



a toxics-free future

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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: Monitoring on Advertisements and Distribution of Restricted Pesticides in Indonesia

NGO: Gita Pertiwi

Country: Indonesia

Date: February 2011

Elements of SAICM Covered:

Promote substitution for highly toxic pesticides including effective non-chemical alternatives (27); Provide training in alternative and ecological agricultural practices, including non-chemical alternatives (51); Encourage industry to extend product stewardship and to voluntarily withdraw highly toxic pesticides which are hazardous and cannot be used safely under prevalent conditions (30); Promote integrated pest and integrated vector management (29); Establish programmes for monitoring chemicals and pesticides to assess exposure (66)

Description of:

The highly hazardous pesticide(s) registered/sold and/or in use in your country:

In Indonesia, the circulation and the application of pesticides increase from year to year. It is also in the same line with the increasing amount of pesticide allowed by the Commission on Pesticides Department of Agriculture. In 2010, there are 2048 brands of pesticides officially traded in all parts of Indonesia. Each year, more than 100 types of new brands are allowed to be traded on the local market. Similarly, the commission allowed trading of restricted pesticides, especially *paraquat* and *aluminium phosphate*, to increase. In Indonesia, there are 5 types of restricted pesticides allowed for trading in Indonesia with 86 brands (in 2010). *Paraquat* is one type of restricted pesticide and is the most heavily traded in Indonesia. Even in trade ethics, this pesticide tends to ignore the safety of the user. The study conducted by Gita Pertiwi in 2006 showed that 96.7% of stores that sell these pesticides do not sell the Personal Protective Equipment (PPE) completely. In the applications in the field, many farmers use these pesticides freely. According to the regulations, only farmers who receive certificates from the Department of Agriculture are allowed to use pesticides of this type.

This condition is found in a study of limited circulation and advertising of pesticides in agricultural areas and palm plantation at Serdang Bedagai (North Sumatra province) and Wonosobo (Central Java province). *Paraquat* pesticide is widely circulated and used by farmers intensively in those plantations (oil palm, rubber and cocoa) and also in food crops (rice, secondary crops and vegetables). In Wonosobo, which is a plateau with the main crops of cabbages, potatoes and tobaccos, the farmers use various pesticides heavily (insecticides, fungicides and herbicides). Commonly used herbicides with *paraquat dichloride* as its main material are Gramoxone 276 SL, Paraxone 276 L and Bravoxone 276 S. The farmers usually use them at the time of land preparation and at harvest. The stores selling pesticides and the advertising are often found there, both in rural, sub-district and district areas.

Serdang Bedagai district (North Sumatra Province) is known as the center of the plantation. There are various state-owned plantations (PTP II, III and IV), as many as 11 companies, 19 foreign private/national private companies, and 31.729 public companies. The products of the cultivation are oil palm (53.178 ha), rubber (36.604 ha), cocoa (8.435 ha) and coconut (2.824 ha). The use of pesticides to eradicate the grass on the plantations is routinely conducted. Many brands of pesticides used contain both active *paraquat dichloride* and active glyphosate. The pesticides' store and advertising are often found in the trees on either side of the road around the settlement and in the plantation area.

Health and environmental effects of the pesticides:

Most of the farmers who use pesticide get the mild poisoning symptoms such as dizziness and headaches after spraying. At the two locations of study, there were found two cases of poisoning due to the restricted use of pesticides and one case of illegal pesticide *endosulfan* (in Serdang Bedagai). The pesticide Gramoxone 276 SL, which contains active *paraquat dichloride*, appeared in two cases, while the other one, Akodan 35 EC, contains active *endosulfan* 350 g/l and is mixed with Curater 3 GR, which contains active Carbofuran 3%. Both of them are insecticides.

All of the cases occurred due to the use of direct or indirect contact, without wearing personal protective equipment. The spray tool used was a hand sprayer. The length of the reaction time after the use was 10 minutes - 2 hours with symptoms of dizziness, headache, blurred vision, sweating, staggering, trembling, vomiting, and shortness of breath. Symptoms appear from the mouth, skin, eyes and respiratory tract. Treatment is by giving a drink of coconut water, milk and coffee, while also one man was taken to the hospital (hospitalization) for 2 days.

