NATIONAL PROFILE

FOR

THE MANAGEMENT OF CHEMICALS IN EGYPT

JANUARY 1999

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Introduction

The development of the National Profile for the Management of Chemicals followed the recommendations of the Intergovernmental Forum on Chemical Safety (IFCS) which has been established as a follow-up to the Rio Conference on Environment and Development (UNCED) held in 1992 in Rio de Janeiro, Brazil. At this conference, Heads of States or Governments adopted “Agenda 21”, a document outlining responsibilities towards the achievement of sustainable development.

Chapter 19 of Agenda 21 deals with environmentally sound management of chemicals as well as illegal international traffic in toxic and dangerous products. The six programme areas on which governments should base their actions and priorities are:

- Expanding and accelerating international assessment of chemical risks;
- Harmonization of classification and labeling of chemicals;
- Information exchange on toxic chemicals and chemical risks;
- Establishment of risk reduction programs;
- Strengthening national capabilities and capacities for the management of chemicals; and
- Prevention of illegal international traffic in toxic and dangerous products.

Egypt participated in the Rio Conference and the Stockholm Conference, which established the Intergovernmental Forum on Chemical Safety

(IFCS). The IFCS is a forum for governments to exchange information on activities being undertaken to safeguarding health and the environment from chemicals, in spite of the benefits that they bring in enhancing the livelihood of the world.

The process of developing the National Profile falls under Program Area E of Chapter 19, titled 'Strengthening National Capabilities and Capacities for the Management of Chemicals'. The inaugural meeting established a co-ordinating team with representation from the following ministries, institutions and agencies:

- Cairo and Ain Shams Universities
- Egyptian Environmental Affairs Agency (EEAA)
- Ministry of Agriculture
- Ministry of Industry
- Ministry of Health & Population
- Ministry of Interior
- Ministry of Manpower & Immigration
- Ministry of Public Works
- Ministry of State for Scientific Research
- Ministry of Trade

The National Co-ordinating Team (NCT) met several times in the initial stages. Members were requested to submit relevant data from their institution to the Secretariat, for inclusion in the National Profile. Sub-committees were formed where necessary to deal with selected/specified areas in details to ensure completeness of the document.

Executive summary of the national profile

Egypt is primarily an agricultural country. Pesticides and fertilizers are being used extensively to increase crop yield of limited cultivable land to meet the requirements of the exponential increase in population. The overuse of such substances contaminates the air, the soil, the surface and underground water and the crops. Outdated pesticides and fertilizers and their empty containers create serious health and environmental problems.

Over the past decades, Egypt has been engaged in rapidly progressing economic related industrial development. The industrial base in the country accommodates a variety of chemical industries that have created several problems, most important of which is that of industrial chemicals. This problem is rather complex and can not be attributed to one single cause but rather to a sequence of interrelated events leading eventually to uncontrolled disposal of Hazardous Wastes.

Different chemical substances are being used in pharmaceutical, petroleum industries, laboratories, in housing and the production of consumer goods in Egypt. Currently an exceedingly large number of chemicals is imported, manufactured, marketed, transported, stored and disposed of, thus creating huge benefits, but also health and environmental risks.

Explosive are used in different activities, such as mining, police activities.

Radioactive substances are used in clinical activities, research, welding and piping testing.

Handling of such substances in an environmentally sound manner is of paramount importance for proper health and environmental protection as well as for the sound management of natural resources and life enjoyment.

The major problems facing controlling chemicals in Egypt are:

- Inadequate capabilities to assess the potential toxicity and to control the nature and purity of imported or domestically produced chemicals.
- Handling of chemicals by inadequately informed or trained personnel, especially operators in small-scale enterprises.
- Shortage of management skills needed to deal safely with technology transfer and with the storage, transport, use or disposal of chemicals.
- Lack of effective mechanisms for coordinating the work of those responsible for different aspects of chemicals safety.
- Lack of means of coping with chemicals accidents, including the treatment of victims and the subsequent rehabilitation of the environment.
- Inadequate proper management of chemicals and enforcement of regulations.
- Lack of reliable information sources to establish properly coordinated infrastructures, controls and procedures to deal properly with chemical safety.

Egyptian activities in managing chemicals:

Egyptian Environmental Affairs Agency (EEAA) is the national body, which is responsible for drawing up Egypt's policy on the welfare of the environment and natural resources, endorsing executive plans and programs and the promulgation and follow-up of legislation.

With the growing interest in Egypt for the management of environmental problems, EEAA has established a national strategy to achieve sound environment and sustainable development. In this strategy the management of Hazardous substances including chemicals plays an important role.

In recognition of the importance of establishing an information and management system for the identification, registration, categorization and management of chemicals, EEAA is currently developing a

comprehensive database for Hazardous substances including chemicals. Efforts will be directed towards the collection of data from different sources, which include producers, users, importers and distributors of chemicals. Categorization and specifications of these substances will follow the international codes.

EEAA, in consulting with the competent ministries, is developing pollution prevention programs based on economic incentives and clean technologies that are compatible with Egyptian development after adaptation to the specific economic, cultural, social and institutional context in Egypt in order to encourage the steady reduction of hazards resulting from mishandling chemicals.

EEAA, in cooperation with the competent authorities and donner countries is currently developing a national system for controlling handling of chemicals, Such systems will include the following:

- Establishment of an adequate infrastructure monitoring and controlling systems for importation, manufacturing, transportation, storage, usage of chemicals.
- Establishment of information and database for handling Hazardous wastes.
- Exchange of experience in the field of research and development, with the relevant national and international organization.
- Providing the public with information which will allow them to understand and develop confidence in the regulatory systems' ability to ensure that the industrial installations are operating in an environmentally sound way.
- Establishment of treatment and disposal facilities for hazardous Waste.
- Advanced training in hazard assessment and human resource development and quantitative risk assessment (QRA).
- Introduction of clean technology alternatives, and environmental management system.
- Proper enforcement procedures for legislation and regulation.
- Education and public awareness about chemicals.

EEAA acts as the Designated National Authority (DNA) for implementation of London Guidelines for the Exchange of Information

on Chemicals in International Trade and Prior Informed Consent (PIC) procedures, That has been developed to "The Rotterdam Convention". For conservation of the environment and its resources, Egypt banned

The importation of goods and substances that are banned by the original producer or by the developed countries even if they are in the form of donations or aid.

Chapter 1: National Back Ground Information

1.1 Physical and Demographic Context

Location

Egypt enjoys a unique geographical location. It is an Arab African country, being situated on the northeastern corner of the African continent. It is also partly an Asian country, being linked to Asia by the Sinai Peninsula, which has always played a pivotal role over history as a crossing point between the continents of Asia, Africa and Europe. Due to its singular geographical situation, Egypt has always been a connecting link between the world continents. Although Egypt's position was affected following the discovery of the Cape of Good Hope route, the country later regained its vital role after the digging of the Sue Canal. Egypt lies between latitudes 22" and 32" and between longitudes 24" and 37" to the east of Greenwich line.

Geographical Borders

Egypt is bounded as follows:

- To the north, by the Mediterranean sea with a 995 km long coast.
- To the east, by the Red Sea with a 194 km long coast.
- To the north east, by 265 km long borders with Palestine and Israel.
- To the west, by 1105 km long borders with Libya.
- To the south, by 1280 km long borders with Sudan.

Area

The Arab Republic of Egypt has a total area of about 1,002,000 Sq. kilometers, of which only 35,189 Sq. kilometers, i.e.; 3.6% are populated.

Capital

Cairo, the capital of the Arab Republic of Egypt is a time-honored city, with an outstanding position among world capitals. It has a population of 6,789,479, ranking twenty first among world cities in order of population, and the largest in the Arab world and Africa.

Geography

The Arab Republic of Egypt is divided into four major parts:

1- Nile Valley and Delta

It has an area of about 33,000 Sq. km accounting for 4% of the total area of the country, while the remaining area; i.e.; 96%, is desert. It extends in the south from north of Wadi Halfa up to the Mediterranean coast in the north.

It is divided into:

1st- Upper Egypt, extending from Wadi Halfa to the South of Cairo.
2nd- Lower Egypt (Nile Delta), extending from the South of Cairo to the Mediterranean coast in the north.

2- Western Desert

The Western Desert occupies an area of about 671,000 Sq. km, i.e.; 68% of the country's total area, extending from the Nile Valley in the east to the Egyptian-Libyan borders in the west and from the Mediterranean coast in the north to Egypt's southern borders with Sudan.

The Western Desert terrain is dominated by sand dunes, extending from north to south. It is divided into two sections:

1st- The northern section extending from the Mediterranean coast to the Great Depressions area.
2nd- The southern section, extending from the south of the Great Depressions area to the borders of Sudan.

3- Eastern Desert

With an area of about 225,000 Sq. km, i.e.; 25% of the country's total area. The Eastern Desert marked with the eastern Mountain range along the Red Sea coast, with peaks that rise up to about 2000 meters above sea level.

4- Sinai Peninsula

With an area of about 61,000 Sq.km, i.e.; 6% of the country's total area, the Sinai Peninsula is triangular in shape, with the base in the

north and apex in the south. It is bounded by the Mediterranean coast to the north, the Gulf of Aqaba to the east, and the Sue canal to the west.

Climate

Climate is determined by many factors, chief of which are location, terrain and overall system of atmospheric pressure and water surfaces. Basically (Egypt lies within the dry tropical region, except for the northern parts that lie within the warm moderate region, with a climate similar to the Mediterranean region, characterized by hot dry summers, and moderate winters with little rainfall, increasing along the coastal areas.

Annual average temperature in Lower Egypt ranges from 20" centigrade during the day to 7" centigrade at night. In Upper Egypt average temperature range from a maximum of 25" centigrade to a minimum of 17" centigrade.

Natural Resources

Egypt's land area is about 238 million feddans, of which only 7.7 million feddans are cultivated, while the remaining part consists of desert, lakes and territorial waters.

Water Resources

Egypt depends, for its water supply on three fresh water sources namely: surface water from the River Nile, rain and storm water and subterranean water. While the Nile remains, for Egypt, as the main source of fresh water, there are additional, albeit limited resources consisting of the following:

- Recycling agricultural drainage water resulting from irrigating cultivated land, either used as such or mixed with fresh Nile water.
- Treated sanitary waste water.

Quantity of water available for use at present is 61.61 billion cubic meters per annum, broken down as follows:

53.3 billion cubic meters of Nile water from the Aswan Dam reservoir, to irrigate cultivated land (old and newly reclaimed).

3.3 billion cubic meters of underground water, in the Delta, Upper Egypt and Sinai, for drinking purposes.

7.2 billion cubic meters of recycled agricultural drainage water, for non-consumer purposes.

Water Resources Forecast for the Year 2000.

57.5 billion cubic meters of Nile water.

4.6 billion cubic meters of underground water in the Delta and Nile valley.

7 billion cubic meters of recycled agricultural drainage water.

1.1 billion cubic meters from the water management programme.

2.5 billion cubic meters of underground water from deep wells in the
desert.

Total forecast water resources for the year 2000 are estimated at 73.7 billion cubic meters.

Mineral Resources

The Arab Republic of Egypt has a large wealth of major minerals, particularly petroleum, phosphate, iron and manganese.

Population

The 1996 census shows the following:

- Total number of population as of 1996, is 61,452382 against 50,405,238 according to the 1986 census, with an increase of 10,948,144.

Males accounted for 51.2% of the population and females 48.8%, reflecting the same percentage of the 1986 census.

The number of people residing within the country rose to 59,272,382 from 48,254,238 in 1986; Egyptian expatriates abroad, on temporary

immigration basis fell to 2,180,000 against 2,250.000 in 1986, in addition to 720,000 permanent Egyptian immigrants abroad. According to United Nations' data, Egypt ranked, in terms of population, seventeenth among world countries.

In 1996, annual population growth rate in urban areas dropped to 1.85% compared to 2.1% in 1986, and to 2.28% in rural areas.

Population of Cairo Governorate rose to 6,789,479 in 1996, with an increase of 720,784, at a percentage pf 11.9% compared to the 1986 census. In terms of population, Cairo ranks the twenty first in the order of world cities. The labor force rose to 17,795,647, accounting for 35.4%of the total population, compared to 13,400,387 accounting for 34.4% of total population in 1986.

Rate of immigration of population from rural to urban areas decreased by 1%.

Family size decreased to 4.6 persons compared to 4.9 persons according to the 1986 census.

Rate of illiteracy dropped by 11%. According to the 1996 census, the number of illiterate persons at the age of ten and above was 17,347,745, representing, 38.6% of the total population, compared to 17,147,597 illiterates according to the 1986 census, representing 49.6%.

The number of new cities in 1996 rose to 19 compared to 9 in 1986.

All the 1996 census indicators show that Egypt, having successfully implemented the economic reform policy as recognized by international economic institutions, has managed to address its social problems, particularly those of population, illiteracy, construction of new urban communities, moving out of the old valley to the south and extending infrastructure facilities to towns, villages and even squats.

Population Growth Rate

	1996/97	2001/2002
Population Growth Rate	1.94%	1.66%
Birth Rate	2.60%	2.27%
Mortality Rate	0.66%	061%
Total Fertility Rate	3.4	2.9 births per female
Contraceptives Use Rate	50%	60%
Percentage of Rural Areas Covered by Family Planning Units	80%	85%

Population Forecasts Broken Down by Sex and Specific Age Groups (1996/97 – 1997/1998)

Description		Population below 6	Education Age 6-24	Producti-vity Age 15-64	Old Age 65+
1996/97 (in thousand)	Male	4713.6	12784.9	17638.3	1043.1
	Female	4489.3	12125.2	17040.9	1202.8
	Total	9202.9	2409.6	34979.2	2245.9
%	Male	15.52	42.08	58.66	3.43
	Female	15.28	41.27	58.00	4.09
	Total	15.40	41.68	58.03	3.76
1997/98 (in thousand)	Male	4661.4	13014.3	18177.6	1081.9
	Female	4442.5	12351.2	17563.5	1235.6
	Total	9103.9	25365.5	35741.1	2317.5
%	Male	15.06	42.05	58.73	3.50
	Female	14.84	41.26	58.68	4.13
	Total	14.95	41.66	58.71	381

Population Density

The pattern of population distribution in Egypt is unique among world countries. Therefore, it is the object of the population policy to

redistribute population to various geographical regions, making full use of the unexploited vast areas and natural wealth by focusing on alternative areas in new cities and various urban communities. Sustained efforts are underway for the development of rural areas in Egypt with the purpose of curbing migration to urban areas. It is not worthy that the National Project for the Development of Sinai, with its many economic and strategic advantages will contribute to the easing of over-crowdedness by providing opportunities for settling about 2.9 million people and accelerating development rates.

