A. Presentations

A.1. International opinions

Prevention of accumulation of obsolete unwanted and banned pesticide stocks
- Problems and perspectives -

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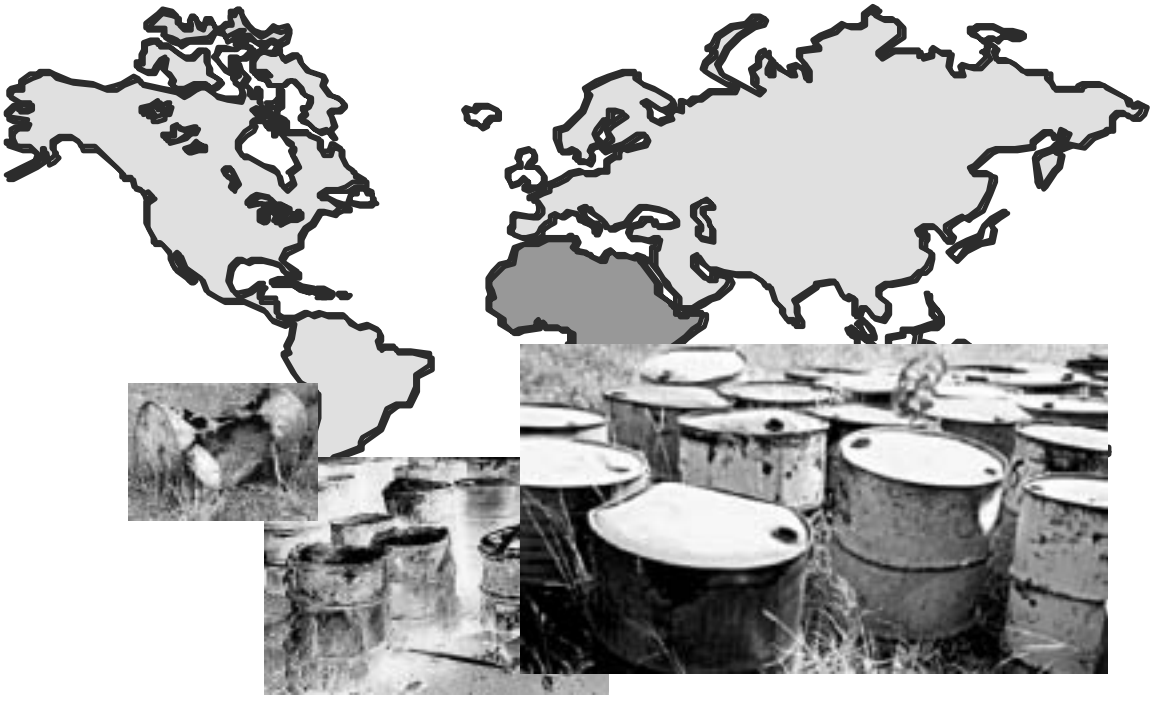

Pesticides and POPs, rusted, corroding and leaking pesticide drums and contaminated soil are serious environmental and human health problems

Overview

The planet is covered with pesticides; there are no places to hide. This is not raising alarm but that is the situation! Pesticides in general and obsolete stocks are worldwide environmental and human health hazards. There are no countries that are totally free from misuse or abuse of pesticides. Some stocks date back several decades. Some are banned pesticides the majority of which fall under Persistent Organic Pollutants (POPs) that are more hazardous because of their persistency in the environment.

Among POPs, 75% are pesticides while 25% fall under industrial chemicals. There are additional candidates for POPs both from pesticides and the industrial chemicals. The distribution of POPs is neither limited by distance nor by natural barriers. They are traced in soil, water, air and are in the food chain. But the greatest damage either from use of newly introduced pesticides or obsolete stocks, is mainly in the developing countries. There is little or no awareness of the inherent danger of pesticides. Ignorance compounded by lack of alternative methods of pest control, brain washed by aggressive pesticide sales, and the poor nations are misled and confused. The short and-long-term environment hazards and the negative impact on the human health go on unabated. Neither facilities nor expertise or the financial resources exist to clean up toxic waste inflicted on the poor over several decades.