Information on pesticide levels in the environment, in food, or in people:

In those two districts, the location of the pesticide sales (stores) are more located in the village, in an urban environment, close to food stores and some are close to water sources. This shows that sales tend to be closer to the consumer directly without considering the negative impact that can be caused. Moreover, there are many traders also repacking products so the pesticides

are affordable for consumers whose economy is below the level. There are many traders who do not heed the ethics of the pesticide sales, so that the pesticide that has been banned is still sold freely (endosulfan). The reason is because they do not know that endosulfan has been banned according to the Agriculture Ministerial policy number 7/Permentan/SR.140/2/2007, nor about the terms and registration of pesticides.

The type of pesticide *paraquat*, from various brands and companies, dominates the trading market in 2 areas. Even the farmers consider that this pesticide can be the potential one to control grasses, although this pesticide is also considered highly hazardous. Although it belongs to the limited category, both the sale and the use of this pesticide can be found in many places. The liabilities of the shops that sell personal protective equipment (PPE) were broken because there are no buyers.

Most of the traders do not provide security advice and information about use of pesticides to the farmers (as many as 40% of the traders interviewed) and rarely read the label on the packaging. The advice to the farmer is actually very important, especially about the dangers of pesticides on health and the environment. Moreover, there are quite a lot of traders that get pesticide training from local agricultural companies and agencies.

The farmers also do not always read the label/packaging of pesticides when purchased or before using it. One reason is because the writing is very small. In addition, the pesticides often come with a label with the language that is difficult to understand. Many farmers buy the repackaged pesticides which are provided with very little information.

The high use of the pesticides is also limited due to the onslaught of advertisement that spread by the company with the traders. Number of advertisements along the main road show the vigorous campaigns. This is not including the leaflets and the lure of prizes that are often provided by vendors, and simplify the number of the purchases according to the ability of their money (with repacking).

Advertisement's packs often give false and misleading advice, such as the images of using the pesticides without full protective clothing (Gramoxone 276 SL). There is also information that misleads the consumers, such as: "the active ingredient is more efficient by using the small dose (297 Noxone SL)", "safe for the crop cultivation" and "not leave residue on the crop (Sidaxone 276 SL)."

Existing pesticide legislation in your country:

The pesticide policy in Indonesia is based on the regulations made by the Ministry of Agriculture. This policy more just sets the permission for the production and the utilization. The circulation and the distribution problems belong to the affairs of another ministry, which is the Ministry of Trade. If any violations in the field were found, it would be difficult to find the solution, because there is a decentralization of government affairs to the city and county. The head of the regions often have different policies, since they do not give permission to the production and circulation, so if there is violation, it will be overlooked.

The ratification of a convention also encourages improvements in the domestic policy. Among others, the ratification of the Stockholm Convention encourages a policy of banning some types of pesticides that belong to the categories of POPs.

To date there are 38 pesticides that are banned in Indonesia. The ban is not consistent with existing oversight in the field. The supervision (according to the Ministry of Agriculture regulation number 42 of 2007) is an examination at the time of production, circulation, storage and usage to ensure the quality and effectiveness, and that it does not interfere with human health and safety and the environmental sustainability. The supervision is conducted by the Ministry of Agriculture staff from central to district. It is still limited to the examination, and has not been followed up into the next action.

In a study in Serdang Badagai district, one type of endosulfan pesticide (Akodan 35 EC, which is produced by Sudara Tani Agro Lestari Company) was still found. The endosulfan pesticide has been banned since 2007, but is still on the list of pesticides permitted to be traded, issued by the Commission on Pesticides in 2008. These findings have also been sent to the Commission on Pesticides and immediately followed up with further supervision at Serdang Badagai area.

One aspect of concern via regulations is that it is easy enough to grant the permission of new pesticides. Every year there are more than 100 new pesticide brands in Indonesia. See the list below.

