

# International Obsolete Stocks Projects

## Country Reports, Update March 2004

These summaries supplement CropLife International's policy statement 'Obsolete Stocks of Crop Protection Products'. Countries are listed in alphabetical order and only those projects relevant to companies participating in the CropLife obsolete stocks programme<sup>1</sup> are mentioned. The obsolete stocks referred to are those owned by third parties, usually national governments or government agencies, not by CropLife participating companies.

CropLife International and its leading member companies have worked actively on this issue for more than a decade, in partnership with national governments, aid agencies, international organisations and NGO's. Obsolete products originating from our participating companies are, naturally, the focus of our efforts, but we recognise that our skills contribute to dealing with all obsolete stocks. We have:

- \* facilitated over 25 disposal projects by finding bilateral donor funding, organising projects, supervising operations in the field or, when appropriate, re-formulating useable stocks.

- \* provided funding, representing at least the cost of incineration of the products that were originally supplied by our participating companies.

- \* contributed to the safe disposal of over 3400 tonnes of obsolete products from developing countries, especially Africa.

- \* promoted initiatives in developed countries, where over 5000 tonnes of obsolete stocks have been collected from farmers.

Excellent stock management is a commercial necessity for the private sector and is an area of significant expertise which our members are working to extend to customers everywhere.

This document summarises current and past projects. However it is not intended to be exhaustive and cannot do justice to the complexity of such projects.

### Africa

CropLife International is a core partner in the Africa Stockpiles Programme (ASP), a multistakeholder initiative, to remove obsolete stocks of crop protection products from all 53 countries in Africa and to take appropriate steps to prevent further accumulation. A major source of funding will be the Global Environment Fund. Other funding sources include donor and national governments. The companies participating in the CropLife International obsolete stocks programme have committed up to US\$30 million, both as direct funding and as provision of expertise, over the 15 year expected lifetime of the programme.

### Country projects worldwide:

#### Australia

*ChemCollect* was an A\$27 million 'once-only' nationwide collection of unused, unwanted and deregistered crop protection and veterinary products. Begun in 2000, it was funded by the State and Federal Governments of Australia and had collected around 1700 tonnes by the time of its completion in December 2002. Some 150 tonnes of this was organochlorine pesticides. ChemClear, an industry-funded programme for on-going collection and disposal of unwanted registered chemicals, will commence in 2004 and is supported by AVCARE, the National Association of Crop Protection and Animal Health, a member association of CropLife International.

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1. Companies leading and participating in the CropLife International obsolete stocks programme are BASF, Bayer CropScience, Dow Agrochemicals, DuPont, FMC, Monsanto, Shell, Sumitomo and Syngenta. The companies Cheminova and Makhteshim Agan have also collaborated with CropLife International to remove obsolete stocks.

### Brazil

Over many years, authorities in the State of Paraná accumulated some 1,200 tonnes of obsolete crop protection products. Most of the products were manufactured by state-owned organisations. After consultation in 1998 with different stakeholders and the local crop protection industry association (ANDEF), a member of CropLife, it was decided that incineration was the appropriate disposal option. Successful incineration at a local industry plant was finalised in June 2000. The participating ANDEF member companies funded the incineration of their products of origin, while the State of Paraná covered the balance of the costs.

### Cameroon

A plan to progress a disposal project was submitted by the local industry association, UPAC, to the Ministry of Agriculture in Cameroon during June 2001. It is believed that several hundreds of tonnes of obsolete crop protection products exist in the country. The Cameroon authorities have expressed interest in participating in the ASP.

### Canada

Since 1999, unwanted and unused stocks of crop protection products have been collected from farms and disposed of in Canada. In a programme phased across the provinces, about 350 tonnes of such products have been collected. Completion is estimated by 2004. The programme is jointly funded by the Federal and Provincial Governments respectively, and CropLife Canada. Its success is due to the effective multi-stakeholder approach between government, industry, retailers and grower groups.

