

Government of GSPLAJ United Nations Development Programme

Title of Project:

National Framework for Solid Waste Management and action plan for Hazardous Waste Disposal in Libya

- asse Disposar III Dibya	Country: Libya
UNDAF Outcome(s)/Indicator(s): (Link to UNDAF outcome., If no UNDAF, leave blank)	NIL
Expected Outcome(s)/Indicator (s):	
(GP/RP/CP outcomes linked to the MYFF goal and service line)	Environment Conservation
Expected Output(s)/Annual Targets: (GP/RP/CP outputs linked to the above CP outcome)	National Action Plan
Executing Entity:	UNDP
Implementing agencies	Environment General Authority (EGA)
The other objective of the project is to strengthen the obligations under the Basal and Stockholm Conventi Action Plan.	e national capacity and build ownership in Libya to meet its ions, including preparation of a hazardous waste National
Programme Period:2007-2009 Project Duration:2 years	Total Budget \$1.7 million
Agreed by (Government): Agreed by (Executing entity):	2.23=7 A: DEVELOD

I. SITUATION ANALYSIS:

Libya in recent years has faced a significant increase in the magnitude of waste management problems for a number of reasons, including, but not necessarily limited to: the rapid growth in population; changing consumption patterns; transportation difficulties, coupled with the environmental challenges brought about by the growth in key economic sectors.

The government has recognised the need to address the waste management issues in a more integrated, comprehensive fashion in twofold. Firstly, developing an integrated National Solid Waste Management Policy. Secondly, drafting national action plan for hazardous waste disposal.

For these tasks to be achieved there are a number of barriers which will need to be removed. The following are the main barriers preventing sustainable improvements in the delivery of solid waste management services:

- i. Insufficient funding of waste management infrastructure, equipment and practices. Indeed, the majority of cities and towns lack basic waste management infrastructure, such as an engineered disposal site, in conjunction with waste processing equipment such as shredders for green waste and crushers for glass and metal items.
- Absence of appropriate cost recovery mechanisms. The key factor is that of affordability as the resource base within the country is very limited. For the application of service fees to be more broadly applied, there is clearly a need for far more attention to be paid to the issue of public education and awareness raising. But, in addition, affordability and willingness to pay need to be accurately determined and assessed before the introduction of new service fees.
- iii. Inadequate institutional capacity within key government agencies, coupled with a lack of clear roles and responsibilities, has resulted in an absence of clear leadership or coordination on the subject.
- iv. Inadequate level of public education and awareness rising amongst the public resulting in uncertainties regarding available options. Again, the lack of national waste management coordination and policy has resulted in inadequate attention being paid to the matter of public education and awareness raising. There is a distinct lack of knowledge regarding waste disposal and waste recycling options available, and about what initiatives have been undertaken on other islands.
- v. Weak legislative and regulatory framework which hinders monitoring and regulatory functions. Monitoring and enforcement of waste management services has been observed to be generally weak. There are a number of government entities with partial responsibility for regulation and enforcement of waste management activities nationally.

Hazardous waste is defined by four major characteristics: material that is ignitable, corrosive, reactive, and/or toxic. Any waste that can be defined by one or more of these characteristics should be considered hazardous. Toxic chemicals and other hazardous materials are basic

elements of development. Chemical pollution is mainly attributed to industrial and agricultural activities.

In Libya, The disposal of hazardous materials which were accumulated for a long number of years require technical experience, developed equipment and substantial resources, taking into account that such task represents a tremendous challenge to the countries of the world, particularly developing countries. Several international agreements and protocols were concluded to deal with the disposal of hazardous waste materials, the most important of which were the Basel Agreement on the control of transport of hazardous materials across borders, the Stockholm agreement the on the organic pollutant materials which were ratified by Libya, in the consideration of the importance of international cooperation in the field of environment protection and the role of such agreements in establishing cooperation, transfer of technology and building national capacities under the UN umbrella.

It is worth underling that Libya suffers from the accumulated hazardous waste materials which resulted over time from economic and development activities, particularly the sector of energy, health and agriculture. These waste materials include:

- 1. Invalid abandoned pesticides materials which are found in various places in Libya. Some of these materials are very old, estimated in about 2000 tons, mostly in bad condition stored unsafely in rotten containers.
- 2. Oils containing the hazardous PCBs used in electric transformers and condensers, causing great hazards threatening human life and environment and estimated in the amount of about 2200 tons in the western part of Libya only.
- 3. Invalid medicinal materials, in addition to chemical materials which are stored in the various pharmaceutical ware houses in various parts of Libya. Some of these materials are not classified, identified or quantified.
- 4. Hazardous medical remains such as blood, human members, tissues, polluted gauze and cotton and others.
- 5. Other chemical materials derived from oil and chemical industries which are classified as hazardous.

