

Capacity building in pesticide registration and pesticide management for emerging and developing countries

Pesticides are an important input in agriculture and a tool for disease vector control. A pesticide needs to be effective for its intended purposes and not pose an unacceptable risk to human or animal health or the environment under the conditions of use in a country or region. Regional or national pesticide registration authorities are the “gatekeepers” which have to ensure that pesticides authorized by them are of good quality and pose no undue risks.

Alterra Wageningen-UR

The Environmental Risk Assessment team of Alterra Wageningen-UR can support pesticide registration authorities in developing countries to develop or strengthen scientifically sound and locally relevant pesticide registration procedures. To provide high-level support in pesticide registration Alterra collaborates with the Dutch Board for the Registration of Pesticides and Biocides, other Universities (in the Netherlands and the rest of the world) and specialized consultancy firms. Alterra Wageningen-UR can support countries to:

- *Build capacity for environmental and human health risk assessment of pesticides*
- *Develop tools which can help to conduct risk assessments.*
- *Streamline pesticide registration procedures*
- *Set up monitoring systems of pesticide impact*

Background: pesticides in developing countries

Developing countries are in the process of intensifying their agriculture to meet national demands for food and to increase agricultural exports. New crops have begun to replace traditional crops either as potential export commodities or as substitutes for imports. Such intensification could lead to increased reliance on external inputs and exploitation of natural resources. If not managed well, the consequences (e.g. in the case of pesticide misuse) could be environmental deterioration, reductions in agricultural productivity, adverse impacts on the health of farmers, consumers and the surrounding community and poor sustainability of agricultural production in general.

Many of the intensive practices now employed rely heavily on the input of hazardous pesticides for pest, disease and weed control. Uptake of alternative management strategies that have been developed is limited. Fully operational systems for pesticide regulation and control and support to farmers on best practices in sustainable pest management and pesticide use are often lacking. Banned, unregistered or counterfeit

products are often available and overuse, misuse, mishandling and mismanagement of pesticides are all too common. Pesticide risk reduction through proper registration of less hazardous pesticides and the promotion of non-chemical pest/disease control measures is crucial for a more sustainable pest management approach.

Also, for building a competitive and at the same time sustainable agricultural sector in developing countries, possible adverse effects of pesticide use have to be minimized. Export agriculture in particular, depends on maintaining strict standards (and a good image) concerning pesticide use, food safety, food quality and sustainability of production. Consumers and civil society organisations of importing countries are concerned about residues of pesticides on agricultural products in supermarkets and more and more attention is being paid to the sustainability of production and traceability of agricultural products. Big retailers (e.g. Ahold in the Netherlands and Tesco in the UK) set strict standards concerning sustainability of production and actively promote development of cropping systems with limited pesticide use.

Experience has shown that implementing a comprehensive pesticide evaluation and registration systems is complicated and expensive. For example, even countries belonging to the Organisation for Economic Co-operation and Development (OECD) share their work and also in the EU pesticide registration is shared among Member States.

For developing countries it could be more resource efficient to move towards regionally harmonized systems for pesticide registration than to register pesticides in isolation. This would also support regional moves to reduce risks from pesticides and promote more sustainable crop protection methods. These experiences can be seen in West Africa (CILSS Countries), Southern Africa (SADC), the Andean Region (CAN), the Caribbean (CARICOM), South East Asia (ASEAN). Initial steps have been taken by the East African Community (EAC) as well.

In progress: The Pesticide Management Initiative for the East African Region

The Pesticide Risk Reduction Programme Ethiopia (PRRP-Ethiopia 2010-14, <http://prrp-ethiopia.org/>), in which the Ethiopian Ministry of Agriculture, Alterra Wageningen-UR and the FAO collaborate on the improvement of pesticide registration, post registration and pesticide management in Ethiopia, was the positive stimulus for FAO and Alterra Wageningen UR to initiate a Pesticide Management Initiative for East Africa.

An important first step in the elaboration of a regional Pesticide Management Initiative was the workshop in Rwanda in September 2013 supported by government of the Netherlands and the FAO.

Regional stakeholders of Rwanda, Tanzania, Kenya, Burundi and Uganda and representatives of FAO, EAC (East African Community), Dutch embassies, Dutch ministries, the Swedish Chemicals Agency (KEMI) and Wageningen University and Research Centre came together to identify and prioritize specific pesticide management issues in their countries and draft an action plan (see <http://www.wageningenur.nl/nl/show/More-food-less-risk-Workshop-on-Pesticides-Management-for-East-Africa.htm>).

The following issues and corresponding activities were prioritized as important/urgent in the workshop:

- *Capacity building in registration (staff and equipment) and enforcement of legislation*
- *Awareness on use and risks of pesticides (farmers, (health)workers, CSO's etc.)*
- *Laboratory infrastructure, training and access to, regional, services*
- *Monitoring of health (incl. human poisoning) and environment*
- *Capacity building on safe use, handling and disposal, storage of pesticides*
- *Prevention and disposal of obsolete pesticides*

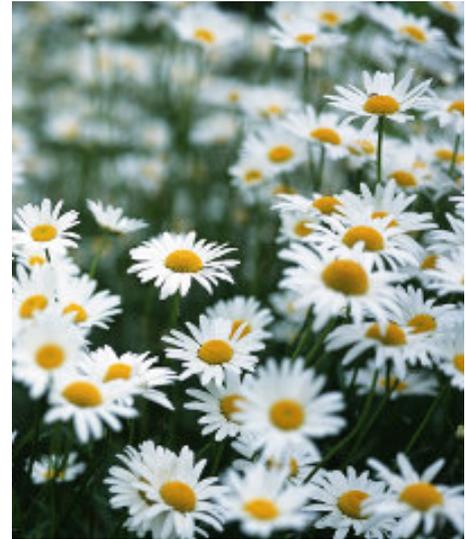
At the moment steps are being taken in engaging major donors and to further develop the programme.

For more information on capacity building in pesticide registration and pesticide management please contact:

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