1. Background

Pesticide Action Network (PAN) is a network of over 600 participating nongovernmental organizations, institutions and individuals in over 90 countries working to replace the use of hazardous pesticides with ecologically sound alternatives. Its projects and campaigns are coordinated by five autonomous Regional Centers.

This PAN International position paper came out from the PAN working group on Community Monitoring of Pesticide Impacts and was collectively developed by the PAN regional centres and their partners. This paper provides PAN's views and analysis on community monitoring, proposes solution and presents the network's commitment to resolve the issue. Other position papers related to the five strategic objectives of PAN as well as supporting technical papers are also available.

2. The problem

The use of pesticides carries severe risks to human health, the environment, biodiversity, food security and income of small-scale farmers and agricultural workers. These problems are particularly severe in developing countries.

Indeed, conditions in most developing countries make it practically impossible to guarantee appropriate use. The availability of highly toxic chemicals, the lack of information about their hazards, government policies and aggressive marketing by the industry, as well as poverty, illiteracy, and lack of health facilities in rural areas ensure that pesticides are a major threat to food security, health and the environment. In these conditions, farmers use what is available rather than what is appropriate.

Most of the pesticides used in developing countries are highly toxic chemicals. For example, 73% of pesticide imports into Thailand are World Health Organization categories Ia (extremely toxic) and Ib (highly toxic). In Cambodia, 84% of pesticides used are moderately to extremely hazardous to human health. In developed countries, most of these chemicals either are banned or can only be used by licensed specialists who must follow stringent precautions. Between 1992 and 1994, more than 344 million pounds of hazardous pesticides were exported from the US -at least 25 million pounds of which were forbidden for use in the country- the majority of which went to developing world[i].

There are several specific conditions and practices common in developing countries that exacerbate this problem, including:

1. Excessive use or misuse of hazardous substances:
- Lack of caution when transporting or handling chemical substances
- Re-use of pesticide containers for food or water storage

- Use of cheap, often more dangerous substances, self-made pesticide cocktails and faulty equipment
- Inappropriate use of pesticides (e.g. to catch fish)

2. Use of acutely toxic substances without adequate safety measures:
- Inability to afford protective clothing or equipment
- Virtual impossibility of wearing protective clothing in hot and humid climates
- Lack of clean water for washing
- Mixing of hazardous chemicals by hand

3. Inability to read complex label instructions due to:
- High rates of illiteracy
- Use of labels in foreign languages rather than the common local languages

These practices stem from the lack of awareness of the risks related to pesticide use among pesticides end users and from poverty in general. Communities are not aware of the risks of pesticides, nor do they have basic knowledge about appropriate application rates and practices. Even if they had such knowledge, they do not have the necessary power and means to compensate for their governments' lack of pesticide management.

At the policy level, the lack of certainty about and evidence of pesticide hazards are considered *lack of hazards*. For the policy makers, it means they find no necessity to include pesticide management among national priorities. Thus, policies meant to deal with pesticides issues are weak. There are neither programs nor infrastructure to track and evaluate pesticides and their effects. Even where such infrastructure does exist (e.g. the Poison Centre), the only pesticide effects that are considered are acute ones, and many/most cases of acute poisoning in remote rural areas are not well documented and are often not regarded as pesticide poisoning due to the nature of symptoms which are similar to other common ailments. Doctors and people in the field of medicine also lack the knowledge in diagnosing pesticide related poisoning cases. Thus, chronic effects of pesticide use remain undocumented and pose a great risk to developing countries. So, aside from the acute poisoning cases reported in newspapers, the real impacts of pesticides in these countries are not really known to the policy makers in charge of chemical safety.

The lack of knowledge results in a very weak framework for pesticides management in developing countries that can be characterised by the:

- Lack of appropriate pesticide control legislation and advanced pesticides approval/registration procedure
- Lack of legislation on working conditions and monitoring of pollutants (e.g. in food, drinking water and working environment)
- Easy access to acutely toxic substances (e.g. that can be used to commit suicide)
- Lack of a national poison surveillance system and information/control centre

- Lack of capacity (human and financial resources) to advise on and enforce national laws, approved codes of conduct
- Lack of information and awareness raising aimed at the small enterprise level (e.g. farms) on rational storage, handling, use of pesticides and disposal of waste pesticides and empty containers
- Absence of medical facilities
- Poor information provisions leading to a lack of knowledge about risks involved
- Inadequate management and storage of obsolete stocks and used packaging material and lack of facilities for proper waste management
- Continued pursuit of agricultural policies that aim to alleviate poverty and malnutrition but in fact exacerbate these problems.