Consequently, the country is in need for having an action plan for hazardous waste management and a sound environmental management. However, and due to current condition of hazardous waste materials, it is a matter of urgency to implement programme to start disposing some of the hazardous waste materials which cause a direct threat to human life and environment, which are generated from the following:

- 1. Electric transformers/condensers oils
- 2. Invalid pesticides of all kinds

II. STRATEGY:

Under the overall objective of developing and implementing appropriate, affordable and sustainable waste management practices throughout Libya the project will adopt the following approach and priorities to managing solid waste in the country. Central to achieving the above stated goal will be the development and implementation of a National Solid Waste Management Policy, anchored within an institution which is mandated, and has sufficient resources, to be responsible for its implementation. The proposed project will be implemented over a two years period and will comprise a range of activities to develop and implement the intended national policy and remove existing barriers, based on the following elements:

Development of a National Solid Waste Management Policy: A dedicated officer within EGA will be identified from existing staff, or recruited, as necessary, to take full-time responsibility for the development and implementation of the policy. This policy must be finalized, having taken into account the National Development Plan, and its progressive implementation underway. The policy shall be finalized through a process of national consultation and the establishment of focused working groups. Targets shall be achievable and realistic to ensure success. For example, reducing the amount of green waste burnt through the adoption of composting is relatively easy to achieve, whereas alternative management of other waste streams, such as plastics, will require further investigation and attitudinal change, and will take longer to achieve.

Institutional Strengthening: Clearly defined and separated institutional roles and responsibilities are identified, communicated and agreed upon by all major stakeholders. A strengthened EGA is established to fully execute its role of national waste management policy development and implementation. EGA staff, as well as staff from other relevant government agencies, are adequately trained, additional staff have been recruited, as appropriate, and the necessary degree of capacity building is undertaken.

Public Education & Awareness Raising: A dedicated officer within EGA will be identified from existing staff, or recruited, to take full-time responsibility for the national waste management public education and awareness raising campaign. Adequate capacity building will be provide to the officer and assistance provided in the development of the national campaign and educational materials.

Improved Investment in Waste Management Infrastructure & Promotion of Cost Recovery Mechanisms:

This will require a firm understanding of the present mechanisms for funding existing waste management infrastructure and operations; raising awareness amongst decision makers regarding pressing need to allocate greater financial resources for the provision of waste management infrastructure; development of detailed cost-recovery models to potentially fund improvements in waste management infrastructure and services; Develop mechanisms, and seek appropriate approval for funds raised through the implementation of any cost recovery initiatives to ensure they are allocated to waste management activities.

Encourage Private Sector participation in Service Delivery: The opportunity for the participation of the private sector in the provision of waste management services through the

establishment of open, transparent and accountable tender processes. Contract monitoring and enforcement mechanisms will be established to ensure that the private sector deliver services in complete compliance with contract specifications.

As for the disposal of the hazardous waste, the anticipated programme will aim:

- 1. To make an inventory of the hazardous waste materials
- 2. To store such materials and protect them safely in order not to cause any threat to general health and environment
- 3. To identify the safe ways to dispose with such materials without causing any threat to general health and environment, through the following options:
 - To transfer such materials and dispose them outside Libya. This requires contacting with one international specialized company to undertake the collection and transport of such materials dispose with them safely outside the country.
 - To undertake a national plan to dispose such materials. This requires establishing the utilities for this purpose to dispose of such materials without causing threats to human life and environment.
 - In view of the above, EGA is seeking cooperation with UNDP, as per the following:
 - 1. To prepare and implement media programme to identify the hazards of such material.
 - 2. To prepare and implement national workshops in the field of safe disposal with hazardous wastes.
 - 3. To prepare and implement training courses for the disposal of hazardous wastes, in cooperation with experts and international specialized centers.
 - 4. To make an inventory to identify and classify the hazardous wastes in Libya, with the cooperation of international specialized organizations under the international agreements thereto.
 - **5.** To cooperate internationally for technical and possibly financial assistance for the implementation of the programme.

III. Objectives of the project and its activities:

Objective 1: Municipal solid waste management plan

Immediate objective 1: Project elaboration

 $Output 1: General\ project\ coordination,\ setting\ goals\ and\ tasks,\ legal\ assessment\ and\ awareness\ raising.$

Activity 1.1: Establishment of Project Co-ordination Mechanisms, i.e. a Project Steering Committee and municipal solid waste Focal Point.

Activity 1.2: Assessment of the capacity building needs in support for project implementation.

- **Activity 1.3:** Organization of the project induction workshop: setting goals, tasks and milestones for project implementation.
- Activity 1.4: Review of the national legislation and practices concerning municipal solid waste management in Libya including laws, regulations, norms, standards:
- Activity 1.5: analysis of the current management system in Libya related to municipal solid waste
- **Activity 1.6:** institutional responsibility analysis (at all levels)
- Activity 1.7: Planning and implementation of awareness raising campaigns on municipal solid waste and other chemical safety and management issues.