Over hundreds of thousands of tonnes of obsolete stocks, several hundreds of millions of empty and contaminated containers of all sizes and makes and equally millions of volumes or tonnes of contaminated soil exist worldwide. Substantial financial resources and extended analytical work and commitment will be required to get reliable environmental assessment and accurate inventory of stocks. In most cases pesticide containers have rusted

or corroded, unmarked or their labels have disappeared and their contents have leaked into storage floors and subsequently into the environment. This makes it difficult, complicated, and expensive to make accurate environmental impact or risk assessment.

Reasons for accumulation of stocks

Reasons for accumulation of stocks vary from country to country but in general the following have contributed in many ways depending on situations under each country's conditions:

1. Donations in excess of requirements.
2. Lack of accurate assessment of pesticide requirements.
3. Banning of products while still kept in store.
4. Lower pest incidence than expected.
5. Insufficient storage capacity.
6. Weak or absence of storage management.
7. Absence of pesticide legislation.
8. Government decisions to request or procure pesticides much above required and without consulting technical staff members responsible for the job.
9. Improper labels.
10. Products replaced by newer products.
11. Product inappropriate for intended use.
12. Fraudulent practices.
13. Civil war.
14. Over-stocking of products with limited shelf life.
15. Lack of product with a long shelf life.
16. Lack of product knowledge.
17. Government policy on trade liberalisation.
18. Change in agricultural crops.
19. Unsuitable packaging of pesticides.
20. Lack of introduction or Government policy for non-chemical crop protection methods.

Whatever reasons may have contributed to accumulations of stocks, pointing wise fingers at whoever is responsible or whatever the reasons might not solve the problem. The priority is to find means and to enhance concerted international effort to avoid repetition of accumulation in the future.

Salient points that need consideration

In majority of cases, pesticide vendors or distributors in developing countries are less knowledgeable or less aware about ethics of handling, storing and or distributing pesticides. Most are in the business because that is the way of making a living with little or no concern to themselves, to people working for them, to the environment or to the health of people or the community in general.

On the other hand, the Industry is making efforts to promote safe usage of pesticides and instituting stewardship directed towards the end users of pesticides in the field. But the effort first and foremost is to do the homework with distributors. On the part of the Industry, the first line of defence in raising awareness, in ensuring ethics and in maintaining Code of Conduct on the use and distribution of pesticides should focus on distributors. This should be the primary task of the Industry, and Governments should put in place adequate legal and policy framework and guidelines to avoid illegal practices. These are important issues that should be addressed as matter of priority. In cases where wrong or adulterated pesticides are supplied and where pesticide handling is illegal, the principle of ***send-back-to-the sender*** must prevail. This means sending back to the suppliers or producers or formulators at their own cost. This is the best and fastest option in solving the problem of accumulation of stocks.

Pesticide containers

Obsolete stocks are not limited only to liquid, solid, emulsion, powder or granular forms of pesticides but also include several millions of pesticide containers reaching the farm gate and urban centres all the time. Containers are never collected or returned to their place of origins or to the senders. Containers are as dangerous as pesticides to the farming community, to urban dwellers, to children on playgrounds. Experience has shown that most such poisonous containers were almost always used for domestic purposes mainly for food storage or for water haulage or for drinking purposes. Farmers are advised by pesticide vendors to bury containers on their farmland or at their backyard or on their limited individual plots. Burial has never provided permanent solution nor is accepted as being appropriate. The question is how and why such wrong practice is allowed to continue? For example, a total of 30 tonnes of POPs pesticides buried in an irrigation scheme in Surdod, Republic of Yemen by ill equipped and ill advised Expatriate Advisors and Consultants is discovered to have contaminated about 1,600 tonnes of soil in less than 20 years including the core pesticide waste. Now the waste has to be excavated and disposed of at enormous financial resources. The level or cost of damage caused to the environment is incalculable and the impact inflicted on the human health in the surrounding area is not possible to establish.

There are several hot spots in many countries where pesticides have been buried or dumped in Africa. But that was not a solution because all buried pesticides should have to be excavated and disposed of in a safe and appropriate manner but at high cost. Buried pesticides, contaminants and soil will increase costs of disposal several fold.