### Cape Verde

In 2001, the Ministry of Agriculture requested the assistance of the Royal Netherlands Embassy in Dakar, Senegal, for the disposal of its obsolete pesticide stocks and associated materials from various locations over the 12 islands. The collection and export for disposal of 57 tonnes of stocks and 21 tonnes of associated waste and soil have now been completed. The work formed part of a combined project including Senegal (see below) and Mauritania in which CropLife International has assisted with the development and co-ordination of the project, and participating companies are contributing to the cost of the work.

### Colombia

An estimated 500 tonnes of old crop protection and public health products have been identified in Colombia. The local CropLife Latin America member association, ANDI, supported a Ministry of the Environment / FAO international seminar on the problem in November 2001 and has offered help to the Colombian Government as part of a multi-stakeholder approach.

### Ecuador

Of an initial 13 tonnes of potentially obsolete crop protection products, only two tonnes remain as obsolete products. No further participation from Industry is required to dispose of this quantity.

### El Salvador

The Ministries of Agriculture, of the Environment and of Health have compiled an inventory showing 135 tonnes of potentially obsolete products as of July 2000. The crop protection industry has offered its collaboration in progressing a disposal project.

The CropLife member association, APA, is collaborating with US AID and US EPA to advise the El Salvador authorities on the safeguarding of some 30 tonnes of toxaphene abandoned at a locally owned formulating site more than 10 years ago. A donation to the project from CropLife Latin America has moved the project forward significantly.

### Ethiopia

The project, launched in 1998, became active in the third quarter of 2000 under the leadership of FAO. Phase 1 of the project was completed in autumn 2003 with the disposal of some 1500 tonnes of obsolete pesticides by Ekokem OY AB, Finland. A significant quantity of the original stocks was reclassified as useable during the course of the work. The local industry association, EACA, and CropLife International worked closely with the project management to identify the obsolete products. Donor organisations that funded Phase 1 were The Netherlands Embassy, USAID, and the Swedish government, as well as full collaboration from the Ethiopian authorities. CropLife participating companies are contributing to the cost of the work.

Phase 2 of the project will dispose of the estimated 1000 tonnes of remaining obsolete stocks in Ethiopia, together with a quantity of heavily contaminated soil. Funding for Phase 2 operations is being provided by the Governments of Belgium, Ethiopia, Finland and Japan as well as CropLife participating companies and the ASP. A comprehensive programme of measures to prevent future stockpile accumulation is also being undertaken in Ethiopia, in which EACA and CropLife Africa Middle East Region are participating.

#### Gambia

Starting in 1997, member companies of CropLife International managed and funded this small project in collaboration with the Commonwealth Development Corporation (CDC) of the UK. Some 15 tonnes of obsolete products were collected and incinerated by Shanks (UK) early 2000.

#### India

Indian governmental organisations contacted the Indian Crop Protection Association (ICPA) in early 1998. Initial lists of crop protection products that are considered obsolete are available from the responsible State Government Departments. Industry has offered support for disposal of the products it originally manufactured or supplied.

#### Madagascar

In 1993, at the request of the Government of Madagascar, the Pesticide Disposal Project of the German Agency for Technical Cooperation (GTZ), Germany, undertook a project for the removal and disposal of 56,000 litres of a locust-control product containing dieldrin from the southern part of the country. It was repacked, shipped and incinerated by Shanks, UK. The project was funded by the German Government. Shell, the original manufacturer, provided technical guidance and on-site assistance.

In 1996, the local authorities, GTZ, the Swiss Development Co-operation (SDC), member companies of CropLife International and the local crop protection association (PHYTOMAD) were the major stakeholders in an obsolete stock disposal operation. GTZ managed the project locally. The inventory listed 160 tonnes of older crop protection products of which 90 tonnes were found to be unusable. These were collected and packed for export and disposal. Shipment to Switzerland took place in early 2000, and incineration was completed soon after. Four participating companies of CropLife contributed to the costs of the disposal operation.

