



## **Beyond 2020: Why SAICM is important**

IPEN and Pesticide Action Network

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### **Introduction**

The Strategic Approach to International Chemicals Management (SAICM) addresses significant health and environmental harms caused by chemical exposure and makes a global political commitment to reform how chemicals are produced and used in order to minimize those harms. Heads of State at the 2002 World Summit on Sustainable Development in Johannesburg called for the development of SAICM. While the agreement is not legally binding, its basic texts represent a consensus of Environment Ministers, Health Ministers and other delegates from more than one hundred governments who attended the first International Conference on Chemicals Management (ICCM1), held in Dubai, February 2006.

SAICM is the only global forum where the full range of known and newly discovered health and environmental concerns associated with the chemical life-cycle can be identified, assessed and addressed. SAICM catalyzes and enables multi-stakeholder, multi-sectoral efforts to achieve chemical safety and to minimize or eliminate all sources of toxic exposure. It provides opportunities for information-exchange, knowledge-sharing, support and encouragement to government officials with national responsibilities for chemicals management. While SAICM can be useful to chemicals managers from countries at all levels of development, it is of particular importance to those from developing and transition countries and especially, least developed countries (LDCs).

### **SAICM addresses substances and other issues not covered by the chemicals conventions**

SAICM's broad scope covers many chemical exposures that lie outside the framework of current chemicals conventions. Key features of SAICM's importance include its high level of political endorsement and the many ways it links chemical safety to: sustainable development; financing; regulatory infrastructure; enforcement; coherency in coordination across ministries and stakeholders; and key chemical safety principles including right to know, substitution, polluter pays and others. SAICM is an important driver for action on chemical safety and its links to sustainable development. In the absence of SAICM, no international framework would exist for addressing the majority of the world's most pressing, chemical safety concerns.

### **Importance to developing and transition countries**

SAICM was adopted in 2006 to supersede and replace the Intergovernmental Forum on Chemical Safety (IFCS); to facilitate better coordination and the greater engagement of the organizations making up the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) in sound chemicals management initiatives; and to better promote multi-sectoral, multi-stakeholder engagement and partnerships. Since its adoption, SAICM has grown and matured and has proved to be a very useful international framework for promoting and advancing chemical safety objectives. While SAICM is important to all countries, it is of special value to the many low- and middle-income countries that still have very weak legal, regulatory, institutional and technical infrastructures and lack information and capacity for protecting their residents and environment from the harms associated with exposure to toxic chemicals and wastes. With the current, rapid expansion of chemical use and chemical production in the

developing world, there is a growing need for a stronger, more capable SAICM that receives proper political priority and adequate resources.

The Stockholm Convention on Persistent Organic Pollutants—which was adopted prior to SAICM—and the Minamata Convention on Mercury—which was adopted after SAICM—both address specific toxic pollutants that can travel long distances on air or water currents, and accumulate in the environment and in living organisms. These pollutants cause harm to human health and the environment at locations distant from their original source. This is the reason given to justify establishing global, legally-binding, chemicals-control treaties. This is also what gives governments of high income countries a self-interested reason to provide political, technical and financial support to the Conventions.

SAICM, on the other hand, has a much wider scope: it addresses virtually all sources of toxic chemical exposure not covered by the Stockholm, Minamata, Montreal Protocol or other treaties. In many cases, the harms to human health and/or the environment caused by these other sources can be just as serious as harms caused by persistent organic pollutants, ozone depleting substances, and/or mercury. These sources of toxic chemical exposure frequently disproportionately affect people and environments in low- and middle-income countries. In many cases, however, the governments of adversely affected countries lack information about these sources of toxic exposure and also often lack information about the kinds of relevant policies and programs that can be put in place to adequately address them.

Consider just two examples of the many toxic chemical sources that are not comprehensively addressed by any of the existing chemicals and wastes conventions<sup>1</sup>: lead poisoning and pesticide exposure (please see Annex 1).

