PRRP – Ethiopia Newsletter

Pesticide Risk Reduction Programme - Ethiopia

December, 2012 / newsletter # 4

Welcome to PRRP - Ethiopia

We arriving the end of the year we would like to share with you the latest news and some not mentioned activities of 2012.

Gizachew Assefa

We are very sorry to inform you about the unexpected death of our well respected colleague Gizachew Assefa.

The extremely sad news of Gizachew's death is something we can still hardly belief. It is impossible to put into words how we feel. Gizachew was more than just a friend and colleague. He was always so kind and considerate to us.

Within PRRP Gizachew was highly committed to the development of a scientific evaluation system for the registration of pesticides. With his help big steps were made. His passing will leave a considerable gap in our work.

Reducing risks posed by pesticide use to human health and environment in Ethiopia.

As part of the technical assistance provided by FAO, the Pesticide Stock Management System (PSMS), already in use in the country for obsolete pesticide management purpose, is being upgraded to optimize the pesticide registration process. In order to address the issue of pesticide quality, FAO has also supported the training of national pesticide analysts at Walloon Agricultural Research Centre (CRA-W), Belgium on quality testing of technical and formulated pesticides. Existing laboratories have been upgraded with high performance chromatography instruments, which are currently used to develop protocols for pesticide residues analysis under a collaboration with the national JICA-funded project.

A field survey of pesticide use covering 179 farms has been carried out. The survey showed that tomatoes and onions are the mostly treated crops in the area under study, registering up to over 15 applications per season. Mostly herbicides are used on coffee farms.

National and international experts have analyzed the issue of container management in different production sectors: migratory pests, horticulture, floriculture, cotton, coffee and malaria prevention. Their findings and recommendations for a sustainable container management will be soon available at the PRRP website.

Proposed focus areas for the next future are the identification of Highly Hazardous Pesticides (HHPs) and development of mitigation strategies, promotion of Integrated Pest Management (IPM) and conducting field-based

pesticide residue risk assessments to reduce reliance on pesticide use. This would in turn help to realize the production of safe food for local consumption and export trade.

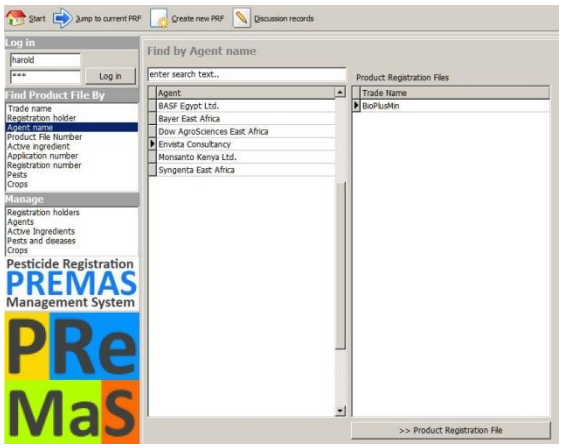
PREMAS being "field-tested"

The Pesticide Registration Management System (PREMAS) is a software programme specifically developed to manage the administrative process of registering a pesticide. PREMAS allows easy tracking of the application and the status of evaluation of the registration dossier, establishes a database of basic information of each of the pesticides under evaluation, provides rapid access to contact information of registration holders, facilitates the production of standard letters, check-lists and receipts, allows real-time reporting of specific steps in the registration process, etc.

PREMAS has been developed to mirror the exact registration process and procedures applied by APHRD in Ethiopia. It is also compatible with the FAO Pesticide Stock Management System (PSMS), to allow easy uploading of registration data into PSMS.

Early April 2012, a beta-version of PREMAS was tested by APHRD staff during a workshop in Addis Ababa, problems were identified, and improvements were suggested. An updated version was then prepared and is now being "field-tested" by APHRD as part of the regular registration activities.

PREMAS is jointly developed under the PRRP by Alterra, APHRD and Envista Consultancy. More information can be obtained from Harold van de Valk (harold.vandervalk@planet.nl) or Joost Vlaming (joost@envista.nl).



