

# REDUCING PESTICIDE RISKS THROUGH BUILDING CAPACITY OF AFRICAN REGULATORS



## PROBLEM

Although developing countries use fewer pesticides than developed countries, most pesticide poisonings occur in developing countries – *over 25 million agricultural workers in developing countries suffer from an acute pesticide poisoning incident each year*. Research has shown that in some developing countries, pesticide poisoning causes more deaths than infectious diseases. Regulating pesticide use is a key strategy to reducing health and environmental risks. African countries, however, face a number of difficulties in regulating pesticides (Table 1). These include:

- Pressures to register pesticides may be high because of food insecurity in the region and the perception that chemicals are essential for adequate agricultural production;
- Many countries have no or insufficient pesticide regulations to control the use of and exposure to pesticides, especially for workers and other vulnerable populations;
- Countries may lack the human resource capacity to register and regulate pesticides through adequate enforcement;
- Countries may lack technical expertise to evaluate technical data submitted by the pesticide industry for
- Registering a pesticide (typically imported from developed countries);
- Generally, pesticide use in Africa is high with poor protection. Workers (including women, children, malnourished and immune deficient sectors of the population) and farmers do not have access to protective equipment, exposure is high, climatic conditions potentially increase exposure risks, and vulnerable populations are exposed.

Some examples of health risks associated with pesticide exposures are:

### Short-term (Acute) Effects

Damage to nerves (e.g. headaches, tremors, vomiting, intoxications)

Damage to lungs

Damage to skin

Damage to eyes

### Long-term (Chronic) Effects

Various cancers

Endocrine disruption

Immune system effects

Neurological diseases

Reproductive effects

## What efforts have been attempted by WAHSA to assist with capacity building of regulators?

In October 2006 WAHSA ran the first workshop with regulators both within and outside of the SADC region. A unique feature of this workshop was the opportunity for regulators to visit a research site, watch first hand workers spraying pesticides, as well as to engage in discussions with these workers. This highlighted the need for regulators to maintain grassroots contact with end users in their own countries to better understand the implications of pesticide use.

In November 2006 WAHSA, through the University of Cape Town (UCT), established the African Pesticide Regulators electronic list server in response to regulators' request for the need to have access to up-to-date information on pesticide research and pesticide regulations internationally.

In June 2007 the Food and Agricultural Organization of the United Nations (FAO) ran the second regulators workshop where WAHSA actively participated.

Funding for the registrars' electronic list server was obtained from the Swedish Chemical Agency (KemI) and SIDA for January to December 2008.



Current pesticide application practices put workers & vulnerable populations at risk

# WAHSA POLICY BRIEFS

### **Table 1. Pesticide Use in the SADC Region: Gaps and Challenges**

a multitude of high exposures leading to high levels of acute and chronic morbidity

inadequate surveillance systems both for hazards and for health impacts

weak or missing legislative and regulatory frameworks with inadequate enforcement

significant environmental impacts from inadequate storage and disposal of hazardous chemicals

low levels of awareness of hazards amongst workers and communities, with inadequate provisions for controls

importation and exportation of illegal or banned pesticides within the region

lack of technical support, including laboratory services and resources for appropriate research to support control measures

weak understanding of the role of risk perceptions and behavioural factors in pesticide-related morbidity

interactions between generally high levels of non-occupational population morbidity and occupational pesticide hazards

toxicological and environmental risk assessment data on pesticide used for standards setting inappropriate for local conditions

insufficient information, data & technical capacity to conduct risk assessments

inability to conduct hazard surveillance & impact monitoring to inform policy

Inadequate risk awareness amongst regulators, workers and the general population

Inability of workers to read and understand current pesticide risk information found on pesticide labels

policy context involving multiple factors, including globalization, and increasing use of hazardous chemicals by those with the least capacity to protect themselves

re-use for water & food storage of pesticide containers with toxic residues

improper disposal of containers by both large and small-scale farmers leading to human and environmental contamination

Lack of technical training to evaluate the environmental and toxicological risk assessment data submitted by industry for registering a pesticide

Dependency on industry for technical support, training and other inputs

Insufficient laboratory capacity to conduct pesticide related analyses

Stockpiling of obsolete pesticides

Lack of capacity to dispose of pesticide containers and obsolete pesticides

The importance of trade and phytosanitary requirements for export produce may unbalance national capacity to monitor residue exposures and plan sustainable control strategies.

## Future plans for building regulators capacity

Subject to funding, UCT and the FAO are currently planning to:

- Run a third regulators' workshop and information exchange before the end of 2008
- Develop a post-graduate distance course on Pesticides Management for regulators, technical advisors, inspectors, enforcement officers, and others involved in pesticide management by the end of 2009.

### What role can stakeholders play to reduce pesticide risks?

- Ensure that pesticide management is referred to in all relevant strategic policy documents
- Leverage funds for developing effective and efficient pesticide policies and regulations
- Provide funds to build the capacity of regulators and technical staff through further training in pesticide management and retention of skilled personnel
- Leverage funds for departments tasked with regulating pesticides to support more staff for regulation and inspection of pesticides and enforcement of regulations
- Incorporate pest management into poverty alleviation strategies
- Provide funds for inspector and customs officials training to promote better enforcement of regulations and reduce the current trend of illegal pesticides crossing borders.
- Further pesticide health and environmental risks as a priority public health and environmental issue requiring political support.
- Work intersectorally with relevant agencies and departments: health, labour, environment, agriculture, water, and others, to ensure a coordinated policy framework and harmonisation of different sectoral activities.
- Provide input to government negotiations on international agreements and treaties to ensure these do not exacerbate pesticide related problems
- Support efforts to build national laboratory capacity for monitoring and research related to pesticides.

### What role can regulators play to reduce pesticide risks?

- Ensure pesticide management is highlighted in relevant national policy documents.
- Promote risk communication mechanisms for public awareness on pesticide risks.
- Facilitate discussions between all relevant stakeholders (including workers) on how to improve pesticide management within the country.
- Network and work with other SADC regulators to improve on current and promote complementary regulatory systems and prevent the stock piling of obsolete pesticides.
- Network with regulators in other Southern governments outside of the region.
- Put in place regulatory requirements that indirectly builds the capacity for pesticide laboratory monitoring
- Require toxicological and environmental risk assessment data that is relevant for their country context.
- Promote less toxic pest management strategies.



WAHSA provided regulators with the opportunity to ask pesticide applicators questions.



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