



Site in Molodo, Mali, heavily contaminated with pesticides where FAO supported remediation techniques have been piloted. Photo courtesy of FAO.

FAO and pesticide risk reduction

One billion people in the world live in chronic hunger. FAO is committed to increase food security for all. Sustainable crop production intensification is one of FAO's strategic objectives that contributes to this goal. A key challenge for sustainable crop production intensification is to ensure that natural resources are used wisely, and that negative impacts of agricultural activities on the environment are reduced to the extent possible. Pesticide risk reduction is a key focal area. FAO has long-standing experience in this domain, combining expertise on Multilateral Environment Agreements, in particular those related to pesticides and environment, on promoting alternatives to pesticides like Integrated Pest Management, and on policy frameworks that enhance sound management of pests and pesticides.

The problem of obsolete pesticides

Over the past forty years, many countries in Africa and other regions have accumulated large quantities of pesticides which have become obsolete. The unwanted build-up of such products has occurred due to inadequate stock management, non-distribution to farmers, bans on several pesticides, uncoordinated or inappropriate supply from donor agencies, unsuitable packaging and supplier incentive programs. In Africa alone, the amount of publicly-held obsolete pesticides stockpiled is estimated at 50,000 tonnes.

The impact is often greatest on the poor. Abandoned pesticide stockpiles and dumps are often located in poorer communities where people scavenge for "recyclables" with no awareness of the dangers involved. Estimates of annual pesticide poisonings range in the millions and although reliable data is scarce, this has undoubtedly led to thousands of deaths and disabilities in Africa alone.

Disposal and prevention hand-in-hand

Disposal of obsolete pesticides is not enough, a framework that will prevent future build-up of pesticide stocks needs to be put in place while disposal operations take place. This is the strategy that FAO uses when providing technical assistance to countries around the globe. Disposal operations include inventory, safeguarding, clean-up of contaminated sites and disposal of obsolete stockpiles, respecting the highest standards for health, safety and environmental protection set for such operations. The preventive framework addresses better stock management, strengthening the pesticide legislative framework, as well as promoting alternatives to pesticides, such as Integrated Pest Management (IPM).

FAO is providing technical assistance to countries around the globe to reduce risks associated with pesticides. The EU supports FAO's work in ACP countries. Two examples are given below to highlight some interesting aspects.

Soil decontamination – an example from Mali

Where pesticides are used and stored there is often spillage and environmental contamination. When large quantities are used this can lead to significant problems, with spilled pesticides remaining toxic for years. In Molodo on the Niger River in Mali, spilled pesticides filled the air to such an extent that nobody could work on the site for long without feeling ill. Neighbours and workers close by complained constantly, but to no avail. The owners of the site and the local authorities could do nothing to solve the problem.

FAO was already working with the Government of Mali to help eliminate stockpiles of obsolete pesticides and build capacity to manage agricultural pesticides better. FAO was asked to

help solve the problem of the pesticide contaminated sites. The FAO Pesticides Management Programme sought solutions that could be implemented locally, using available infrastructure and materials. A collaboration started with Wageningen University in the Netherlands. Researchers had developed methodologies for characterization of contaminated sites, and some work had been carried out to manage such sites in the Netherlands. However, the methods had not been tried on pesticides or in Africa.

In 2007 five trial sites were selected in Mali, after having trained local teams to characterize the sites for specific risks, the current and future use of the land, the kind of contaminants and levels of contamination and biological activity in the sites. Appropriate responses were worked out for the different sites. Land-farming seemed an option in Molodono. There risks from dieldrin and parathion contamination were deemed to be high, but evidence from ecological surveys and chemical analysis showed that parathion was degrading naturally, while dieldrin remained at the same concentration over time. A decision was made to



Pesticide application in rice where IPM techniques have substantially reduced pesticide use. Photo courtesy of FAO

excavate the site and return a portion of the soil, mixed with organic manure to a small controlled area where the parathion would be degraded over a period of 3 months. The excavated soil is 'land-farmed' in this way in manageable portions until all of it has gone through this process. This soil, now without parathion was then removed from the 'land-farm' and mixed with ground charcoal to absorb the dieldrin, and isolated in a concrete bunker. Planting of deep rooted unpalatable vegetation around the original contaminated site prevents any residual contamination from either leaching into the ground when rain falls, or from evaporating into the air. The site has been fenced and signs erected warning people to keep away.