According to WHO, lead poisoning is an “*entirely preventable disease*”.<sup>2</sup> As high-income countries have increasingly adopted programs and policies aimed at minimizing childhood lead exposure, this has now predominantly become a disease of low-income regions. An estimated 90% of all children with elevated blood-lead levels now live in low-income regions.<sup>3</sup> But since lead does not generally travel long distances in the environment, global chemicals conventions have not been of use in reducing and minimizing these exposures.

The relevant government agencies and industries in low-income countries have often lacked information about the extreme harms associated with childhood lead exposure and they have also lacked information about policies, programs and techniques that can be put in place to minimize or eliminate these harms. SAICM, however, has provided a venue for sharing information about these harms and for promoting international cooperation to address them. ICCM2 identified lead in paint as an emerging policy issue and stimulated the establishment of a global, multi-stakeholder partnership – the Global Alliance to Eliminate Lead Paint (GAELP) – which promotes lead paint elimination efforts at the country level, and which reports its progress to meetings of the ICCM.

The other example is health and environmental harms associated with pesticide exposure. Here too, the harm disproportionally impacts people and environments in low- and middle-income countries. In these countries, a much greater proportion of the populations engage in agriculture and/or live in rural areas where pesticides are intensively used than in high income countries. National pesticide control regulations in low- and middle-income countries are often completely lacking or weak, spotty, and inadequately

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<sup>1</sup> Basel, Rotterdam, Stockholm, and Minamata Conventions

<sup>2</sup> World Health Organization, Childhood Lead Poisoning, 2010 page 8:  
<http://www.who.int/ceh/publications/leadguidance.pdf>

<sup>3</sup> Ibid, page 32

monitored and enforced. Literacy is often lower; peasants, small farmers and landless agricultural workers often lack access to critical information and in many cases, highly hazardous pesticides that have been banned or severely restricted in high-income countries continue to be widely used.

Some pesticides that are persistent and/or bioaccumulative, and that transport long distances in the environment, have been banned by the Stockholm Convention. The Rotterdam Convention enables the provision of information to importers of some other hazardous pesticides and formulations. However, all other pesticides – many of them highly hazardous – are completely uncontrolled at the global level. According to WHO, available data are too limited to estimate the global health impacts of pesticides, however it is clear from the scientific literature that the effects of manufacturing, use, dispersal, and improper handling of pesticides are a significant global health problem. UNEP notes that the accumulated health costs of acute injury to small holder pesticide users in sub-Saharan Africa will be approximately USD\$97 billion by 2020.<sup>4</sup> Currently, there is no cost estimate of the global health and environmental impacts of pesticides.

In response to these and other concerns, ICCM4 recognized that highly hazardous pesticides (HHPs) cause adverse human health and environmental effects in many countries, particularly in low-income and middle-income countries, and it welcomed a strategy to address the problem developed by FAO, UNEP and WHO. ICCM4 additionally encouraged stakeholders to undertake concerted efforts to implement this strategy at the local, national, regional and international levels, with emphasis on promoting agroecologically-based alternatives and strengthening national regulatory capacity to conduct risk assessment and risk management.<sup>5</sup>

This issue is not addressed in a comprehensive way in any international cooperative agreement. SAICM is the only framework within which governments, intergovernmental agencies and relevant stakeholders can cooperate to address this critically important issue.

## **SAICM catalyzes and enables multi-stakeholder, multi-sectoral efforts to address sources of toxic exposure**

The Global Alliance to Eliminate Lead Paint and the decisions of ICCM4 on HHPs are just two examples of how SAICM stimulates and enables multi-stakeholder, multi-sectoral efforts to address sources of toxic exposure. ICCM decisions have also stimulated international activities aimed at addressing other toxic exposure sources, including: access to information about chemicals in products; toxic exposures related to the full lifecycle of electrical and electronic products; endocrine disrupting chemicals (EDCs); nanotechnology and nanomaterials; environmentally persistent pharmaceutical pollutants and others.

SAICM provides a framework that stimulates and enables government officials, public interest NGOs, community groups, UN agencies, the private sector, the health sector, trade unions, and other relevant actors to interact and collaborate with one another in support of sound chemicals management objectives. In the absence of the SAICM framework, such collaboration would often be difficult and would sometimes not even be feasible. In the context of SAICM, public interest NGOs and other stakeholders can align their own chemical safety initiatives with internationally approved policies and frameworks that their governments acknowledge and support.