#### Malawi

Approximately 120 tonnes of product were listed as obsolete when this project was initiated in 1997. Fortunately, most of them were still usable in the country, some after reformulation and repackaging. An updated inventory by the local Ministry of Agriculture was made available in 2001 and will be the basis for the next steps to be implemented by the government.

#### Mali

In 1997 the Pesticide Disposal Project of GTZ, Germany, undertook an inventory of obsolete pesticide stocks at the request of the Mali authorities. The work was funded by the Stromme Memorial Foundation and Shell funded some of the analytical work. Some 80 tonnes of obsolete stocks were found and several sites with high levels of soil contamination were identified in the Gao/Kidal region. Although some subsequent safeguarding was done by the Malian authorities and others there was insufficient funding available for a full collection and disposal project to be undertaken. Mali is one of the priority countries within the ASP and it is anticipated that a full project will be started during 2004. Together with the Government of Mali, FAO, the World Bank and other ASP partners, CropLife International is actively involved in developing the project.

#### Mauritania

In 1997, at the request of the Mauritanian authorities, the Pesticide Disposal Project of GTZ carried out a safeguarding operation in the major store at Ayoun el Atrous, in Central Mauritania, during which 90 tonnes of locust control formulations containing the insecticide dieldrin were repacked into new containers. This operation was funded by GTZ.

Due to the serious stock situation in the country the GTZ Disposal Project then extended its activity and prepared a complete disposal operation for up to 200 tonnes of dieldrin-based products in Mauritania,

In 1998 a collaborative project was completed, involving local authorities, GTZ and Shell (the original manufacturer), to collect and incinerate over 220 tonnes of dieldrin-based product and associated waste. AVR, Holland, incinerated the materials. The project costs were shared between the German Ministry for Economic Co-operation and Development (BMZ) and Shell.

In August 2000, the same partners co-operated again, when around 30 tonnes of sand contaminated with dieldrin were removed from a state-owned warehouse in the town of Rosso, in southern Mauritania, and remediated in the Netherlands.

During 2001, an initiative to have 34 tonnes of carbaryl reformulated from oil to a low strength dust product was financed by the Netherlands Government and Aventis CropScience (now Bayer CropScience).

Also in 2001, the Ministry of Agriculture requested the assistance of the Royal Netherlands Embassy in Dakar, Senegal, for the disposal of around 45 tonnes of remaining obsolete pesticide stocks and associated materials. The collection and export for disposal have now been completed, also including some 240 tonnes of contaminated soil. Disposal of the stocks and treatment of the soil by high temperature incineration will have been completed by the end of the first quarter of 2004. The work formed part of a combined project including Senegal (see below) and Cape Verde. CropLife International has assisted with the development and co-ordination of the project and participating companies will be contributing to the final cost of the work.

#### Mozambique

In 1991, at the urgent request of the Government of Mozambique, Shell (the original supplier) collected and repacked 72,000 litres of monocrotophos/DDT from a government warehouse in Beira, cleaned the storage area and transferred the product to a safe facility near Maputo to await disposal.

In 1994, the GTZ Disposal Project managed the removal of the 72, 000 litres of the monocrotophos - DDT, earlier safeguarded by Shell. The product was incinerated by Shanks, UK. The project was funded by the German Government.

As a follow-up to the above operation, GTZ then funded and carried out a countrywide analytical survey of all government and semi governmental stores in Mozambique. Several hundreds of samples were analysed by the GTZ lab in Germany.

In 1999, CropLife International was approached for support to a project initiated in 1997 by the Mozambican Ministry of Agriculture in collaboration with the Danish Government through DANIDA. The inventory showed approximately 1000 tonnes of collected products to be disposed of. CropLife International contributed significantly to the product verification process and paid the incineration costs of 395 tonnes of obsolete products that originated from its member companies. Many of the products only became obsolete after collection and industry deplores this avoidable waste.

In 1999, at the request of BASF, the Pesticide Disposal Project of GTZ safeguarded and removed more than 73 tonnes of agrochemicals from the former BASF formulation plant at Chimoio. The obsolete products were destroyed in the high temperature incinerator of BASF, Germany. The project was funded by BASF AG.

