afterwards, we trained 10 members of the community to become trainers i.e. TOTs. The TOTs were trained on EMCA (covering the Act, offences and penalties), participatory monitoring and evaluation in relation with lead poisoning, what the SAICM says on lead poisoning, and conduction of a non-violent advocacy campaign. The discussions were lead by informed people including from NEMA, Coast region coordinator-Kituo cha Sheria, and programs officer of Eco-Ethics International-Kenya.

We organized the community into an action unit –community based organization. Although the

process has been finalized, the registration certificate is not yet out. The CBOs name is “Owino Uhuru Residents Empowerment Group”; its goal is to empower the residents on environmental and economical issues. Its objectives are “to promote environmental awareness creation and advocacy in slum area” and “to promote economic empowerment of slum residents.”

Then we brought the management of the lead processing company together with the community, relevant government departments including the public health, and NEMA to a meeting dubbed “joint multi-stakeholders workshop”. This meeting created an avenue for the residents’ empowerment group to interact with the employers of the EPZ Company and chart out a common plan to reduce/eliminate lead exposure to the slum residents.

Lastly we initiated a non-violence advocacy campaign to seek redress, enforcement of environmental laws and policies. Officials of the newly formed Owino Uhuru Residents Empowerment Group organized visits to the town clerk, mayor, and provincial director of environment. A spring letter shall be employed in the subsequent approaches. The residents’ empowerment group has taken charge of the initiative and will be mobilizing resources (through corporate social responsibility, donor funding) to further its activities.

Impact on target groups:

Enhanced awareness on lead poisoning- the target groups’ awareness and knowledge on the dangers of lead on the environment and human health was enhanced. The community, especially workers of the EPZ Company, demand safety measures to minimize exposure to lead.

Organized community- the project enabled the community to form and register a community outfit that shall champion their interest in the area. Registration of this outfit and election of office bearers brought the much needed coordination by the community in championing their interests. Further, it brought about unity of purpose.

Increased networking and collaboration- there is increased networking and collaboration between the community and authorities. Because facilitators of trainings and workshops were strategically sought, the interaction during these events created linkages for regular interaction and collaboration between the facilitator’s institutions and the community.

Advanced the objectives of SAICM and WSSD- the resolutions made under SAICM and WSSD were incorporated in the training manuals. This enabled the communities to implement SAICM. By having community members implementing some SAICM approaches, the project advances the SAICM objectives.

Increased visibility- there is increased visibility of the community’s efforts to address lead poisoning menace in the area. The visits to the Town Clerk, the Mayor and the Provincial Director of Environment greatly enhanced their visibility. Inviting media houses to the workshops (and their subsequent highlights on the issue) helped report the problem to the authorities.

Improved access to and use of information materials among stakeholders- the training manuals, presentations, t-shirts, banners, and posters increased access to and use of information by the target group, the aggrieved and the general public.

Impact on target policies:

Presently, Kenya does not have a lead policy. However, issues touching on pollution from hazardous wastes and heavy metals are highlighted in the Environmental Management and Coordination Act, 1999 Laws of Kenya. The result of the activity on EMCA is that besides increased understanding of the Law (EMCA) by the target group, the enforcing agent pledged to strengthen its enforcement of the law.

Outreach to stakeholders:

The stakeholders engaged in this activity included the civil society organization, Municipal Council of Mombasa, the National Environmental Management Authority, and public health department. The potential for follow-up to advance the relationships with these stakeholders is enormous. To the target group, the project has not yet ended but the funding from IPEN is what has ended. It will come to an end when their problems are addressed and regular and sustainable interaction and collaboration among the stakeholders is necessary to realize this course.

Deliverables, outputs and/or products:

- Activity reports
- 50 t-shirts
- 50 posters
- Translated sections of EMCA
- 3 Banners
- Presentations
- Training manuals
- 10 TOTs
- Registered community initiative

Communication efforts:

We invited media houses to our workshops, meetings and trainings. The activity was reported several times in the local radio stations. We used ICT materials such as t-shirts, banners, posters, etc. to further the communication under this project.

SAICM National Focal Point:

Mr. James Ole Kiyiapi, Permanent Secretary,
Ministry of Environment and Natural Resources,
NHIF Building, Ngong Road, 12th Floor,
P.O. Box 30126
Nairobi
Kenya
Tel: (254 20) 273 0808
Fax: (254 20) 271 3654

NGO Recommendations for next steps:

Policy enforcement- there is need for authorities charged with responsibilities of enforcing policies to take up to those responsibilities. For example, all member states of Stockholm Convention, Kyoto Protocol etc should be compelled to localize the resolutions of these agreements. Where there are no policies on lead elimination/phase out, some policies should be developed. Urban planning is also another aspect. There should be strict laws on zoning of urban areas as either residential or industrial areas to avoid/minimize lead exposure to humans.

Awareness creation and education on the dangers of lead to the environment and human health should be intensified. Majority of the population around the world are still ignorant on lead poisoning. Access to and use of information and education materials should be improved.

Funding- in most development projects, very little amount of the investment goes to environmental betterment. While the polluters, due to corruption practices, may escape the principle of "polluter pays principle" there is required to be more funding to environmental advocacy institutions to check them. To have this realized, more funding will be required to be channeled in this sector.