Inventories of obsolete stocks

Africa and the Near East

Countrywide surveys and inventory of stocks began in mid 1994 i.e. soon after FAO established a programme with a financial support of the Government of the Netherlands, specifically aimed at obsolete stocks. Several developing countries either requested or were badly in need for assistance to address the problems or issues associated with obsolete stocks. Unfortunately adequate support could not be provided because the necessary financial resources were not available. Thus efforts from the outset had to be limited mainly to Africa and the Near East. To date a total of 45 countries in Africa and 9 in the Near East have been covered. A total of nearly 48,000 tonnes of obsolete stocks including a total of approximately 5% disposed of (*Annex 1*) is recorded. Initially the FAO estimate of obsolete stocks was 20,000 tonnes but with the discovery of heavily contaminated soil in many countries, and empty and contaminated containers, the total of waste is steadily increasing. Although the current figure stands at nearly 50,000 tonnes, this is believed to increase steeply.

Of the total stocks identified, nearly 30% constitutes POPs. Empty and contaminated containers or contaminated soil give rise to widespread concern. In many countries stocks also remained undeclared or could not be located during the process of countrywide surveys and inventory taking. This makes it necessary to undertake revised surveys from time to time in the countries (*Annex 1*) where surveys have already been completed. This is necessary to update existing inventory and new stocks, which are likely to accumulate if disposal is not undertaken.

Latin America and the Caribbean

With limited financial support from UNEP and the Environmental Agency of Canada, survey and inventory have been initiated in nearly 36 countries in Latin, and Central America and the Caribbean (*Annex 2*). So far results have been secured only from five countries namely, Nicaragua, Suriname, Trinidad and Tobago, Venezuela and Peru. The result of survey yielded a total of 1,895 tonnes of which 421 tonnes or 27% is POPs as shown below: Contaminated soil and empty and contaminated containers need to be resurveyed and re-examined and data updated.

Summary of inventory from the above 5 countries

Country	Tonnes
Venezuela	1,031
Nicaragua	753
Trinidad & Tobago	71
Suriname	31
Peru	9
Total	**1,895**

A detailed version of the above inventory is available in the FAO database. The total shown above neither includes empty and contaminated containers nor contaminated soil at storage sites.

South East Asia

With the financial assistance of the Government of Japan, countrywide surveys are being initiated involving 21 countries in South East Asia.

Among the 21 countries listed below so far, results of survey have been received only from Nepal, partly India and Pakistan. The programme of survey and related activities in the region is expected to continue up to the first quarter of 2002 by which time, inventory taking should be completed. The list of countries is given below:

1	Bangladesh	8	Kazakhstan	15	Myanmar
2	Bhutan	9	DPR Korea	16	Nepal
3	Cambodia	10	R. Korea	17	Pakistan
4	China	11	Laos	18	Philippines
5	India	12	Malaysia	19	Sri Lanka
6	Indonesia	13	Maldives	20	Thailand
7	Japan	14	Mongolia	21	Vietnam

An overview of the agricultural practice indicates that, although many countries in the region are using *Integrated Pest Management (IPM)* in rice, widespread misuse and abuse of pesticides are not uncommon. Countries like China and India have the capacity to produce huge quantities of pesticides both for local use and for export. Thailand, Indonesia and others use huge quantities of pesticides in agriculture and for vector pest control. Thailand alone has nearly 80 pesticide formulators and several thousand local distributors or vendors. There are two strong agrochemical associations one under GCPF and the second involving quite a huge number of national pesticide formulation and distribution companies in Asia and South East Pacific countries, usually competing with each other and sometimes at odds. Vietnam is inundated with large quantities of pesticides, illegally introduced from China and India across borders. Bangladesh also faces difficulties from misuse and environmental abuse of pesticides. A few years back, the Government, not knowing what to do with obsolete stocks, sold a huge quantity of stocks to local vendors who then resold it to farmers making profits. That was a perfect example of environmental disaster where pesticide vendors care less but the poor who is unaware continues to suffer not only from pesticides but also from natural disasters that are common occurrences.