In 2003, CropLife International participated in a Japanese Government mission to investigate the condition of pesticide stocks donated under the Japanese Government (KR2) aid scheme since 1998. About three quarters of the products were found to be still useable, despite having exceeded their expiry date.

Activities led by FAO have continued during 2003 and 2004 to prepare for the disposal of all remaining obsolete stocks in Mozambique and the establishment of a prevention programme with the ASP. CropLife is participating in these activities.

#### Nepal

It is reported that the Government of Nepal holds around 75 tonnes of obsolete pesticide stocks. The potential risk presented by these stocks has been highlighted by a number of parties, including Greenpeace Germany. In 2002 and 2003, CropLife International and the German Government offered assistance to the Government of Nepal to dispose of these stocks. An acceptance of this assistance is still awaited.

#### Niger

The first collaborative government / donor / industry obsolete stock project took place soon after the pioneering FAO/USAID-led 1991 Niger conference on the problem of obsolete crop protection products in Africa. The Government of Niger, USAID, GTZ and Shell participated. Some 54 tonnes of locust

control products containing dieldrin were collected, shipped to the Netherlands in bulk containers and incinerated by AVR, Holland. USAID co-ordinated the project. Shell arranged the international logistics and provided expert supervision for the field activities. GTZ carried out field monitoring, and support analysis in its laboratory in Germany. The project cost was shared between USAID and Shell. This project showed how such work could be undertaken. Many lessons were learned, including the need to facilitate the training and use of professional hazardous waste collection and disposal companies to improve the efficiency of future projects.

#### Nigeria

An inventory co-financed by the local industry association (AAN) and the Nigerian Government is now available and shows some 22 tonnes of confirmed obsolete products. Further inventory operations are planned as part of an ASP project in Nigeria, funded by the Canadian Government.

#### Pakistan

In 2001, a pilot project initiated and sponsored by the Royal Netherlands Embassy (RNE) in Islamabad, was completed. On behalf of the RNE the Pesticide Disposal Project of GTZ managed and carried out the basic survey for the disposal operation, the safeguarding and disposal of 323 tonnes of obsolete pesticides and associated waste from 13 high risk stores in the Province of Punjab and a complete survey of all 168 pesticide stores in Punjab Province. The 13 warehouses were owned by the Punjab Department of Agriculture and the stocks had been held since the late 1970s. Member companies of CropLife International paid the cost of incineration of 94 tonnes of the products (those they had either manufactured or supplied). The collection, re-packing, cleaning of storage areas, shipping and incineration activities were undertaken by AVR, the Dutch hazardous waste disposal company, subcontracted and supervised by GTZ. The GTZ survey indicated that there might be around another 1000 tonnes of obsolete stocks in the Province of Punjab. The Pakistan authorities hope that new donors will help fund further projects to collect and destroy these stocks.

In 2001, GTZ, the Environmental Protection Agency (EPA) of the North West Frontier Province of Pakistan and Bayer CropScience successfully completed an obsolete stocks disposal project in Peshawar, the provincial capital. Sixty tonnes of Gusathion, an insecticide for cotton – purchased by the government some 20 years ago – had been mistakenly transported to a government warehouse in a non-cotton growing area. As a result it lay unused and eventually deteriorated. The Pesticide Disposal Project of GTZ managed and carried out the collection and disposal operation. The product was repacked and transported to the United Kingdom, where it was incinerated by Shanks. GTZ and Bayer CropScience shared the technical and financial contributions.

Until 1980, all pesticides in Pakistan were purchased centrally and then distributed to farmers. A private market was subsequently introduced, which had the beneficial effect of reducing considerably the accumulation of obsolete stocks.

#### Senegal

During 1998/99 some 100 tonnes of unusable carbaryl oil formulation were reformulated locally into a usable low strength dust. The work was funded jointly by Aventis CropScience (now Bayer CropScience) and USAID and coordinated by the FAO Locustox Project in Senegal.

Subsequently a further 21 tonnes of carbaryl oil formulation were similarly reformulated. This was financed jointly by the Royal Netherlands Embassy and Aventis CropScience (now Bayer CropScience).

In 2001, the Ministry of Agriculture requested the assistance of the Royal Netherlands Embassy in Dakar for the disposal of around 270 tonnes of obsolete pesticide stocks and associated materials. The collection and export for disposal of an eventual 307 tonnes of stocks and 118 tonnes of associated materials and soil have now been completed. Disposal of the stocks and treatment of the soil by high temperature incineration will have been completed by the end of the first quarter of 2004. The work formed part of a combined project including Mauritania and Cape Verde. SAVA Sonderabfallverbrennungsanlagen GmbH, Germany, was contracted to do the work. CropLife International assisted significantly with the development and co-ordination of the project, and seven companies will be contributing to the final cost of the work.

#### Southern Africa

In the late 1990s GTZ carried out a survey in the southern part of Namibia and made an inventory of over 200 tonnes of BHC purchased for locust control. In 1998 the South African Government and the local industry association CropLife South Africa, collaborated to collect a total of 1,040 tonnes of obsolete products across South Africa, Swaziland, and Namibia, (including the 208 tonnes of BHC from

the latter) with significant quantities coming from government owned stores and from a local producer. The disposal operation was jointly financed by the South African and German governments and managed by CropLife South Africa. The German government financed the transportation of the BHC to the UK. In 2000, a total of 740 tonnes of obsolete stocks from this project were successfully incinerated by Shanks.

The Danish Government development organisation DANCED initiated a project in 2002 to access the remaining stocks in Southern Africa. Some 87 tonnes of farmer held obsolete stocks were identified prior to funding for the project being withdrawn. CropLife South Africa has subsequently acted to safeguard some of these stocks to avoid inappropriate disposal by farmers.

The disposal of the remaining obsolete products from South Africa is being undertaken as part of the ASP together with the adoption of measures to prevent the accumulation of obsolete stocks in the future. This work will also be extended to the other countries of Southern Africa in due course.

#### Sri Lanka

In response to a request for assistance from the Government of Sri Lanka in October 1999, the crop protection industry has proposed an action plan for the disposal of some 70 tonnes of products that are considered obsolete.

#### Sudan

In May 1998 the local industry association (SAGA) and the Sudanese government, FAO and others held a stakeholder meeting at which an action plan was drawn up. FAO agreed to update the product inventory, and the industry-funded analyses confirmed that a number of stocks were still usable. Some of these products have subsequently been used. In the meantime, the Government has been seeking financial assistance for the disposal of the remaining stocks believed to amount to about 660 tonnes. FAO, CropLife and the Sudanese authorities are currently jointly seeking ways to assess the condition of the existing stocks with a view to carrying out a safeguarding operation to reduce the risks posed by these stocks.

#### Tanzania

The National Environment Management Council (NEMC) of Tanzania initiated inventory taking in 1997, supported by the Dutch Government. About 1,000 tonnes of old products from 300 warehouses were identified, and most are likely to require disposal. Twenty-five percent of the listed stocks are estimated to originate from the CropLife participating companies.

Tanzania is one of the priority countries within the ASP and it is anticipated that a full project will be started during 2004. Together with the Government of Tanzania, FAO, the World Bank and other ASP partners, CropLife International is actively involved in developing the project

#### Uganda

In 1993, FAO developed and supervised a project for the collection and disposal of some 51 tonnes of tsetse fly control product containing dieldrin. The product had been donated to the Ugandan authorities by UNDP after the use of the product had become no longer permitted, and hence it was unusable. The product was repacked, shipped to the UK and subsequently incinerated by Shanks. Shell, the original manufacturer, helped to facilitate the project which was funded by UNCDF.

In 2000, Syngenta managed the disposal of some 40 tonnes of a cotton herbicide from Uganda. The Ugandan Government had purchased the product in the mid eighties but its use had been minimal due to political unrest and changes in the local cotton support policy. Incineration was undertaken in Switzerland.

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