Chemical analysis shows that, in early 2010, the parathion in the soil is completely degraded by accelerated microbiological activity, and that dieldrin remains unaffected because it is a particularly stable chemical. The real evidence however, comes from the local population and the mayor of Molodono who express their gratitude for eliminating the overwhelming and ever-present stench of chemicals.

Pesticide Stock Management System and locust control

FAO developed the Pesticide Stock Management System (PSMS) which is an important tool in the management of stockpiles of pesticides. It is set up to ;

- i. provide information on the inventory of useable and obsolete pesticide stocks,
- ii. identify the registration status of the pesticides in stock,
- iii. monitor the quality of the pesticides and their movement and use in the country (including disposal).



Obsolete pesticide disposal is hazardous, costly and complex
Photo courtesy of FAO

Teams in different countries were trained in PSMS. Information was collected and entered into the database, on inventories of obsolete and usable pesticides. During the most recent desert locust outbreaks, the information in the PSMS database allowed for the transfer of usable pesticides from countries that had an excess of locust control pesticides to countries that had an immediate need for them. Examples include transfers from Mauritania to Yemen and from Mali to Malawi and Mozambique.

Outlook

Disposal of obsolete pesticides and strengthening pest and pesticide management framework still needs major efforts in the coming decade. FAO continues to assist a growing number of countries with this specific problem, making a significant contribution to enhanced food security while limiting risks for public health and environment. The ACP-EC MEA programme is making a valuable contribution to the expansion and implementation of FAO facilitated activities in the area of pesticide risk reduction and sustainable intensification of crop production.

Article courtesy of FAO

African Hub (AUC)

In March 2010 the AUC, together with UNEP, organized a meeting of African Negotiators on Climate Change to exchange information and discuss a common African position for upcoming international negotiations meetings. The outcomes feed into High level African Union meetings discussing climate change in May and July 2010. In addition, the AUC is supporting the updating of the draft East African Community bill on Transboundary Ecosystems Management. For further information please contact the African Hub coordinators Ms. Fatoumata Ndoye (NDOYEF@africa-union.org, fnjallow@yahoo.com) and Mr. Livingstone Sindayigaya (sindayigaya@yahoo.com)

Caribbean Hub (CARICOM)

Together with the University of the West Indies Caribbean Law Institute the Caribbean Hub will conduct a regional MEA negotiation workshop August / September 2010. This will include preparations for and conduct during MEA negotiations, including developing and drafting national position papers in support of identified needs and priorities. In May discussions were initiated with Dominica and Trinidad and Tobago regarding technical assistance to review selected environment-related legislative, regulatory and administrative frameworks and policies. This will lead to national training workshops and legal advisory services being provided to the two countries later in the year. For further information please contact the Caribbean Hub coordinator Mr. Ronald Williams (rwilliams@caricom.org).

Pacific Hub (SPREP)

Practical integrated environmental assessments (IEA) trainings were held in Micronesia and Marshall Islands in March 2010 to mainstream MEAs into these countries' IEAs. Similar work will continue with IEA trainings in Kiribati in July, and other countries in the second half of 2010. Work on mainstreaming MEAs into National Sustainable Development Strategies (NSDS) has continued in Nauru and Tuvalu. The Pacific Hub assisted Nauru with its self assessment as part of the peer review of its NSDS. The Hub also facilitated mainstreaming sessions in the Tuvalu National Adaptation Programme of Action (NAPA) inception meeting, and started

developing the Tuvalu national climate change policy. In May a draft mainstreaming guide on climate change adaptation was introduced to a regional Pacific Adaptation to Climate Change (PACC) multi-tripartite review meeting to assist Pacific ACP countries with their efforts to mainstream climate change. For further information please contact the interim Pacific Hub coordinator Mr. Seve Paeniu (sevep@sprep.org).

UNEP Risoe Centre

The UNEP Risoe Centre has finalized project agreements with five African countries (Botswana, Cote d'Ivoire, Malawi, Rwanda and Sao Tome and Principe) and two Caribbean countries (Belize and Cuba) for national level CDM capacity building interventions. It has also finalized a cooperation agreement with the Caribbean Community Climate Change Centre for regional Caribbean activities. While supporting establishment and strengthening of Designated National Authorities (DNAs) in these countries, the Risoe Centre is developing publications and web-based tools, such as the CDM methodology selection tool, which was launched during the Carbon Expo 2010. The Risoe Centre is also assisting countries in designing sustainable development criteria for CDM project review and approval procedures. For further information please contact Ms. Miriam Hinostroza (milb@risoe.dtu.dk).

SAICM Secretariat

In April the SAICM Secretariat signed project agreements with Djibouti to strengthen its capacity to control the transboundary movements of hazardous wastes and chemicals. Agreements for four other QSP projects, including one national project in Mauritius, and three regional projects involving Burundi and Rwanda, Burkina Faso, Chad, The Gambia, Mauritania, Niger and Rwanda, and Cook Islands, Kiribati, Samoa, Solomon Islands, and Tonga will be finalized in June - August 2010. The ninth QSP application round is open until 27 August 2010. For further information please contact Ms. Tatiana Terekhova (Tatiana.Terekhova@unep.org).

FAO

FAO has worked in the Africa, Caribbean and Pacific regions supporting the further development of projects and activities related to improving pesticides management in countries and supporting the elimination of obsolete pesticides. In Africa, the seven countries participating in the Africa Stockpiles Programme Phase 1 are being supported towards completion of their national projects, and 12 additional countries are being prepared for new project implementation. In the Caribbean, FAO is working with national pesticide registrars and CARICOM to develop strategies to eliminate obsolete pesticides and build capacity to strengthen pesticide management. In the Pacific FAO is collaborating with regional organizations and UNEP to implement a regional waste management project that will include obsolete pesticide disposal. For further information please contact Mr. Mark Davis (Mark.Davis@fao.org).

UNCCD-GM

The GM is currently setting-up platforms to establish permanent networks in the three ACP sub-regions to exchange experiences on resource mobilization strategies and to develop financial partnerships. The networks, which will use state-of-the-art web technologies, will foster the exchange of experiences in the context of South-South cooperation and provide an interactive platform to build up and share knowledge and information on UNCCD financing opportunities and approaches. The GM is closely collaborating with potential users to better target and respond to their needs and expectations. A first version of these portals is planned to go live in September 2010 and will be continuously updated to better suit partners' needs, especially according to regional specificities and capacity. For further information please contact Ms. Ines Chaalala (i.chaalala@global-mechanism.org).

Green Week 1-4 June 2010, Brussels

ACP MEAs was present at the Green Week, the largest annual conference on European environment policy organized by the European Commission. This year's Green Week theme was Biodiversity, and the visibility of the project benefited from the visit of Mr. Janez Potočnik, European Environment Commissioner and Ms. Angela Cropper, UNEP Deputy-Executive Director. For further information, please contact Sandrine Marquès (sandrine.marques@unep.org).



Janez Potočnik, European Commissioner for Environment at the United Nations stand at the Green Week exhibition. He was offered the Biodiversity pin and was briefed on the EC-funded MEAs project and relevance of MEAs enforcement in the African, Caribbean and Pacific countries.

Photo courtesy of Tour of the Green Week exhibition, European Commission.



Angela Cropper (centre), UNEP Deputy-Executive Director (DED) seen here at the United Nations stand at the Green Week encouraging the UN team.

Photo courtesy of Lea Stuff, UNEP Brussels Office intern.

This newsletter is published quarterly and includes opinion pieces by the programme partners as well as an update of latest developments. For more information on ACP MEAs please contact:

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