In some countries in Asia, a visit to several pesticides formulators revealed that most of them operate their own locally built burners for disposal of toxic waste they generate. Unfortunately, the types of burners in use are archaic, substandard because they lack the destructive efficiency of dedicated incinerators. They constantly spew out dangerous dioxins into the environment. In an effort to dominate the market in production of pesticides, annual sales and distributions are expanding aggressively and fast. Equally the rate, level and frequency of generating unlimited toxic waste continue with little or no control.

Disposal of stocks

Disposal of even the already identified stocks in developing countries has been difficult. As indicated above the necessary financial resources are lacking. There hasn't been much headway in disposal since 1991 when 60 tonnes of dieldrin was disposed of from Niger under the financial aid from USAID. Thereafter only few countries benefited from disposal. In 1993 disposal of dieldrin took place in Uganda under FAO's TCP programme then also in Madagascar, Mozambique, etc. with the financial support of Germany executed through GTZ.

As much as FAO is making the effort to bring the issue high on the international agenda, the desire to dispose of obsolete pesticides did not progress, as it should. A total of only 2,419 tonnes has been disposed of during the last 10 years. This means that at the rate at which disposal is progressing, it will take several decades before meaningful results can be achieved. A summary Table of the list of the few countries that benefited from disposal in Africa and the Near East is in *Annex 4*.

Disposal undertaken by pesticide distributors

Among members of the industry, only few disposed of their own obsolete stocks from their own operation sites. Accurate figures have not been made available to FAO for recording. Only meagre information was received mainly from the countries concerned. Sometimes, the Ministries of Environment or the Environmental Agencies of the countries concerned don't know that operations have taken place. The disposals by the Industry are known not directly from companies but through different avenues which includes the following:

No	Country	Tonnes	Company involved
1	Côte d'Ivoire	821	Shell: soil, sludge, in 1997/98
2	Kenya	100	ICI Twiga chemicals 1991,
3	Malawi	70	Shell Co. Aerosol & contaminated soil 1993
4	Tanzania	160	ICI Co. (own waste) in 1991
5	Uganda	40	Cotoran, (fluomeutron, 550 FW, 5 l plastic, 2000
	Total	**1,191**	

Financial support

As a matter of emphasis, the factor affecting activities related to obsolete stocks, prevention or disposal is the lack of funds. Since 1991 a total of nearly US$ 30 million has been earmarked towards obsolete pesticides in one way or another. Part of this total has not yet been implemented. Unfortunately the number of donors were either limited or only the same few donors were usually the ones that continued to provide supports as shown below:

Summary of financial contribution by source between 1994 and 2000

No	Contributor	US$	Percent Contribution
1	Netherlands *	11,524,795	39.00
2	Denmark	6,000,000	20.24
3	Germany-GTZ & KfW	3,315,000	11.18
4	South Africa	2,000,000	6.75
5	USAID	1,980,000	6.68
6	Sweden/Sida	1,456,000	4.91
7	Bilbao-Spain	1,000,000	3.37
8	FAO/TCP	1,002,000	3.38
9	Yemen loan from W/Bank & IFAD	770,000	2.60
10	Shell	300,000	1.01
11	GCPF for Gambia & Madagascar?	191,000	0.65
12	Islamic Bank	100,000	0.34
	Total	**29,638,795**	**100**

For details, reference should be made to *Annex 3.*

The Table above does not include contributions made by UNEP, the Environmental Agency of Canada or FAO for survey and inventory taking in Latin America, Central and the Caribbean countries. FAO's contribution approved a sum of about *US$ 192,000* under its Technical Cooperative Programme, for in-depth studies of obsolete pesticides in Colombia. The country faces serious and widespread environmental hazards both from buried and long-term storage of obsolete pesticides. The Government of Finland contributed a sum of *US$ 500,000* towards the disposal of stocks from Nicaragua.

Detailed list of financial sources and the level of fund earmarked for disposal activities either for ongoing or planned projects is in Annex 3. However, the Annex does not include figures for Latin America or for Asian countries. Japan has contributed a sum of *US$ 317,000* for countrywide surveys and for taking inventory in South East Asian counties.

Prevention of accumulation of obsolete stocks

This is a salient feature under the FAO programme of prevention of accumulation and disposal of obsolete pesticides. One of the main reasons for accumulation of obsolete pesticides and the suffering inflicted on the poor countries is mainly because of lack of appropriate guidelines. FAO has taken this point as a priority and developed appropriate guidelines and continues to do so. Few of the currently available guidelines include the following:

- Prevention of accumulation of obsolete pesticides
- Pesticide storage and stock control manual
- Disposal of bulk quantities of obsolete stocks
- Management of small quantities of pesticides
- Assessment of contaminated soil: reference manual
- Guideline on inventory taking of obsolete stocks
- Brochure highlighting obsolete stocks
- Videos on disposal of stocks and various posters showing affected sites used for raising awareness and training

The guidelines on (a) Disposal of bulk quantities of obsolete stocks and the (b) Management of small quantities of obsolete pesticides in the above list are a result of a joint effort among FAO, UNEP and WHO. Advantage will continue to be taken of such collaborative effort as and when opportunities arise.

Other guidelines will be developed and made available as soon as priorities are identified and the needs for them are established.

Other activities related to obsolete stocks

The following points feature high in the FAO's list of activities aimed at achieving solutions to the problem of obsolete stocks.

1. Maintain database on global stocks inventory.
2. Maintain database of disposal technologies.
3. Provide useful information and guidelines to member countries and to others in need in hard copies and electronics formats.
4. Maintain information on obsolete stocks on the FAO Internet Website.
5. Produce and distribute video on issues and problems associated with obsolete pesticides and disposal of stocks including posters, slides, etc.
6. Produce and distribute brochures on obsolete stocks or related information of interest.
7. Organise workshops, training seminars both within individual countries and on regional basis.
8. Provide advisory services to member governments on issues of obsolete pesticides and provide guidance on the best course of action leading to solutions of obsolete pesticides or disposal.
9. Raise the issue of obsolete pesticides high on international agenda and mobilise opinions to finding solutions from the point of view of affected countries and from the global perspectives.
10. Organise donors meetings and consultation of experts on regular basis.
11. Assist countries in the development of disposal projects and in finding financial support for disposal in close collaboration with countries concerned by jointly organising donors meeting locally.
12. Provide supervision & monitoring of disposal of obsolete pesticides in countries where disposal of stocks is inoperations.
13. Raise awareness on pesticide problems and obsolete stocks at various levels and enhance the means leadingtowards solving problems of accumulation of stocks, etc.

Coordination strategy

FAO coordination includes the following line of actions:

1. Follow up with panel of experts and donors
2. Encourage and follow up Interagency networking or coordination

3. Raising awareness in collaboration with all concerned and establish basis to
   - Enhance prevention of accumulation,
   - Enhance introduction of alternative methods of pest control,
   - Enhance national and regional networking.

The turning point

The turning point to begin to address the problem of obsolete pesticides started getting attention in 1992. The 1992 Rio-Summit of the United Nations Conference on Environment and Development (UNCED) helped countries to realise and to be aware of the seriousness of environmental hazards and the consequences to the human health. This continues to be instrumental part for countries to take actions or look for support in finding solutions towards obsolete stocks although not as fast or as aggressively as it should. Nevertheless, many countries, or governments and organisations have started since the UN Summit in Rio, a series of positive actions. Quite a few managed to form relevant agencies responsible for environmental protection. This is a milestone, which in some ways contributes to long-term solution of problems and issues of obsolete stocks.

Why help the poor countries in disposal of obsolete stocks?

Poor countries desperately need help for a number of reasons. Looking at the following list of only 27 poor countries among many others should provide the answer as to why support to developing countries is urgently necessary.

A table of least developed and poor countries ranked

No	Country	Grade in poverty	No	Country	Grade in poverty
1.	Togo	145	15.	Guinea	162
2.	Mauritania	147	16.	Malawi	163
3.	Djibouti	149	17.	Rwanda	164
4.	Nigeria	151	18.	Mali	165
5.	Demo. Rep. Congo	152	19.	Central Africa	166
6.	Zambia	153	20.	Chad	167
7.	C□te d'Ivoire	154	21.	Mozambique	168
8.	Senegal	155	22.	Guinea Bissau	169
9.	Tanzania	156	23.	Burundi	170
10.	Benin	157	24.	Ethiopia	171
11.	Uganda	158	25.	Burkina Faso	172
12.	Eritrea	159	26.	Niger	173
13.	Angola	160	27.	Sierra Leone	174
14.	Gambia	161			

Source: Construire l'Afrique, No. 057 du 10 au 31 Octobre 2000

Most of the above listed and other African countries:

- Are in need of immediate support.
- Are desperately poor.
- Live off toxic waste conditions or hazardous substances.
- Pay back at least US$ 9 for every US$ 1 they receive as part of aid components or in servicing debt payments, etc.
- Neither facilities nor expertise or resources are available.
- Are unaware of the danger of waste.
- Live under natural environmental and other pandemics (Suffer from multiple and repeated natural disasters such as El Nino (devastating weather phenomenon) war, ethnic strife, drought, pest invasions, pestilence such as locust, migratory pests, malnutrition, famine, encroaching desertification, political upheaval, etc.).
- Are almost always under eternal burden of debt servicing.

For example countries that are deepest in debts are like the following with the high percentage of indebtedness:

- Sao Tomé & Principe 615%
- Guinea Bissau 518%
- Nicaragua 318%
- Angola 298%
- Rep. of Congo 207%

Most people in Africa suffer from various tropical diseases and sicknesses of all kinds. Of the total worldwide estimate of 33 million people suffering from AIDS, 23.4 million or 71% live in Sub-Saharan Africa. This definitely affects development. Add to the already sick and hungry people with no food security, toxic waste in the environment is a further blow. That is why the poor in developing countries need urgent support and guidance.

Alternative methods of pest control

There should be a way of wriggling out from never-ending saga of pesticide trauma. Developing countries should transform the method of agricultural pest control from using pesticides into alternative methods that are friendly and environmentally safe. The strategy hinges on policies of diverting resources to alternative methods. There needs to be interdisciplinary approach for working and coordinating among researches to focus attention on Integrated Pest Management. This calls upon specialists in the area of Soils, Agronomy, Engineering, Plant Pathology, Weed Science, and Entomology to work together. All these need to pool brains and financial resources to arrive at both short and long-term solutions not only concerning pesticides but other related issues undermining development, food security and human health.

Annex 1 - Obsolete pesticide inventory and stocks disposed of

	Country	Total in Tonnes	Total disposed of	Comments agencies involved in disposal
	AFRICA			
1	Algeria	207		
2	Benin	421		
3	Botswana	18,249		
4	Burkina Faso	74		
5	Burundi	169		
6	Cameroon	225		
7	Cape Verde	35		
8	Cent African Rep.	238		
9	Congo	2		
10	Congo Dem. Rep.	591		
11	Cote d'Ivoire	7		
12	Equatorial Guinea	146		
13	Egypt	591		
14	Eritrea	223		
15	Ethiopia	1,500		
16	Gambia	7	**14**	Industry & the Overseas Develop. Corp. of UK
17	Ghana	50		
18	Guinea Bissau	9		
19	Guinea-Conakry	4		
20	Kenya	56		
21	Libya	44		

22	Madagascar	135	**135**	70 tonnes removed Gov. of Germany-GTZ in 1996, 56 tonnes GCPF, GTZ, Swiss Govt.
23	Malawi	111		
24	Mali	13,761		
25	Mauritania	38	**200**	200 tonnes of Dieldrin. Financed 62.5% by Germany-GTZ and 37.5% by Shell Co. 37.5% in 1997
26	Morocco	2,265		
27	Mozambique	443	**160**	Government of Germany-GTZ 1996
28	Namibia	43	**202**	Finance contributed by the Gov. of S/Africa
29	Niger	116	**60**	55 (t) but 60 (t) total weight removed) USAID/Germany-GTZ financial support 1991)
30	Rwanda	451		
31	Sao .T/Principe	3		
32	Senegal	150		86(t) Carbaryl reformulated, 24 (t) carbaryl to be disposed of
33	Seychelles	0	**12**	12 tonnes removed by Food and Agric. Organisation & Govt. the Netherlands in 1997
34	Sierra Leone	7		
35	South Africa	0	**603**	Disposed of in 98/99 under own (I.e. S/African) financial support
36	Sudan	666		
37	Swaziland	0	**9**	Finance contributed by the Government of S/Africa
38	Tanzania	1,136	**57**	57 tonnes removed by the Govt. of Germany-GTZ in 1996
39	Tchad	0		
40	Togo	86		
41	Tunisia	882		
42	Uganda	214	**50**	(1) FAO in Cooperation with UNCDPF in 1993
43	Zambia	0	**360**	FAO, The Netherlands and Germany-GTZ
44	Zanzibar-Tanzania	0	**280**	Government of the Netherlands in 1996
45	Zimbabwe	27		
Total Africa + disposed		**43,382**	**2,142**	
			5%	**Percent disposed of the total 43,400 Tonnes**
	NEAR EAST			
1	Iran	1,139		
2	Iraq	232		
3	Jordan	0		
4	Kuwait	2		
5	Lebanon	177	**10**	The Food and Agricultural Organization of UN 1999
6	Qatar		**5**	Government's own financial support
7	Syria	327		
8	Saudi Arabia	241		
9	Yemen	1,540	**262**	FAO, the Netherlands and Germany (through KfW German-Bank)
Total Near East		**3,658**	**277**	**Total disposed of from the Near East**
Grand total		**46,97**	**2,419**	
Total existing & disposed of			**50,545**	**(Tonnes of waste)**

A Summary of countries covered in Africa most of which require revised inventory and updating

No	Country	No	Country	No	Country
1	Algeria	16	Gambia	31	Sao Tome/Principe
2	Benin	17	Ghana	32	Senegal
3	Botswana	18	Guinea Bissau	33	Seychelles
4	Burkina Faso	19	Guinea-Conakry	34	Sierra Leone
5	Burundi	20	Kenya	35	South Africa
6	Cameroon	21	Libya	36	Sudan
7	Cape Verde	22	Madagascar	37	Swaziland
8	Cent. African Rep	23	Malawi	38	Tanzania
9	Congo	24	Mali	39	Tchad
10	Congo Dem. Rep.	25	Mauritania	40	Togo
11	Cote d'Ivoire	26	Morocco	41	Tunisia
12	Equatorial Guinea	27	Mozambique	42	Uganda
13	Egypt	28	Namibia	43	Zambia
14	Eritrea	29	Niger	44	Zanzibar-Tanzania
15	Ethiopia	30	Rwanda	45	Zimbabwe

Countries covered in the Near East

1	Iraq	4	Kuwait	7	Syria
2	Iran	5	Lebanon	8	Saudi Arabia
3	Jordan	6	Qatar	9	Yemen

Annex 2 - Countries under survey in Central, Latin America and the Caribbean countries

1	Antigua & Barbuda	13	Dominica	25	Nicaragua
2	Argentina	14	Dominican Republic	26	Panama
3	Bahamas	15	Ecuador	27	Paraguay
4	Barbados	16	El Salvador	28	Peru
5	Belize	17	Grenada	29	Saint Kitts and Nevis
6	Bolivia	18	Guatemala	30	Saint Lucia
7	Brazil	19	Guyana	31	St Vincent & the Grenadines
8	Chile	20	Haiti	32	Samoa
9	Colombia	21	Honduras	33	Solomon Islands
10	Cook Islands	22	Jamaica	34	Uruguay
11	Costa Rica	23	Maldives	35	Vanuatu
12	Cuba	24	Myanmar	36	Venezuela

Annex 3 - A summary of financial support for disposal of strocks either earmarked or promised