Immediate objective 2: Elaboration of a municipal solid waste management plan

Output1: Formulation of National Framework for Solid Waste Management

Activity 1.2.1: To prepare and implement a national plan on solid waste management, that would lead to a reduction of soil and water contamination caused by the uncontrolled disposal of waste;

Activity 1.2.2: Remove dangers to human health from inappropriate waste collection and disposal methods;

Activity 1.2.3: Define standards and regulations for classification and final disposal of urban and industrial wastes;

Activity 1.2.4: Identify and recommend appropriate waste treatment methods and financing plans capable of providing necessary investments and appropriate user charge systems; Activity 1.2.5: To prepare a national plan for the management of solid urban, industrial and hospital waste, also covering the rehabilitation of existing uncontrolled dump sites. This plan should cover all legal and regulatory, technical, financial and managerial aspects of implementing such a plan. The plan will be based on a well researched data base of the volumes and composition of waste currently being generated, and the nature and composition of wastes in existence in existing dump sites and industrial installations.

Activity 1.2.6: Implement a system of analysis and control capable of monitoring the environmental degradation caused by waste pollution.

Objective 2: Drafting action plan for Hazardous Waste Disposal

Immediate objective 3: Compilation of Initial Inventories and capacity assessment

Output 1: This output is divided into 2 components dealing with i) hazardous waste inventories, i.e. pesticides, unintentional by-product hazardous waste as well as ii) chemical analysis support and strengthening the hazardous waste monitoring scheme in Libya.

Activity1: Assessment of the national infrastructure and institutional capacity for hazardous waste management, including scientific capacity and chemical analytical infrastructure.

Activity1: Assessment of monitoring and R&D capacity, and detecting the gaps on monitoring (pollutants, sites, analytical methods, etc.).

Activity1: Assessment of existing hazardous waste inventory and control data maintenance system.

Activity 1: Baseline inventory database on the hazardous waste situation in the country compiled.

Activity1: Training and capacity building of task teams and institutions/organizations, including industries and other stakeholders, conducting the collection of hazardous waste data and management.

Activity1: Data maintenance system analysis, its improvement and further development to an adequate management information system for hazardous waste.

Activity1: Sampling and analysis of chemicals, water and soil for determination of possible hazardous waste content.

Activity1: Collection and compilation of more detailed inventories of hazardous waste stockpiles, articles in use containing hazardous material as well as hazardous substances containing waste and sites contaminated with chemicals.

Activity1: Establish priority list for contaminated sites and initiate sampling from highest ranked sites.

Activity1: Assessment of opportunities for disposal of obsolete stocks and contaminated articles.

Immediate objective 2: Finalization of National Implementation Plan

Output 2: Drawing up the national action plan for hazardous waste disposal

Activity 2.2.1: Conduct hazardous waste National Implementation Plan Workshop.

Activity 2.2.2.: Agreed country objectives and priorities for hazardous waste.

Activity 2.2.3: Draft National Implementation Plan for meeting country obligations under the UN Conventions.

Activity 2.2.4: Obtain endorsement of National Implementation Plan.

Activity 2.2.5: Final National Implementation Plan integrating views from government and other stakeholders.

Activity 2.2.6: Publication and wide dissemination of the National Implementation Plan.

Activity 2.2.7: Submission of National Implementation Plan to the Stockholm Convention Secretariat.

IV. PROJECT RESULTS AND RESOURCES FRAMEWORK

Intended Outcome as stated in the	Country/ Doctoral/Clob	shel Ducassame, Deserte and Deserte F		
Greater awareness, capacities, and means to monitor and preserve the environment at global national and local levels	to monitor and preserve the	al Frogramme Results al environment at global natio	id Kesource Framewor! nal and local levels	ÿ
Outcome indicators as stated in the Country/ R	Country/ Regional/ Glob	al Programme Results a	nd Resources Framewo	egional/ Global Programme Results and Resources Framework, including baseline and
targets. Action plans for municipal waste management and hazardous waste disposal are formulated and validated.	ment and hazardous waste d	isposal are formulated and v	lidated.	0
Base Line: No national strategy for municipal waste management and hazardous waste disposal is exist	ipal waste management and	hazardous waste disposal is	exist	
Applicable MYFF Service Line: Improved national capacity for sustainable environment management and development.	roved national capacity for	sustainable environment mai	nagement and development	
Partnership Strategy				
Project title and ID (ATLAS Award ID): National Framework for Solid Waste Management and action plan for Hazardous Waste Disposal in Libya	ID): National Framewo	rk for Solid Waste Mana	gement and action plan	for Hazardous Waste
Intended Outputs	Output Targets for (years)	Indicative Activities	Responsible parties	Inputs
Output1: General project coordination, setting goals and tasks, legal assessment and awareness raising.			EGA, UNDP	\$2.5 Million
Output 2: Formulation of National Framework for Solid Waste Management				
Output 3: i) hazardous waste inventories, i.e. pesticides, unintentional by-product hazardous waste as well as ii) chemical analysis support and strengthening the hazardous waste monitoring scheme in Libya.				
Output 4: Drawing up the national action plan for hazardous waste disposal				