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<sup>4</sup> UNEP (2013) Costs of Inaction on the Sound Management of Chemicals, Job Number: DTI/1551/GE

<sup>5</sup> [http://www.saicm.org/index.php?option=com\\_content&view=article&id=550&Itemid=767](http://www.saicm.org/index.php?option=com_content&view=article&id=550&Itemid=767)

If SAICM were to expire in 2020, these initiatives would come to an end and there would be little if any basis going forward to promote any other multi-stakeholder, multi-sectoral efforts to address sources of toxic exposure.

## **SAICM provides information and support to government officials who have responsibilities for chemicals management**

SAICM provides a framework for regional meetings that enable peer-to-peer discussions on issues related to sound chemicals management. SAICM helps national chemicals managers better understand the approaches that other countries use to control the many different chemical hazards they need to address. SAICM expands access to chemicals-related information, expertise, and policy guidance. SAICM helps elevate the standing of national chemicals management officials within their own ministries or agencies; and it helps stimulate inter-ministerial coordination and cooperation in support of chemical safety objectives.

### **> Outcomes for why SAICM is important**

1. The multi-stakeholder and multi-sectoral design and practice of SAICM is preserved Beyond 2020.
2. SAICM's broad scope is preserved because, in its absence, no participatory international framework would exist for addressing the majority of the world's most pressing chemical safety concerns.
3. Current issues of concern and emerging policy issues are carried forward Beyond 2020 and further addressed.
4. The Beyond 2020 process results in continued, measurable progress toward reforming how chemicals are produced and used in order to prevent harm to human health and the environment.

## Annex 1 Two examples of issues important to developing and transition countries that are not comprehensively addressed by any of the existing chemicals and wastes conventions

Lead and pesticide exposure are just two of many possible examples of sources of toxic exposure that the SAICM process seeks to address. In the absence of SAICM, no participatory international framework would exist for addressing the majority of the world's most pressing chemical safety concerns.

### Lead Poisoning

The World Health Organization (WHO) considers lead poisoning to be one of the top ten diseases whose health burden among children is due to modifiable environmental factors.<sup>6</sup> Lead poisoning accounts for 0.6% of the total global burden of disease.<sup>7</sup> Sixteen percent of all children, worldwide, are estimated to have lead in their blood at levels greater than 10 micrograms of lead per deciliter. Of all children with elevated blood-lead levels, an estimated 90% live in low-income regions.<sup>8</sup> Scientists and public health officials agree that there is no safe level of lead exposure for children.<sup>9</sup>

In addition to its enormous human costs, exposure to lead also puts a great economic burden on societies. A recent study that investigated the economic impact of childhood lead exposure on national economies in low- and middle-income countries estimated the total cumulative cost burden to be \$977 billion international dollars per year.<sup>10</sup> This amount is seven times greater than the combined total of all the development aid to low- and middle-income countries provided by major donor governments.<sup>11</sup> According to WHO, lead poisoning is an “*entirely preventable disease*”.<sup>12</sup>

### Pesticide Exposure

Global data and authoritative estimates of the harms to human health and the environment caused by pesticide exposure are much sparser than those associated with lead exposure. WHO scientists have indicated that the global burden of disease associated with chronic exposure to toxic pesticides is still unknown because it has not yet been possible to conduct estimates based on the different modes of action by which pesticides exert their toxic effects.<sup>13</sup> An older, but authoritative study estimated that there are possibly one million cases of serious unintentional pesticide poisonings each year, and an additional two million cases of people hospitalized for suicide attempts with pesticides. The author notes that this

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<sup>6</sup>Prüss-Üstün A, and C. Corvalán C (2006) World Health Organization, Preventing Disease Through Healthy Environments: Towards an estimate of the environmental burden of disease, 2006, page 12: [http://www.who.int/quantifying\\_ehimpacts/publications/preventingdisease.pdf](http://www.who.int/quantifying_ehimpacts/publications/preventingdisease.pdf)

<sup>7</sup> World Health Organization, Childhood Lead Poisoning, 2010 page 11: <http://www.who.int/ceh/publications/leadguidance.pdf>

<sup>8</sup> Ibid, page 32

<sup>9</sup> <https://www.cdc.gov/nceh/lead/>

<sup>10</sup>Attina TM, Trasande L (2013) Economic costs of childhood lead exposure in low- and middle-income countries, Environmental Health Perspectives 121: 1097-1102 <http://ehp.niehs.nih.gov/1206424/>

<sup>11</sup> In 2013, governments participating in the Development Assistance Committee (DAC) of the Organization of Economic Development and Cooperation (OECD) provided a total of USD\$134.8 billion in net official development assistance. See: OECD; Aid to developing countries rebounds in 2013 to reach an all-time high; <http://www.oecd.org/newsroom/aid-to-developing-countries-rebounds-in-2013-to-reach-an-all-time-high.htm>

<sup>12</sup>World Health Organization, Childhood Lead Poisoning, 2010 page 8: <http://www.who.int/ceh/publications/leadguidance.pdf>

<sup>13</sup>Prüss-Ustün A, Vickers C, Haefliger P, Bertollini R (2011) Knowns and unknowns on burden of disease due to chemicals: a systematic review; Environmental Health 10:9 <http://www.ehjournal.net/content/10/1/9>

necessarily reflects only a fraction of the real problem and estimates that there could be as many as 25 million agricultural workers in the developing world suffering some from occupational pesticide poisoning each year, though most incidents are not recorded and most patients do not seek medical attention.<sup>14</sup> A more recent surveillance exercise in Central America indicated a 98% rate of underreporting of pesticide poisonings, with a regional estimate of 400,000 poisonings per year, 76% of the incidents being work related.<sup>15</sup> And still more recently, an FAO survey in Burkina Faso (2010), under the auspices of the Rotterdam Convention, showed that 82% of farmers have experienced symptoms of pesticide poisoning.<sup>16</sup>

UNEP notes that the accumulated health costs of acute injury to small holder pesticide uses in sub-Saharan Africa will be approximately USD\$97 billion by 2020.<sup>17</sup> A conservative estimate of pesticide exposure impacts on small farmers in sub-Saharan Africa suggests that certain specific costs associated with pesticide poisoning—lost work days, outpatient medical treatment, and inpatient hospitalization—amounted in 2005 to USD\$4.4 billion. These estimates do not include other costs such as the human suffering or the costs associated with lost livelihoods.<sup>18</sup> Nor do data and authoritative estimates quantify the harms to ecosystems associated with pesticide exposures. Once all the harms associated with pesticide exposure become better studied and quantified, they are likely to be as great, or greater, than the harms associated with lead exposure.

As with lead, harms associated with pesticide exposure disproportionately impact low- and middle-income countries. A much greater proportion of the populations of these countries engage in agriculture and/or live in the rural areas where pesticides are intensively used compared to high income countries. National pesticide control regulations in low- and middle-income countries are often completely lacking or weak, spotty, and inadequately monitored and enforced, and the normal conditions of pesticide use often pose greater threats to farmer and ecosystem health.

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<sup>14</sup>Jeyaratnam, J (1990) Acute pesticide poisoning: A major global health problem, *World Health Stat* Q43:139-44

<sup>15</sup> Murray D, Wesseling C, Keifer M, Corriols M, Henao S (2002) Surveillance of pesticide-related illness in the developing world: putting the data to work. *International Journal of Occupational Environmental Health* 8(3):243-8.

<sup>16</sup><http://www.pic.int/Implementation/SeverelyHazardousPesticideFormulations/SHPFKit/PesticidePoisoning/tabid/3117/language/en-US/Default.aspx>

<sup>17</sup> UNEP (2013) *Costs of Inaction on the Sound Management of Chemicals*, Job Number: DTI/1551/GE

<sup>18</sup> UNEP (2012) *Global Chemicals Outlook/ Towards Sound Management of Chemicals: Synthesis Report for Decision-Makers*; P 29