Number	PESTICIDE	2010	2009	2008
A	Number of Trademarks Plantation and Agricultural Pesticides	2048	1832	1702
B	Number of Pesticides Companies	270	256	209
C	Total Retristed Pesticides; Consists of:	86	66	33
	1. Aluminum phosphide	13	9	7
	2. Paraquat diklora	56	42	17
	3. Zinc phosphide	1	1	1
	4. Magnesium phosphide	4	4	
	5. Methyl bromide	10	10	6
	6. Diuron	1	0	1
	7. Mefsulfuron methyl	1		
	8. Methyldathion			1

Number 6-8 belong to the limited pesticides.

Use of IPM and ecological agriculture:

In this study, there is no store that promotes the principles of IPM to the farmers, especially in that they would have to do the field observation and analysis. In addition, there is no advertising of the pesticides that recommended for IPM programs. Advertisements like these are common when Indonesia still has an IPM program collaborated with the FAO. These advertisements appear as the last principle of IPM, which is to use pesticides wisely.

Conditions of work:

Many people still do not heed the safety advice in treating the pesticides, in the distribution, the circulation and the use. From various shops there were commonly found pesticides sold with the food, pharmaceuticals, clothing, building materials and balance. The separate sales with visible bulkhead are 32.5%, and there are 67.5% separate sales with no bulkhead. The stores that have the danger mark are 20%, while the 80% stores do not have it. The stores that provide the small sized products are 92.5%, while 7.5% of them do not provide the small sized products.

The merchants that do the repackaging exist in the three stores (7.5%), and they use plastic bags and bottles. The limited repackaged pesticides brands, among others, are Phospit 80 WP, 80 Rackus PL, and Topzone 276 SL. The repackaging is done by the traders because it tends to be more practical so they can serve consumers according to their money. The repackaging is done only with open arms and often without the use of respiratory masks. Most of the stores' waiters do not use the security equipment.

There are 62% of traders/shops that do not give the advice on the management of the used containers to consumers because they do not know how to manage the used containers. It indicates that most of the traders do not have the knowledge about the dangers of used containers of pesticides in the environment.

The observations regarding the area surrounding the store showed that there are many children playing in the pile of the pesticides in the store. There are pesticides stores that are also used as the owners' residence. Additionally, the structuring of the products in the stores are not in the right order and there was no hand washing.

Project Outcomes:

Description of the activity conducted to reduce the threat posed by highly hazardous pesticides and advance this SAICM aim.

1. Team/Organisational Building: 1) preparing Gita Pertiwi team and farmer organizations (Farmer federation in Wonosobo) and Estate worker federation of oil palm in Serdang Badagai) 2) designing of monitoring plan, training module and identifying the monitoring area.
2. Pesticide Workshop: 1) facilitating the discussion of the distribution of limited pesticides circulation, health danger, advertisement, and 2) discussing the method of monitoring implemented twice in Wonosobo and Serdang Badagai
3. Data collection by farmers
4. Data collection assistance
5. Data analysis and reporting
6. Publication and seminar
7. Facilitating an open dialogue with government agencies
8. Establishing Pesticides complaint post

Impact on target groups:

- Farmers and workers recognize and understand the rights and the obligations of the manufacturers
- Community is better protected from the hazards and risks of restricted pesticides being distributed.

Deliverables, outputs and/or products:

ISIP report, Project module

NGO Recommendations for next steps:

1. For government

- a. Conducting more stringent supervision of the circulation of banned pesticides that are still found in the field. Also, the role of Pesticide Supervisor from the national to local level as well as the role of law enforcement need to be improved.
- b. Encouraging the inclusion of the active ingredient *paraquat dichloride* to be part of the banned pesticides, because of its hazardous impact on health, environment, and social cultural conditions, and many violations in the field, both in the terms of circulation and use.
- c. Dissemination of the information about the dangers of limited pesticides to the traders and the farmers, and an increase of the training capacity, especially to include the dangers to the human health and the environment.

2. For traders

- a. Understanding the regulations of the trade and circulation of the limited pesticides.