No	Year	Country supported or seeking support	Bilbao - Spain	Denmark DANIDA	FAO/TCP	Germany-GTZ & KfW	Islamic Bank	Nether - lands	Shell - GCPF	Sweden/ Sida	South Africa	USAID	Govt. of Yemen	Total by country in US$
1	1991	Niger				150,000						640,000		790,000
2	1993	Madagascar				600,000								600,000
3	1993	Uganda			200,000									200,000
4	1994	Mozambique		6,000,000		800,000								6,800,000
5	1996	Tanzania/Zanzibar				450,000		980,000						1,430,000
6	1996	Yemen			350,000	275,000		***640,000**						**625,000**
7	1997	Mauritania				500,000			300,000					800,000
8	1997	Seychelles						***100,000**						Footnote
9	1997	Zambia			250,000	540,000		***400,000**						790,000
10	1998	Ethiopia						2,250,000		1,376,000		1,000,000		4,626,000
11	1998	Lebanon			101,000									101,000
12	1999	Namibia									S/Africa			S/Africa
13	1999	S/Africa									2,000,000			2,000,000
14	1999	Swaziland									S/Africa			S/Africa
15	1999	Tanzania						1,000,000						1,000,000
16	99/00	Senegal						600,000				340,000		940,000
17	1999	Yemen					100,000	406,800		80,000			770,000	**1,356,800**
18	1999	Lebanon			101,000									101,000
19	1999	Gambia							**133,000**					133,000
20	99/00	Madagascar							**58,000**					58,000
21	99/00	Country undecided	1,000,000											1,000,000
22	1994->>>>	**FAO/Netherlands Projects**						**US$**						
		1994-1996	GCP/INT/572/NET					**2,609,975**						
		1996-2000	GCP/INT/650/NET					**1,642,122**						
		2000-2003	GCPF/INT/780/NET					**2,035,898**						
		Total	**1,000,000**	**6,000,000**	**1,002,000**	**3,315,000**	**100,000**	**11,524,795**	**491,000**	**1,456,000**	**2,000,000**	**1,980,000**	**770,000**	**29,638,795**
Percentage contributed by source			**3.37**	**20.24**	**3.38**	**11.18**	**0.34**	**39**	**1.66**	**4.91**	**6.75**	**6.68**	**2.60**	**G/Total US$**
								Grand total US$			**29,638,795**			
* Asterisks are under DGIS projects and thus not shown in total by country.								**Total percentage**			**100,00**			

Annex 4 - Summary of obsolete pesticide stocks disposed of in Africa and the Near East with direct financial contribution

No	Year	Country	Pesticides	Qty (Tonnes)	Agency involved
1	1991	Niger	Dieldrin	60	USAID/Germany-GTZ
2	1993	Madagascar	Dieldrin	135	70 tonnes by Germany-GTZ & 65 t. by GCPF, Swiss and Govt.
3	1993	Uganda	Dieldrin	50	FAO/UNCDF
4	1994	Mozambique	DDT/Monocrotophos	160	Germany-GTZ
5	1995	Tanzania (Zanzibar)	Various	280	The Netherlands-DGIS/USAID
6	1996	Seychelles	Various	12	FAO/the Netherlands-DGIS
7	1996	Tanzania	Dinitro-O-Cresol (DNOC)	57	57 (t) Germany
8	1996	Yemen	Various	262	FAO/the Netherlands-DGIS/KfW-Germany
9	1997	Mauritania	Various	200	Germany-GTZ & (Shell contributed 37.5%)
10	1997	Qatar	Various	5	Government
11	1997	Zambia	Various	360	FAO/the Netherlands-DGIS/Germany-GTZ
12	1999	Lebanon	Mainly Fenitrothion	10	FAO 1999
13	1999	Iraq	Contaminated containers		90,000 by FAO (different weights) 1999
14	1998/99	South Africa	Various	603	South African Government 98/1999)
15	1998/99	Swaziland	Various	9	South African Government 98/1999)
16	1998/99	Namibia	Mainly HCH	202	South African Government 98/1999)
17	1999	Gambia	Various	14	Industry and Overseas Develop. Corporation
			Total	**2,419**	

DGIS: Ministry of Foreign Affairs, Government of the Netherlands
UNCDF: United Nations Country Development Fund
Kfw: *Kreditanstalt für Wiederaufbau: (German Kredit Bank in Frankfurt)* **(t) Tonnes**
Note Disposals undertaken in Uganda, Niger, Mozambique and Madagascar were limited either to *Dieldrin* or a few other types of stocks. There are still stocks in these countries that require disposal.