Pesticide registration based on equivalence

In April a workshop was organized in Addis Ababa to discuss the FAO/WHO equivalence determination procedure. This procedure can be used to assess whether a pesticide product submitted for registration, or its active ingredient, can be considered equivalent to an already registered pesticide. The objective of the equivalence determination is to facilitate registration of generic pesticides without jeopardizing product efficacy and safety. The workshop was facilitated by Markus Müller, of the Swiss Federal Research Station at Wädenswil and chairman of the FAO/WHO Joint Meeting on Pesticide Specifications. Staff from the APHRD, the Ethiopian Institute of Agricultural Research, the Ethiopian Environmental Protection Agency and the Ethiopian Conformity Assessment Enterprise, participated.

During the workshop, the equivalence determination procedure of FAO/WHO was introduced, equivalence determination and evaluation using a number of pesticide cases was exercised, and generic pesticide registration process and procedures based on equivalence determination discussed. It was recommended to further develop a specific registration procedure in Ethiopia based on equivalence.

Development of scenarios to protect surface water and groundwater

In November 2012 a procedure has been designed to evaluate risks of pesticides for groundwater and surface water in Ethiopia used as drinking water for men and cattle during a workshop with representatives of the Ethiopian APHRD, EIAR, Water Works Design and Supervision Ethiopia and the Dutch research institute Alterra. First it was clarified which types of surface water and groundwater are to be protected. For the most vulnerable and important protection goals a conceptual model, consisting of a sketch plus description was drafted. For surface water small rivers in the Ethiopian highlands (above 1500 m elevation)

as well as temporary stagnant ponds (for cattle watering) were defined. For groundwater wells in alluvial aquifers along small rivers or in volcanic aquifers, both in the Ethiopian highlands were defined, also wells in alluvial aquifers in the Rift Valley margins (up to 2000 m elevation) or in lowlands (below 1500 m elevation) were defined.

Next, a scenario selection procedure was developed. A scenario represents a 'realistic worst case' situation for which the risks of normal agricultural use of pesticides are evaluated, before the pesticide is admitted on the market. The term 'realistic worst case' situation implies that not the average situation is to be protected, but a more vulnerable situation A scenario is a fixed combination of agro-environmental conditions, such as precipitation, soil, land use management , crops with their cropping calendar and the surface water body or groundwater body to be protected.

Finally, a careful selection of the proposed scenarios was made using spatial and temporal statistics of occurrence of the most important 'driving factors' for the pesticide concentration in the selected surface water bodies and groundwater bodies. The driving factors were (i) the number of days with rainfall of more than 20 mm (determining pesticide concentrations in runoff entries into surface water) and (ii) the organic matter content and size of downward water flow (determining pesticide concentrations in water percolating to groundwater).

The entire procedure and its results are to be presented to the Pesticide Advisory Board for approval and future implementation in the registration procedure.

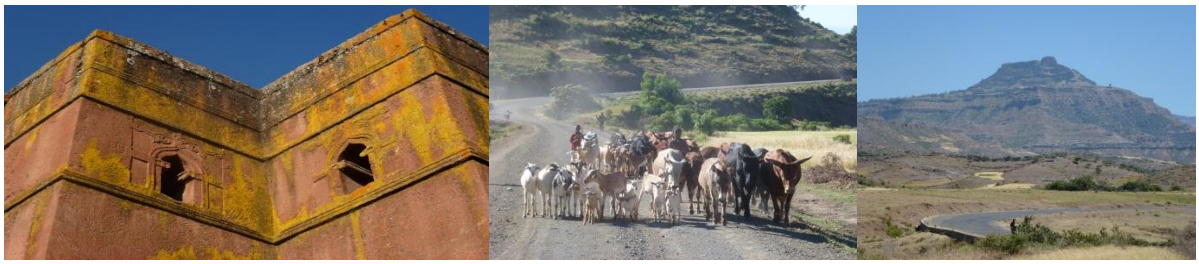
Three candidate scenario locations for the surface water protection goal small rivers in the Ethiopian highlands.

More information

For more information you can contact:

- Alemayehu Woldeamanual, National Project Coordinator (alemaworke@yahoo.com)
- Floor Peeters, Chief Technical Advisor (floor.peeters@wur.nl)

We wish you a peaceful and happy new year!



MoA

ALTERRA WAGENINGEN UR

FAO FIAT PANIS