V. ANNUAL WORK PLAN BUDGET SHEET

Year

Annual Work Plan Budget Sheet

EXPECTED OUTPUTS and indicators including	PLANNED ACTIVITIES List all activities including M&E		TIMEFRAME	NME	RESPONSIBLE PARTY		PLANNED BUDGET	
annual targets	to be undertaken during the year towards stated CP outputs	ō'	20	20 24		Source of Funds	Budget Description	Amount
Output1: General		X					Int.	70,000
project coordination,							Consult.	
setting goals and							Nat.	30,000
tasks, legal assessment			-				Consult.	
and awareness							Equipment	50,000
raising.							Misc.	30,000
Output 2:			X	×			Int.	580,000
Formulation of							Consult.	
National Framework							Nat.	40,000
for Solid Waste							Consult.	
Management							Training	30,000
							Misc.	20,000
Output 3: i)		×	X				Int.	450,000
hazardous waste							Consult.	
inventories ii)							Nat.	50,000
chemical analysis							Consult.	
							Misc.	30,000
Output 4: Drawing up			X	×			Int.	250,000
the national action							Consult.	
plan for hazardous							Nat.	25,000
waste disposal							Consult.	
							Training	25,000
							Misc.	20,000
TOTAL								1.700.000

VI. MANAGEMENT ARRANGEMENTS

The implementation of the project will be country driven. The project is proposed as a nationally executed (NEX) project. EGA will be designated as the national executing agency for the implementation of the project. A senior official of EGA will be the National Project Director (NPD) and will be responsible for the achievement of results and outputs. The NPD will appoint a project manager (PM) who will be responsible to plan and implement the project activities and for budgeting and monitoring. The PM will also be responsible for recruiting consultants and providing travel and other required assistance.

The project duration will be 2 years. The project will possibly be executed in a phased manner with the solid waste management policy drafting and improved investments in waste management infrastructure and promotion of cost recovery components being carried out in the first phase. As new funds are mobilized the other components will be phased in.

Project Steering Committee

A Project Steering Committee (PSC) will be appointed in order to provide overall strategic policy and implementation guidance and support. The PSC will oversee project progress and facilitate the integration of project outputs into existing programs and practices in their respective organizations. Members of the PSC will be appointed from the following organizations:

- 1. Secretariat of Health and Environment:
- 2. Secretariat of Planning
- 3. Secretariat of Industry;
- 4. Secretariat of Agriculture;
- 5. Secretariat of Transportation;
- 6. Construction and Public Infrastructure Authority;
- 7. Meteorology Department;
- 8. Authority of Housing and Urban Development;
- 9. Other Authorities concerned.

VII. Partnership Strategy

Project activities will be undertaken in a participatory manner, to represent the consensus of all key stakeholders within the waste management sector. Stakeholders in the project will include, but not necessarily be limited to, the following:

Government bodies:

- 1. Secretariat of Health and Environment;
- 2. Secretariat of Planning
- 3. Secretariat of Industry;
- 4. Secretariat of Agriculture;
- 5. Secretariat of Transportation;
- 6. Construction and Public Infrastructure Authority;
- 7. Meteorology Department;
- 8. Authority of Housing and Urban Development:
- 9. Other Authorities concerned.

Non-government bodies:

Community-based organization (CSO)

International Organizations

- o UNEP
- o UNIDO
- o FAO
- o WHO

VIII. MONITORING AND EVALUATION

In order to assess the project's performance, the PSC, EGA and UNDP will carry out regular monitoring according to established rules, regulations and procedures. The monitoring exercises will be made in coordination and consultation with other stakeholders. The PM will prepare quarterly progress reports of the project activities and Annual Project Reports.

IX. LEGAL CONTEXT

This project document shall be the instrument referred to as such in the Standard Basic Assistance Agreement between Libya and the United Nations Development Programme (1976). The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government cooperating agent described in that Agreement.

The following types of revisions may be made to this project document with the signature of the UNDP Resident Representative only, provided he or she is assured that the other signatories of the programme document have no objections to the proposed changes:

- (a) Revisions in, or addition of, any of the annexes of the project document;
- (b) Revisions which do not involve significant changes in the immediate objectives, outputs, or activities of a project, but caused by the rearrangement of inputs already agreed to or by cost increases due to inflation; and
- (c) Mandatory annual revisions which re-phase the delivery of agreed programme inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility.