

# **PRRP – Ethiopia Newsletter**

### Pesticide Risk Reduction Programme - Ethiopia

#### November 15, 2011 / newsletter # 2

#### Welcome to PRRP - Ethiopia

The activities of the PRPP-Ethiopia are progressing well, and have already produced a number of interesting results. The results of the activities are given in part 1 of the newsletter. Part 2 of the newsletter gives an overview of the Pesticide registration in a nutshell.

#### **Pesticide Administration**

One of these results is the completion of a pilot version of a 'Pesticide Registration Management System' (PREMAS) for Ethiopia. The regular training of the staff of the Animal and Plant Health Regulatory Directorate (APHRD) of the Ministry of Agriculture through on-the-jobtraining concerning pesticide registration administration is an on-going process. A general training workshop in Ethiopia (February 2011) was conducted by Alterra and the Board for Authorisation of Pesticides and Biocides of the Netherlands (Ctgb) and a working-visit was made to the Netherlands by APHRD staff in June 2011. Alterra Wageningen -UR, the Ctgb, a private efficacy trial company and other places were visited.



#### **Monitoring of pesticides**

Related to the monitoring of pesticides in plant products, public health and environment a firstphase field study was executed. This study covered areas in the country where pesticide use occurs at relatively-high levels, either in smallholder farms, commercial farms and others. More specifically this is the case in the vegetable-growing areas of Oromiya (e.g. Dugda and Ada Woredas) and in the coffee growing areas of the Southern Nations, Nationalities, and People's Region. At such sites were interviewed on their 168 farmers pesticide use, on how they get information related to pesticides', container management, etc. A second-phase field study will start in the beginning of 2012. The outcome of these field studies will be used as input for the baseline survey that will form the basis for the planned impact assessment of the entire PRPP programme.

#### **Efficacy of pesticides**

Another activity is related to the efficacy of pesticides. During two very intensive workshops (one in January 2011 in Addis Ababa and one in October 2011 in Debre Zeyet), 20 efficacy testing protocols were developed by the participants of different organisations like APHRD, EIAR, universities etc. on different crop-pest combinations. Sixteen experts were trained on trial execution, statistical analysis and the interpretation of results for registration of pesticides. Training was given by an international consultant Linge of Agroconsultancy.

#### PhD students started

In September 2011, three Ethiopian students started their sandwich PhD researches at Wageningen University (two) and the University of Utrecht (one). Their respective studies will focus on (i) the environmental effects of pesticides in Ethiopia, (ii) the effects of pesticides on human health and, (iii) pesticide governance. The students, who arrived in September in Wageningen, will stay until March, 2012 to follow courses and to work on their respective PhD proposals. Upon return to Ethiopia they will start their laboratory and field research , which will be implemented in the period 2012-2015 upon which they will return to the Netherlands to complete and defend their theses.

#### **Stakeholder meeting**

On October 25<sup>th</sup> a first well attended stakeholders meeting was organised. Organizations and experts with different interests in pesticide sales, distribution and use had a lively discussion on different aspects of

pesticide management in Ethiopia. In the same week the first meeting with the National Steering Committee of PRRP – Ethiopia took place which endorsed the work plan for the coming period. During this week the first meeting of the Pesticide Advisory Board took also place.

#### **More information**

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Stakeholders meeting at Ghion hotel, Addis Abeba





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# **PRRP – Ethiopia Newsletter**

### Special topic: Pesticide registration in a nutshell

#### Newsletter # 2, part 2, special topic

All pesticides used in Ethiopia must be registered<sup>1</sup>, and it is the Animal and Plant Health Regulatory Department (APHRD) of the Ministry of Agriculture which is responsible for this task. But what is pesticide registration and why is it so important?

In a way, the term "pesticide registration" is confusing, because it only seems to refer to the recording of a product on the list of nationally approved pesticides: the pesticides register. However, this is merely the last step in a long and sometimes complicated process.

Pesticide registration means the process whereby the responsible national government or regional authority approves the sale and use of a pest control product following the evaluation of comprehensive scientific data demonstrating that the product is effective for its intended purposes and does not pose an unacceptable risk to human or animal health or the environment<sup>2</sup>.

Three parts of this definition are key to the understanding of pesticide registration: "... evaluation of comprehensive data", "... effective for its intended purposes", and "... does not pose un unacceptable risk".

All pest control products are evaluated A pest control product, in the form in which it is sold and used, consist of one or more active ingredients (i.e. a substance which is linked to the pesticide's effect) and formulants (i.e. substances other than the active ingredient that are added to a pest control product to improve its physical characteristics; e.g., sprayability, solubility, or stability).

In Ethiopia, as is the case in many other countries, not just the active ingredient, but each individual pest control product needs to be evaluated before it can be authorized for use. Furthermore, it is important to realize that a pest control product never gets a "blanket registration" which allows use in all situations. Pest control products in Ethiopia are registered for a specific use, e.g. against a coffee pest, for malaria mosquito control, against weeds in maize, etc. In principle, if the product is used for another purpose than the one(s) that are registered, the user violates the law.



For APHRD to be able to evaluate a pesticide, and take a registration decision, the distributor, importer or manufacturer of the product submits an application which is accompanied by a substantive technical dossier. APHRD then evaluates the technical information in the dossier, looking at product composition, quality, efficacy and risks. Only part of data in the dossier are generated in Ethiopia (mainly biological efficacy data), but most data (e.g. physico-chemical properties, human toxicity, generated ecotoxicity) will have been elsewhere, often by laboratory studies that meet international quality criteria.

<sup>&</sup>lt;sup>1</sup> Proclamation No. 674/2010 to provide for the registration and control of pesticides. Federal Democratic Republic of Ethiopia. 2010.

<sup>&</sup>lt;sup>2</sup> *Guidelines for the registration of pesticides.* Food and Agriculture Organization of the United Nations (FAO) & World Health Organization (WHO). 2010. <u>http://www.fao.org/agriculture/crops/core-</u> <u>themes/theme/pests/pm/code/quidelines/en/</u>

#### Pesticides should be effective

Before a pest control product can be authorized for use, one should demonstrate that it is effective for its intended purposes, under Ethiopian conditions of use. This is primarily done through biological efficacy trials which are carried out by research institutes in Ethiopia. However, such trials are often expensive and may take several years to complete. As a result, it may be difficult to generate efficacy data for so-called "minor uses". Minor uses are those uses of plant protection products in which either the crop is considered to be of low economic importance at national level (minor crop), or the pest is not important on a major crop (minor pest). In Ethiopia, some flowers and vegetables can be considered minor uses. APHRD and research institutes are investigating options to use efficacy data from other, but climatically and agronomically similar, countries instead of (part of) the local trials.

## Pesticides should not pose unacceptable risks

A pest control product which is used in Ethiopia should not pose an unacceptable risk to human or animal health or the environment, under local conditions of use. Human and environmental risk evaluations are generally with laboratory toxicity conducted and environmental fate data that are used in models which simulate the situation in the country, e.g. a groundwater leaching model to assess risk for drinking water, or an occupational exposure model to assess risk for pesticide applicators or flower pickers.



At present, very few African countries have locally relevant risk assessment procedures and models in place, They conduct more generic hazard assessments, which tend to be less precise. APHRD is in the process of developing risk assessment procedures for Ethiopian use conditions, which should improve decision making on pesticide risks considerably in the near future. If the risk of applying a pest control product is considered unacceptable, the regulator may require that specific risk mitigation measures are taken, e.g. wearing protective clothing, restricting use of the pesticide to professional applicators only, prohibition of use near water bodies, etc. However, risk mitigation measures that are feasible in one country may not be realistic in another (e.g. in Europe certain pesticides can only be applied using tractors with a closed cabin; in Ethiopia very few tractors are being used for pesticide application and this measure is thus not applicable). Therefore, if no realistic measures can be taken to reduce the risk to an acceptable level, the regulator will normally prohibit the use of that specific pest control product.

Why is pesticide registration important? A good pesticide registration system really is the "gate-keeper" for the judicious use of pesticides in a country. It ensures that only pest control products are brought onto the market which are effective against the pest organisms in question. Pesticide registration will also make certain that pest control products which pose an unacceptable risk to human or animal health or to the environment do not enter the national market.

This gate-keeper function is all the more important, since farmers and other pesticide users in Ethiopia will generally not have all the objective information required to take themselves informed decisions on which pesticides to use.

PRRP-Ethiopia and pesticide registration

Ethiopian Pesticide Risk Reduction The Programme (PRRP) is fully engaged in strengthening pesticide registration in Ethiopia. This is done through streamlining registration processes, automating registration developing locally relevant administration, efficacy and risk assessment procedures and models, capacity building of technical and scientific staff, and awareness building and information provision to pesticide users and distributors, among others.

#### **More information**

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