3. The Solution

We believe that ***community monitoring of pesticide impacts*** is a promising tool for implementing these solutions. Monitoring and recording the impacts of pesticides on health, the environment, and the local economy help raise awareness of the pesticide hazards among end users and decision makers. Community monitoring can also help communities get basic knowledge on pesticide effects and help them have the full use of their right to know about pesticides issues. It effectively addresses the knowledge gaps and uncertainties discussed above through the use of scientific and empirical methods, simple self-monitoring tools, and, when appropriate, the help of experts from academia and public interest NGOs. Based on a participatory research approach, it enables communities to record immediate adverse health effects after spraying, and to record the more obvious effects on the environment and biodiversity such as death of worms, bees, fish, cattle, etc. Thus, community monitoring provides a personal relevance that is the best motivator to drive change.

Community based monitoring is not only a strong and needed tool for those countries where the implementation of regulations is almost entirely missing. It is also applicable to so called well regulated countries. In the European Union, for example, there is an obligation to regularly monitor the distribution and use of pesticides and to publish the results annually. But as can be seen from EU reports, there is still illegal trade in pesticides and illegal pesticide use. Joint initiatives from civil society groups are therefore needed to support the implementation of regulations. In addition, there is a need for a more transparent reporting in industrialised countries. As there is no "name and shame" system implemented generally in the industrialised countries, those violating pesticide laws do not expect fines or penalties that could prevent them from breaking the law.

The benefits of community monitoring in pesticides management encompass among others:

Better knowledge of pesticide effects at the community level: in addition to cases of acute poisoning, pesticides have several other health impacts on communities. The quantity of pesticides used in rural communities is not known. Farmers do not use protective equipment; pesticides are stored inside of habitations and among food reserves, where they can contaminate food. Community monitoring provides more knowledge about the quality of pesticides used, the conditions of their use and disposal, and the socioeconomic aspects that

influence pesticide distribution. This information can then be used to assess the level of implementation of governments' responsibilities and duties in the community; the level of compliance of pesticides regulations in the community and how to intervene to improve the situation.

Raising awareness of pesticides effects in communities among policy makers. As discussed above, pesticides cause many problems in communities. But in general, these problems are under-documented and the authorities in charge of public health and pesticides management are not aware of this and therefore do not see the necessity to address these issues. They focus their intervention in agriculture development, poverty alleviation, improvement of health services supply, etc. Community monitoring, by documenting pesticide effects, informs authorities on the relation between poverty, health, rural incomes and assets on one hand and pesticides issues on the other; and proves to them the necessity of addressing the pesticide issue in the promotion of sustainable development

Raising awareness of pesticides end users and increasing the level of knowledge about pesticides at the community level: The risky behaviour of end users vis-à-vis pesticides is due to lack of awareness of pesticides hazards. Thus, it is important to make them aware of pesticide hazards. Through monitoring, communities gain a better understanding of environmental and pollution issues, thereby increasing their knowledge and skills to help reduce the contamination of the land, water, air and all living things. Through monitoring, communities can be empowered to take action to protect themselves and their families from chemical contamination.

Empowering communities*:* The right to monitor pollution and chemical residues is critical. Community environmental monitoring gives groups and individuals an effective way of demonstrating their concern about the degradation of the environment and human health caused by agricultural practices including pesticide use, industrial pollution, and the emissions and waste products from a particular industry.

Contribution to the implementation of the international conventions (Stockholm, Rotterdam and Basel) and the FAO Code on the Distribution ad Use of Pesticides. All these conventions call for documenting pesticides effects, raising awareness of pesticides issues, building capacities of communities and vulnerable groups about the issues of pesticides to enable them to fully participate in the implementation of these conventions. Community monitoring can play a great role particularly in the implementation of the Rotterdam (PIC) Convention. Article 12.9 of the FAO Code explicitly encourages NGOs (and by extension also their local partners and other interested parties to monitor activities related to the implementation of the Code and report these to the Director-General of FAO.

Promotion of the use of the principle of precaution in pesticide management. By employing the precautionary principle, empowered communities and their support groups may use the results of the monitoring to proceed to take action to prevent further exposure of the workers to the incriminated pesticide. This was the case in Malaysia when plantation workers and their support groups used their community monitoring results to launch a *ban paraquat* campaign that is working in full force to ensure that the ban comes in to full force in Malaysia, in November 2007. This was also the case in Kasargod District, Kerala (India) where communities clearly identified *endosulfan* as the pesticide causing health and environmental problems after documenting, monitoring and investigating using a CPAM approach with the help of PANAP and

other groups. A ban on aerial spraying of endosulfan in the state was eventually obtained through a court order. The court in this case invoked the “precautionary principle” in ruling in favour of the affected communities.

Promotion of pesticide alternatives and sustainable agriculture: community monitoring of pesticide effects helps to raise awareness of pesticide hazards among end users and encourages communities to seek alternatives of pest controls and sustainable agriculture methods like IPM, and organic agriculture.

4. The Commitment

For all these reasons, we call for the decision makers in developing countries to promote community monitoring of pesticides effects as a tool for pesticide management. We at PAN are committed to contribute in the monitoring of pesticides effects in the communities and share our experiences and skills.

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[i] http://www.communityipm.org/toxictrail/issue1-Industry.htm