Language

Arabic is the official language of the State.

1.2 Political/ Geographic Structure of the Country

Arab Republic of Egypt is consists of 26 provinces (governorates) each with a Governor.
The capital city, Cairo is the seat of government and is the place where most diplomatic missions have their offices.

The twenty six Governorates (provinces) are:

Nine provinces located at north Delta are:

Governorate	**Population (%)**	**Total area in (Km2)**
Cairo	11.5	214.2
Alexandria	5.60	2679.36
Al-Behera	6.70	10129.48
Kafr Al-Sheikh	3.80	3437.12
Al-Gharbia	5.70	1942.21
Al-Monofia	4.70	1532.13
Al-Kalubia	5.60	1001.09
Al-Sharkia	7.20	4179.55
Al-Dekhailia	7.10	3470.9
Damietta	1.50	589.17

Eight provinces located at upper Egypt

Al-Giza	8.10	85153.56
Al-Fayoum	3.40	1827.1
Beni Swaif	3.10	1321.5
Menya	5.60	2261.7
Assiut	4.70	1553
Sohag	5.30	1547.2
Qena	4.70	1850.6
Aswan	1.60	678.45

Three Provinces located at Suez Canal Area

Port Said	0.80	72.07
Ismailia	1.20	1441.59
Suez	0.70	17840.42

Two Provinces located at Sinai

North Sinai	0.40	
		60,714
South Sinai	0.10	

Located at the Border of the country

Red Sea	0.30	203,685
Mersa Matrouh	0.40	212,112
Al-wadi Algdeed	0.20	376,505

1.3 Industrial and Agricultural Sectors

Industrial & Mining Sector:
The major industries in Egypt are:
Textile and Cotton industry
Mining (Petrol oil, Natural gas, Phosphate, Manganese, Iron)
Fertilizers industries (phosphate & Nitrogenous fertilizers)
Aluminum industry
Steel and Iron industries
Cement industries
Carpet industries

Agricultural Sectors:

Egyptians economy are based on agriculture .The total crops area are Around 136,94 Thousand of Acres (Winter, Summer,Nile and Garden Crops).
The main crops grown in Egypt are Rice, Cotton, Wheat, Sugar cane Vegetables and Fruits.

The use of agrochemical is decreased than before due to the restricted regulations and awareness of the public to the harmful Impact of chemicals.

Table 1.A: Overview of the Industrial and Agricultural Sector

Sector	Number of Employees	Major Products in each Sector/Governmental
Industrial/ Manufacturing Sector	729,286	Textile, Cement, Iron & Steel, Chemicals,Wood,Food, Paper
Mining and Extraction	16,018	Petrolium,Phosphate ,Coke,Natural Gas
Agricultural Sector	6,778,000	Cotton, Rice,Wheat, Sugar-Cane, Vegetable&Fruits
Total	7,523,304	

Table 1.B: Structure of the Manufacturing/Agricultural Sector/Governmental

	Micro Farms Facilities[1]	Small Farms Facilities[2]	Medium Farms Facilities[3]	Big Farms Facilities[4]
Industrial/ Manufacturing Sector	5,455	22,924	99,301	620,860
Agricultural Sector	658,300	42,000	25,000	2,000
Total	663,755	64,924	124,301	622,860

1 : 1 to 10 employees(Industrial)/1to10 Acres(Agricultural)
2 : 10 to 100 employees(Industrial)//10 to20 Acres(Agricultural)
3 : 100 to 500 employees(Industrial)/20 to 50 Acres(Agricultural)
4 : More than 500 employees(Industrial)/More than 100 Acres(Agricultural).

Table 1.C: Breakdown of Agricultural Production by Region

Region	Major Crops	Total Quantity Of Crops	Size of Productive Areas(Thousands Acres)
Delta	Cotton[1]	12,675	710
Delta&upper Egypt	Wheat[2]	5,5	2,521
Delta	Rice[2]	4,3	1,401
Upper Egypt	Sugar-Cane[2]	11	301
Delta&upper Egypt	Vegetables	10,567	1,043
Delta&upper Egypt	Fruits	6,243	954
Total		295,058	6,930

1 Metric Qentar in thousands
2 Ton in Million

Table 1. D: Breakdown of Industrial Production by Region -94/95

Region	Total Value of Production/ Thousand Egyptian Pound	Number of Industrial Facilities	Number of Employees
Cairo	19,085,697	334	151,298
Alexandria	6,224,924	97	18,181
Port Said	67,386	6	3,525
Suez	46,823	5	7,263
Damietta	285,675	2	517
Al-Dekhailia	8,564	5	8,889
Al-Sharkia	79,568	47	11,410
Al-Kalubia	235,533	88	39,225
Kafr Al-Sheikh	256,478	25	4,414

Al-Gharbia	28,007	57	42,627
Al-Monofia	465,578	2	2,953
Al-Behera	647,985	54	12,068
Ismailia	73,782	4	759
Al-Giza	254,306	5	9,093
Beni Swaif	250,065	3	1,056
Al-Fayoum	5,697	2	1,234
Menya	374,630	27	3,289
Assiut	829,652	27	8,132
Sohag	49,638	25	1,881
Qena	2,756,345	22	14,981
Aswan	2,752	22	6,242
Red Sea	5,457	8	1,734
Al-Wadi Al gadeed	5,479	1	39
Marsa Matrouh	36,400	5	402
North Sinai	12,898	3	639
South Sinai	74,207	5	353
Total	32,163,526	881	352,204

1.4 Industrial Employment by Major Economic Sectors

Table 1.E:Industrial Employment by Major Economic Sector

ISIC Code	Description	Number of Facilitie-s	Total Emplo-yment	Out put Value/Year/ in Thousands	Major Emissions (Type)
31	Food Industry	520	358,263	8,107,966	Organics,Oil& Grease,
32	Textiles/Clothi ng&Leat-her Goods	145	1,565,945	5,072,297	Phenols,Heavy Metals,PM_{10},O rganics,Dyes
33	Wood&Wood Product, painting	33	5,134	102,776	Solvents,organ ics,TSP,
34	Paper&Paper Product	19	7,436	701,996	organics,TSP, Bacteria
35	chemical/ coal/Petro/	58	49,542	2,296,696	NO_x,CO,CO_2, SO_x,Organics,

	Plastic Products				Oil&Grease, Phenols,,NH_3, ,PM_{10},Si,SiO_2, Volatil Gases, Heavy Metals
36	Non-metalic Mineral Products	36	6,127	252,390	Fe,CO,CO2, SOx,TSP
37	Basic Metals Industry	25	44,295	4,045,758	NO_x,CO,CO_2, SO_x
38	Fabrication of Machinery& Equipment	66	34,818	1,944,694	NOx,CO,CO_2, SO_x
39	Building&Constructions	17	15,930	2,503,436	TSP,NO_x,CO, CO_2,SO_x,PM_{10}
	Mining & Extraction (coal/Oil/ Natural Gas/Minerals Metals)	8	4,926	709,441	NOx,CO,CO_2, SO_x,TSP
	Electricty Generation	2	2,095	93,468	Temperature, CO,CO_2
	Transportation	97	34,450	1,776,884	NOx,CO,CO_2, SO_x
Total		1,026	2,128,961	27,607,802	

Chapter 2 : Chemical Production,Import, Export and use

2.1 Chemical Production,Import and Export

The production and import of chemicals for local use are concidered to be high quantities where the export is meduim.Table 2.A: shows Chemical production ton/ year .

Table 2.A:Chemical Production and Trade/Governmental sector

Chemicals Type	Production/Manufacturing Ton/year	Imports(Value L.E thousands)	Exports (Ton/year&value)
Fertilizers	6,680,000	3,939,049,72	N.A
petroleum products			N.A
Industrial (used in manufacturing/processing facilities)	7,826,446	3,749,838,63	8,756,133,756
Total	7,826,446	3,749,838,63	8,756,133,756

2.2 Chemical use by categories

Pesticides are generally imported as technical material and formulated in the country.
Pesticides used in Egypt are regulated by Agricultural Law No. 53, that was issued in 1966, as well as the Ministerial Decree No. 215 issued in 1985. An interagency Pesticides Committee, under the umbrella of the Ministry of Agriculture, has been formed which is responsible for pesticide registration and licensing of imports. Before registration a pesticide is evaluated for efficacy for three successive years. At the time of registration it is examined for chemical and physical properties. The Central Agricultural Pesticides Laboratory (CAPL) regulates pesticides through its enforcement system and penalizes violators.

There is an "Association for Agrochemical Producers and Affiliates" in the country, but there is no NGO involved with pesticides.

Pesticides continue to be used in Egypt, under principles of IPM and are used only when absolutely necessary.

Table 2.B:Chemical used by Categories /Governmental sector

Type of Chemical	Number of Tons Used per Year in the Country
Pesticides- agricultural	5,756,000
Fertilizers	1,547,680
Electricity	70,436
Mineral&mining Industries	5,115,088,16
Food industries	3,783,840,32
Chemical Industry	1,341,729
Plastic	22,085
Petroleum	61,043,577
Cellulose Industry	169,334
Industrial Gases	13,463
Textile	2,878,783
Paper	30,928
Pharmaceutical Industry	86,034

2.3 Chemical Waste

A huge amount of Chemical waste is generated during manufacturing processes
The main categories of waste generated are summarized in Table 2.C

Table 2.C: Chemical Waste Generation

Nature of Industry	Type of Chemical Waste	Approx.quantity ton/year
Industrial Governmental Sector	Mercury Lead Chromium Cadmium Copper	1,838,724 24.489 6.092,069 3,738,841 2,055,026
Paper Industries	Organics &Inks	3,175
Engineering Industries	Sludge	1,650
Mineral Industries	Sludge	100,100

Chapter 3: Priority concerns Related to Chemicals Production, Import, Export, and Use.

3.1 Priorty Concerns Related to Chemicals , Import , Production, and Use

As stated in the previous sections, Egypt imports approximatly all its chemicals needs.The chemicals are used in mining, processing, manufacturing and agriculture. From the foregoing a whole spectrum of problems arising from the use of chemicals have to be anticipated. The manufacturing industuries are situated in greater Cairo, Alexandria,and upper Egypt while agriculture cover all parts of Delta and along the River Nile.

Air pollution

Air pollution attributable to the use of chemical substances has been associated with areas where mining, fertilizer manufacturing, cement production and quarrying are located . The most pollutant region is Greater Cairo due to

1- cement production and quarrying that produce dust and particulate matter.

2-In the mining sector (Phosphate, Manganese) which produce emissions of oxides of sulpher, nitrogen and carbon.

3- Foundries of lead are polluted a greater part of the town (north of Greater Cairo- Shoubra)

Pollution of Inland water

Effluents from industries are the major source of pollution of the streams and river systems. The same river is the main sourse of domestic drinking water . The Nile River which runs through Egypt is polluted with the disposal from Industries.

Run-off from agricultural activity has also contributed to pollution by fertilizer.

Pollution of Ground Water

The main sourse of ground water pollution is attributed to man made activities such as discharge of industrial wastes and drainage of agrochemicals.

Drinking Water Contamination

Most of drinking water in or near towns is treated against micro-organisms . This reduses the level of contamination to acceptable standards as far as micro-organisms are concerned. Heavy metals are not completely eliminated during this process.

soil contamination

Soil contamination is due to discharge of wastes form industrial, petroleum,& agriculture activities.

Hazardous waste treatment

Most of the industrial effluents either partially treated or not treated before disposal, the wastes from hospitals and laboratories are currentely incinerated at locally manufactured and imported hazardous waste incinerators.

Occupational Health

The non adhherence to rules requiring the use of appropriate protective clothing during use, handling and application of chemicals has been a major cause of problems.

Chemical Accident : Industrial

Few industerial accidents are reported.

Chemical Accident : Transport

Most of the reported incidents have been associated with tankers carring petrolium products, concentrated acids and chlorine.

Storage and Disposal of obsolete chemicals

The absence of designated storage and disposal sites has contributed to indiscriminate dumping. Depending on the quantities being generated, Some of the wastes are kept on the premises. The security at such storage sites is usually low ,increasing the risk of scavenging of dangerous materials by scavengers.

Nile River Contamination

Nile River is the main sourse of fresh water in Egypt and it is the sourse of fishing wealth,electricity generation and river transportation which links south Egypt with Delta . Due to increasing the number of population and the industrial projects, the industries dispose the liquid wastes to the river.That pollute water of the Nile and change its physical and chemical properties.

Table 3.B: Priority Concerns Related To Chemicals

Nature of problem	Scale of problem	Level of problem	Ability to control problem	Availability of Statistical Data	Specific Chemical creating Concerns	Priority Ranking
Air Pollution	National	High	Medium	Insufficient	SOx,NOx, CO,CO_2, H.Metals, O_3,H.C, Smoke,TSP	1
Pollution of Inland Waterways	National	High	Medium	Insufficient	H.C&Bect.,H. metals, Pestici-des,	2
Marine pollution	National	Medium	Medium	Insufficient	Oil, H. metals & Bect.	3
Ground water Pollution	Regional	High	Medium	Sufficient	H.C&Bect., H.metals, Pesticides,	1
Soil Contamination	Local	Medium	Low	Insufficient	Acidity, H.metals ,Pesticides	4

Chemical Residues in Food	National	High	High	Sufficient	Color,oxidizin-g & preserving agents	1
Drinking Water Contamination	National	High	High	Sufficient	MOH, National Org.for Potable Water	1
Hazardous Waste Treatment/Disp-osal	National	High	Medium	Insufficient	Nuclear radiation & drugs	3
Occupational Health (Agriculture)	Local	Low	Low	Not available	Pesticides	5
Occupational Health (Industrial)	National	High	Medium	Insufficient	Carcinogenic Chemicals & H.metals	3
Public Health	National	High	High	Insufficient	Pb,Cd,Hg, Pesticides	1
Chemical Accidents: Industrial	National	Medium	Medium	Insufficient	Inflammable Substances& Explosive Suspense	3
Chemical Accidents: Transport	National	High	Medium	Insufficient	Inflammable Substances	3
Unknown Chemical Imports	National	Medium	Medium	Not available		4
Storage/Dispos-al of Obsolete Chemicals	National	High	Medium	Not available		4
Chemical Poisoning/Suici-des	Local	High	Low	Not available		4
Persistent Organic Pollutants	National			Insufficient		

Chapter 4 : Legal Instruments and Non-Regulatory Mechanisms for Managing Chemicals.

The control on using chemical is one of the ways through which chemical risks to human and enviroment can be adequatly maneged . The control through legislation, regulation, guidelines, as minimum requirments to be observed in handling, use, storage and disposal of chemicals. Legal instruments can contribute to more efficient approach to the sound management of chemicals if they are adhered to the enforcement.

Egyptian regulations governing management of chemicals:

Egypt has issued a large number of environmental legislation governing, importing, manufacturing, trade, usage of chemicals covering different areas:

- Laws and regulations governing importing, manufacturing, trading, handling of chemicals used in industry, has been issued by The Ministry of Industry.
- Laws and regulations governing, importing, manufacturing, trading, handling and usage of pharmaceuticals, radioactive substances and insecticides, have been issued by The Ministry of Health.
- Laws and regulations governing importing, manufacturing, trading, possessing and usage of explosives, have been issued by The Ministry of Interior.
- Regulations governing operation of nuclear reactors and atomic activities and monitoring of radiation levels and disposal of radioactive wastes are the responsibility of Atomic Authority, affiliated to The Ministry of Electricity and Energy.

The Environmental Law No. (4) has been issued in 1994. Its executive regulations have been issued in February 1995. A full chapter of this Law regulates the management of hazardous substances including chemicals.

By this law, it is forbidden to deal with of hazardous substances without authorization from the concerned agencies. The competent ministries, in cooperation with EEAA and the Ministry of Health should develop

and promulgate a list of hazardous substances, which should be controlled and shall be revised from time to time as appropriate.

The competent ministries, after consulting with the EEAA, shall promulgate regulations establishing standards necessary to the protection of public health and the environment and applicable to those who handle chemicals. The standards shall cover the following:

- Record keeping practices that accurately identify the quantities of such chemicals, constituents which are significant in quantity or in potential harm to human health or the environment.
- Use of appropriate containers for such chemicals.
- Labeling practices for the identification of any containers used for storage, transport of such chemicals.
- Furnishing of information on such chemicals to persons transporting storing, or using it.
- Use of a manifest system and any other reasonable means to assure that all such chemicals are handling in the proper way.
- Contingency plans for effective action to minimize unanticipated damage from any chemicals' accident.

A great deal remains to ensure the environmentally sound management of chemicals within the principles of sustainable development and improved quality of life for human kind.

Egyptian Laws and regulation for managing chemicals

Environmental Law No. 4 for the year 1994

Article 29

It is forbidden, without a license from the competent administrative authority, to handle hazardous substances and wastes. The Executive Regulations of this Law explain the procedures and the conditions for granting such a license.

The Ministries, each in its field of competence, shall issue, in coordination with the Minister of Health and EEAA, a list of the hazardous substances and wastes as aforementioned in paragraph one of this article.

Article 30

Management of hazardous wastes shall be subject to procedures and regulations stated in the Executive Regulations of this Law.The Executive Regulations designate the competent authority, which, after consulting EEAA, will issue the tables of dangerous wastes to which the provisions of this Law shall apply.

Article 31

It is forbidden to construct any establishment for treating dangerous wastes without a permit from the competent administrative authority and before consulting EEAA. Disposal of dangerous wastes shall be according to the norms and conditions stated in the Executive Regulations of this Law. The Minister of Housing, Utilities and New Communities shall assign, after consulting with the Ministries of Health, Industry and EEAA, the disposal sites and the required conditions to authorize the disposal of dangerous wastes.

Article 32

It is forbidden to import dangerous wastes or to allow its entrance into or passage through Egyptian territories. It is forbidden, without permit from the competent authority, to allow the passage of ships carrying hazardous wastes through territorial seas or the exclusive economic zone of the ARE.

Article 33

It is mandatory for all those who produce or handle dangerous material, either in gaseous, liquid or solid form, to take precautions to ensure that no environmental damage shall occur.

The owner of an establishment whose activities may result in hazardous wastes shall, according to the provisions of this Law, maintain a register of these wastes and the method of disposing thereof, as well as contracting agencies for receipt of these wastes. EEAA is responsible for following up the register to ensure its conformity with the truth.

Regulations governing Handling of Industrial Chemicals:

Law number 499/1995:

Stated that the Ministry of Industry is the responsible agency for handling of poisonous and non-poisonous chemicals used in Industry.

The Ministry of Industry issued the rules and regulations for importation and trade of these chemicals.

Decree number 471/1995 of the Minister of Industry:

The Ministry of Industry must be informed of any activity concerning trade in poisonous or non-poisonous substances including the name of the shop owner, the number of this license and the kind of trade.

Decree number 138/1958 of the Minister of Industry, amended by decree 91/1059:

1. For trading in poisonous or non-poisonous chemical used in industry, a license must be issued from the Industrial Control Authority (ICA).
2. It is prohibited to have such a license together with ownership of any pharmaceutical enterprise.
3. This licenses is personal and cannot be transferred or inherited.
4. Poisonous materials should be kept in suitable packages with a label showing the name of the material, the supplying factory, the quantity contained. The word poisonous should be written in Arabic and one foreign language in red and in a clear place.
5. The owner of the shop or store must keep a log book with its pages serially numbered and stamped by the ICA. Any supply or selling should be indicated in this book.

Decree number 342/1962 of the Minister of Industry:

Added the following to MD 138/1958:

The non-poisonous material which are imported or bought by the factories for manufacturing their products are to be excluded from the license mentioned in MD 138/1958.

Law number 21/1958 concerning organization and development of Industry:

Chapter 2, articles 14, 15 authorize the Ministry of Industry to put specifications for raw materials and industrial products. The Minister of Industry issued the rules to be strictly followed in the production of more than 150 commodities.

Law number 21/1957 concerning the Egyptian Organization for Standardization and Quality:

The organization issued specifications for chemicals and household commodities such as: Red lead oxide primer. Matches, paint, solvents, fuel, pigments and dyes, food additives, perfumes, soap, detergents, clothes and blankets.

Regulations governing pesticide use:

Agricultural Law no. 53/1966

Article 78

Agricultural pesticides are those chemicals and formulations used to control plant diseases, pest insects, rodents, weeds, other organisms detrimental to plants, animal insects and parasites.

Article 79

Pesticide Committee is to be formed by a ministerial decree from the Minister of Agriculture. The task of the Committee is to specify pesticides to be used in country, determine their specifications, procedure of their registration and condition for use.

Article 80

Based on the recommendations of the Committee, the Minister of Agriculture issues ministerial decree that put the articles of the agricultural law into action particularly those concerning:

1. Kinds of pesticides to be imported for local use, their specifications, conditions of importation and handling.
2. Conditions and procedures of licensing for pesticides importation and trade.

3. Procedures of pesticides registration, registration renewal, registration fees.
4. Methods of pesticides sampling and analysis, ways of disapprobation by the producers on results of chemical analysis, procedures to be followed in considering approbation and judging its validity, and the fees to be paid for such approbation.

Article 82

Advertising or distribution of information on pesticides should comply with its specification and conditions for handling and registration and also with the recommendations of the Ministry of Agriculture for their use.

Regulations governing handling of pharmaceutical and chemicals in consumer goods:

Law No. 127/1955 (Pharmacy Practicing)

It regulates pharmaceutical affairs including establishments, personnel, products and ingredients. According to this law the ministry of the health apply full control over dosage forms of drugs, cosmetics, household insecticides and disinfectants, biological preparations and diagnostics, and medical devices.

Law No. 183/1960 Concerning narcotics control:

It sets regulations for handling and control of narcotics.

Ministerial Decree No. 429/1969

It sets conditions for storage and licensing procedure concerning narcotic substances.

Presidential Decree 450/1980

Concerning establishment of the national council for addiction control.

Ministerial Decree 487/1985

Deals with psychoactive substances and preparations. It annexes three tables dealing with three different levels and categories.

Law No. 367/1954 Chapter 2,3,4.

It regulates medical diagnostic laboratories, scientific research lab. and biological preparations laboratories.

Law No. 10/1966 and Amendments

Concerns food control.

Ministerial Decree No. 163/1967

It controls importation of food additives.

Decree No. 798/1957 and Ministerial Decree No. 679/1983

Deal with the requirements to be fulfilled in cooking ware containers and packages used for food processing and packaging.

Ministerial Decree No. 178/1975 and Amendments

Concerning coloring additives permitted in foods.

Ministerial Decree No. 16/1964 and amendments

Regulates the use of food preservatives.

Law No. 53/1966

Authorizes the Minister of Agriculture to regulate and organize investigation of food products of animal origin and the freeze food stuff.

Ministerial Decree No. 10/1957

Concerning licensing of household insecticides.

Law No. 118/1979

Concerning import and export of pharmaceutical and chemicals in consumer goods section 5, chapter 1, article 73 defines the role of the general organization for control of Imports and Exports. Under this law it is prohibited to import or export any commodity not fulfilling the specifications laid down by this organization (GOCIE). The minister of economy issued more than decrees dealing with control of many goods and commodities.

Ministerial Decree No. 315/1993

Prohibits the importation of blue asbestos among a list comprising six other chemicals.

Table 4.A : Referances to Exisiting Legal Instruments which Adress the Managment of Chemicals

Legal Instrument(Type, Referance,Year)	Responsi-ble Ministries or Bodies	Chemical use Categories Covered	Objectives of Legislation	Enforcement Ranking
Low No.4 of 1994& Executive Regulations issued by Decree No. 338 of 1995	EEAA	Industrial and Agrochemials	Environme-ntal Protection and Pollution Control, Establish in Egypt	(2)
Decree No.55 of 1983	MOMI	All chemicals used in industrial field	Regulate and control	(2)
Decree No.116 of 1991	MOMI		use,handli ng,and storage of chemicals in the work place enforceme-nt the facilities with training for directors and workers	(2)
Decree No. 60 of 1986	MOA	Pesticides	Regulate & control of using and restricted **compou-nds**	(2)

Decree No.258 of 1990	MOA	Fertilizers	Regulate and control the Importatio-n & sale of Fertilizers	(2)
Decree No. 7330 of 1994	MICD	Exposures	Regulate and control the importatio nand using the exposures	(2)
Decree No. 18039 of 1995	MICO	Exeplosures	Issue of license for import and use of exposures	(2)
Decree No. 499 of 1995	MOI	Poisonous and non poisonous substances in industry	control of handling the poisonous & non poisonous substance-s industry	(2)
Decree No. 138 of 1958	MOI			

Occupational health and safty legislation is a principal instrument for regulating the condtions under which work is carried out . According to the low No.137 of 1981 by ministry of manpower and Immigration and its DecreeNo.55 of 1983 is a comprehensive Act on the work enviroment ,which constitutes a frame work for the most important occuptional health and safty principales and which provides the bases for more details lower level provisions or adjacent legislation.

Table 4.B Overview of Legal Instruments to Manage Chemicals by use Category

Category of Chemical	Importation	Production	Storage	Transport	Marking	Use/ Handli-ng	Dispo -sal
Pesticides(agricultural ,public health and consumer use)	✓	✓	✓	✓	✓	✓	✓
Fertilizers	✓	✓	✓	✓	✓	✓	✓
Industrial chemical-(used in manufacturing/Proces-sing facilities)	✓	✓	✓	✓	✓	✓	✓
Petrolium Products	✓	✓	✓	✓	✓	✓	✓
Consumer Chemicals	✓	✓	✓	✓	✓	✓	✓
Chemical wastes	✓	✓	✓	✓	✓	✓	✓

Chapter 5: Ministries, Agencies and other Institutions Managing Chemicals

5.1 Responsibilities of Different Government Ministries, Agencies and other Institutions

The responsibilities of different ministries to ensure the life cycle of chemicals are saved through laws, regulations, and guidelines. These Ministries include Ministries of Health, Manpower and Immigration, Agriculture, Industry, Public work and Water Resources, Internal and Economic.

Table 5.A : Responsibilities of Government Ministries, Agencies and other Institutions

Stage of Life Cycle/Ministry Concern-ed	Import-ation	Produ-ction	Storage	Transp-ort	Distribution/ Marketing	Use/ Handlin-g	Disp-osal
Environ-ment	√	√	√	√			√
Health	√	√				√	√
Agricult-ure	√		√	√	√	√	√
MMI		√	√	√		√	√
Trade/ Commer-ce	√			√			
Industry	√	√	√	√	√	√	√
Finance	√						√
Transpo-rt				√			
Interior/ Civil Defense	√			√		√	
Justice	√	√	√	√	√	√	√

5.2 Description of ministerial Authorities and Mandates

Ministry of state for the Environment /Egyptian Environmental Affair Agency .

- EEAA administers the environmental law No.4 for the year 1994 and its executive regulations which formulate the general policy and prepare the necessary plans for the protection and promotion of the environment and follow up the implementation of such plans in coordination with competent administrative authorities .
- EEAA is the competent national authority for strengthening environmental relation between Egypt and other countries and regional and international organizations .
- EEAA establishes the necessary norms and standards to assure compliance with the permissible limits of pollutants and to ensure that these norms standards are followed .
- EEAA prepares the Environmental Contingency Plan and coordinate with the competent agencies for the preparation of programs confronting environmental disasters .
- EEAA coordinates with other competent authorities for the organization and handling of hazardous materials .
- EEAA coordinates with the competent a ministry for international cooperation to ensure that projects financed by organizations and donor countries are in accordance with environmental pollution .

Ministry of Health

The Ministry of Health and Population established a unit for chemical safety in 1995, for sake of effective contribution for fulfilling a safety chemical usage and protect from its poisonous and sever chronicle effects. Also, to survey chemical incidents and to develop public awareness of the problems of chemicals.
A comprehensive program for poison control and chemical emergency response is currently developed, with the long term objective of establishing capabilities and capacities in all 26 Governrates of Egypt. Moreover, potential infrastructure for chemical emergency response exists in the directorate for emergency medicine.
The use of chemicals in vector biology control is dealt with in the department of endemic diseases.
The National committee for pharmaceutical and medication programming regulates the household use of chemical products.

There are two poisons information centers exist at Alexandria university and Ain Shams (Cairo) University hospitals respectively.

Ministry of Manpower and Emigration

This Ministry is responsible for the administration and enforcement of the provisions of the Factories Act (Law No.137 of 1981 and its decrees). The Factories Inspectorate Department, a specialized wing on Occupational Safety and Health, enforces this Act. This legislation is aimed at protecting workers against occupational accidents and diseases. The department carries out systematic inspections of all premises covered by the factories Act, i.e., factories, construction sites, and general engineering construction workers, The inspectors assess the risks of the exposure to workers from chemicals and physical hazards and also biological, physiological, mechanical and psychological hazards.

Ministry of Agriculture:

The ministry provides services to farmers in animal and crop production and also administers the fertilizers and pesticides, which controls the importation and use of fertilizers and pesticides through different departments to prevent plant diseases and pests from inside and outside the country. Also these department test and control services administer to general animal Health and diseases monitoring and control. These departments provide services through direct contact with farmers and advertisement Agency. It acts to prevent of the introduction of plant pests and diseases from inside and outside the country. The department of Veterinary and Tsetse Control services administers the Tsetse Act, in addition to general animal health and disease monitoring and control.

Ministry of Commerce and Trade:

The Ministry keeps statistics on companies in the industrial sector, through standers of quality for certain finished products.

Ministry of Economic:

This Ministry monitors and controls the importation and exportation of goods to ensure that only registered products are imported into country.

Chapter 6: Relevant Activities of Industry, Public Interest Groups and the Research Sector

The approach adapted by institutions outside of government in relation to the management of chemicals is that of lobbying for action by interest groups these institutions do not have legal mandates and powers to enforce what they believe in. The institutions in this category vary, ranging from universities and research institutions, professional and industrial organizations and NGO, to individuals. Their effectiveness depends on how wide their membership is and the relevance of their activities to national issues and chemicals management .

6.1 Description of Organizations/ Programmes

The Trade Unions and Industrial Organizations:

- Union Committee of employee in Gravite Company

  Contact: The Chairman
  Address: Extension of Remises Street, Cairo
  Tel : (202) 4023873

- Union Committee of employee in Arabic Company of drugs

  Contact: The chairman
  Address: 5,El Massanee- El Amiria , Cairo
  Tel : (202) 2572491/2575294

- Union Committee of employee in Hochest Company of Drugs

  Contact: The chairman
  Address: El Massanee- El -Amiria

- Union Committee of employee in Trade & Chemical General Company

  Contact: The chairman
  Address: 26 Sheriff Street, Cairo
  Tel : (202) 3935767

- Union Committee of employee in Painting & Chemical Industries Company

  Contact: The chairman
  Address: El Massanee- El -Amiria , Cairo
  Tel : (202) 2578980/ 2596198

- Union Committee of employee in Miser Company for chemical Industry

  Contact: The chairman
  Address: El -Max. Street, Alexandria
  Tel : (203) 4454389/ 4458420

- Union Committee of employee in National Paper Company

  Contact: The chairman
  Address: El Tabia Street- Rashed line, Alexandria
  Tel : (203) 5601810

- Union Committee of employee in the Egyptian Plastics & Electricity Company

  Contact: The chairman
  Address: Mostafa Kamel Street, Alexandria

- Union Committee of employee in the Nile Company for Matches

  Contact: The chairman
  Address: Qena Street El- Mahmodia, Alexandria
  Tel : (203) 4223885 / 4207224

- Union Committee of Employee in Abo-Zaabal Company for Fertilizers & Chemical Industries

  Contact: The chairman
  Address: El Moaada Road , Abo-Zaabal El kaliobia
  Tel : (202) 698682 / 698082

- Union Committee of employee in the Privet Plastic Company
  Contact: The chairman
  Address: Nady El Plastic Road , El kaliopia.
  Tel : (202) 2202504

- Union Committee of employee in Middle East Company for Paper
  Contact : The chairman
  Address: 2 Bahteem Street- Mostoroad , El kaliobia.
  Tel : (202) 2205740

- Union Committee of employee in Chema Company
  Contact: The chairman
  Address: Chema, 3D flat , Aswan
  Tel : (2097) 303867

- Union Committee of employee in Development Company for Chemical Industries
  Contact: The chairman
  Address: Osman Moharem Street - Talbia , Giza.
  Tel : (202) 5850922

- Union Committee of employee in Maser Company for artificial Silk
  Contact : The chairman
  Address: in Kfer- El dawar , Behera.
  Tel : (2045) 4013408

Universities, Research Institutes, Private Laboratories

- Cairo University Center for Environmental Hazard Mitigation (CEHM)

  Contact: Prof. Dr. Yehia Abdelhady
  Director
  P.O.Box: 453 Al Orman- Giza
  Tel : (202) 5719688

Fax. : (202) 5719687
E- mail: CEHM@ hazard2.Cairo

- Meteorology and Astronomy Center for Studies and Environmental Consultancy (MACSEC)

Faculty of Science- Cairo University.
Tel. :(202) 5676839
Fax : (202) 5727056

- Alexandria University

Contact: Dean , The Public Health Institute (PHI)
Alexandria City

- Institute of Graduate Studies and Research (IGSR)

163 Horeya Avenue .El Chatby-Alexandria
Contact: Dr. M. El Raey
Tel : (203) 4225007
Fax : (203) 4215792

- National Institute of Oceanography and Fishers (NIOF)

Contact : Dr. Hussney Emarra
Tel : (203) 4801189
Fax : (203) 5941341

- Environmental Studies and Research Institute (ESRI)

Ain Shams University
Contact: Dean , Dr. Abed El Azeem
Address: El- Abassia ,Cairo
Tel : (202) 821249
Telex : 94070 USHMS

- Environmental Monitoring & Studies Center (EMSC)

Ministry of Health
Contact : General Manager
Tel & Fax : (202) 3118978

- National Institute of Occupational Safety and Health (NIOSH)

  Contact: Dr. Magda Yassin
  Tel : (202) 2452635
  Fax : (202) 2424355.

  Scope of Activity

  1- Scientific & applied research.
  2- Training programmes in Occupational Safety and Health
  3- Advisory services for industry.
  4- International technical cooperation.

Non- Governmental Organizations

- The Egyptian Organization for Environmental Science
- The Egyptian Organization of Natural Protection.
- The Egyptian Organization of Hygiene.
- The Egyptian Organization of Environmental Health Legislation.
- The Arabic Organization of Occupational Safety and Health.
- The Egyptian Green Party (EGP)

6.2 : Summary of expertise available outside of the government

Tables 6.A: Summary of Expertise Available Outside of Government

Field of Expertise	Research Institutes	Universities	Industry	Environment/ Consumer Groups	Labor Union	Professional Org.	Other (Specify)
Data Collection	✓	✓	✓	✓	✓	✓	
Testing of Chemicals	✓	✓	✓			✓	
Risk Assessment	✓	✓	✓	✓			
Risk Reduction				✓			Ministries of Agriculture &Industry
Policy Analysis	✓			✓		✓	
Training and Education	✓	✓		✓	✓	✓	
Research on Education							
Research on Alternatives	✓	✓	✓	✓			Ministries of Agriculture, Public Works &Industry
Monitoring				✓			Ministries of Agriculture, Interior

							&Industry

Chapter 7: International Linkages

7.1 CO-operation and Involvement with International Organizations, Bodies and Agreements

The linkages with international organizations, especially those concerned with chemicals management, has benefited the country in many ways such as:

- receiving international support through UN agencies, such as UNEP/IRPTC, FAO, UNITAR, as well as from other countries to address issues relating to chemicals;
- receiving international information/literature from other countries relating to chemicals management, including measures or actions taken with respect to specific chemicals, such as PIC chemicals; and
- receiving information on legislation and technologies used to reduce risks at the local level, through documents from US-EPA, and other countries.

Table 7.A : Membership in International Organizations, Programs and Bodies

International Organization/Body/ Activity	**National Focal Point (Ministry/Agency & Primary Contact Point)**	**Other Ministries/ Agencies Involved**
UNEP IRPTC – National Correspondence IE/PAC – Cleaner Production Center	EEAA	MOF

IPCS		
WHO	MOH	MOF
FAO	MOA	MOF, EEAA
World Bank	M.I.C	

Table 7.B : Participation in International Agreements / Procedures Related to Chemicals Management

International Agreements	Primary Responsible Agency
Agenda 21 – Commission for Sustainable Development	EEAA
UNEP London Guidelines (voluntary procedure) Rotterdam Convention on Hazardous Chemicals Trade	EEAA, MOF
FAO Code of Conduct (voluntary procedure)	MOA
Montreal Protocol	EEAA, MOF

ILO Convention 170 UN Recommendation for the Transport of Dangerous Goods	MOL MOT
Basel Convention	EEAA, MOF
Rotterdam	EEAA, MOF
GATT/ WTO agreements (related to chemical trade)	MOF, MOT
Chemical Weapon Convention	MOD

Chapter 8 : Awareness /Understanding of Workers And the Public

The understanding by the workers and the public, of the characteristics of the substances that they deal with on a day to day basis is one of the important ways by which accidents may be forestalled. The knowledge of workers of the likelihood of adverse effects that may result form handling the substances brings out the sense of respect and alertness. However, with time and experience disregard for full operational procedures may lead to accidents. To establish working environment standers for each industry, legal provisions have been made to ensure uniformity or adherence.

8.1 legal Instruments on the Awareness of Workers

The provisions in the law designed to achieve compliance for protection of workers have been made so that sanctions may be instituted for non-compliance. With anticipated increased costs to be incurred in this respect, most employers would have no incentive for worker protection other than the law.

The Ministerial decree No.116 of 1991determines the establishments, occupational safety and health organizations and the authorities responsible for training in the field of OHS.This, includes training programs at the Industrial Safety Institute (ISI) by MMI and National Institute of Occupational Health and Safety (NIOHS) for all industrial Facilities. Safety instructions are given to all relevant workers; safety posters are rendered at appropriate intervals through the monthly meeting of safety committee, an information provided by management to workers and the information, which is passed between colleagues.

The provisions of extension Facilities by OHS general department and inspectors, by ministries of MMI and MOH seems to increase awareness, most the extension services not include enough information relating to the chemical hazards and most of the workers are not even aware of the fact that they use chemicals, or that these chemicals are potentially harmful.

Courses have been organized for training between OHS department and EEAA for selected target groups.

8.2 Awareness and Understanding to the public

The Ministry of State for The Environment and **The Egyptian Environmental Affairs Agency (EEAA) have been working very hard since it was established, to raise the public awareness concerning different environmental aspects.**

For this sake, a department for public awareness was specially established, through which different activities were conducted. Not only several Seminars and Workshops were held to raise the public awareness for all society sectors; but also a number of scientists and journalists were dedicated to come up with creative and interesting T.V. and Radio programs to serve maintain and lead an environmentally sound life. Competitions on environment were held to increase the country children environmental laws awareness, and attractive awards were made for this purpose. Also, quite a good part in a number of daily newspapers was assigned to serve the idea of environmental orientation through newsletters that provide information and continuous updates on different environmental activities and events.

EEAA was also able to operate, in coordination with the Ministry of Education, to include the environmental and chemical awareness in their curriculum education.

Annex

CAPL	***Central Agricultural Pesticides Laboratory***
EEAA	***Egyptian Environment Affairs Agency***
EIA	***Environmental Impact Assessment***
EQS	***Environmental Quality Sector at EEAA***
GOFI	***Governmental Organization for Industry***
ISI	***Industrial Safety Institute***
MOIC	***Ministry of International CO- operation***
MOMI	***Ministry of Manpower and Immigration***
MOA	***Ministry of Agriculture***
MOD	***Ministry of Defense***
MOH	***Ministry of Heath and Population***
MOT	***Ministry of Transportation***
MSE	***Ministry of State of Environment***
NIOHS	***National Institute of Occupational Health and Safety***
NGO	***Non – Governmental Organization***
CAA	***Customs Authority Agency***
CAFPMS	***Central Agency for Population , Mobilization and Statistics***

Contents

Sources of Data

- **Egyptian Environmental Affairs Agency**
- **Ministry of Industry**
- **Ministry of Health**
- **Ministry of Agriculture**
- **Ministry of Man Power & Immigration**
- **Academy Scientific Research & Technology**
- **Holding Company for Chemical Industries**
- **Holding Company for Metallurgical Industries**
- **Central Agency for Population , Mobilization and Statistics**
- **Customs Authority Agency**