

EGYPT NATIONAL CAPACITY SELF ASSESSMENT (NCSA)

**"NATIONAL STRATEGY AND ACTION PLAN FOR
CAPACITY DEVELOPMENT"**

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PREFACE

Acknowledgements

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The National Capacity Self-Assessment in Egypt (NCSA), implemented by the United Nations Development Program and funded by the Global Environment Facility (GEF), aims at identifying and analysing national priorities and needs for capacity development in the context of the three Multilateral Environmental Agreements (MEAs) obligations (UNCBD, UNFCCC, UNCCD). This document is the final outcome of the NCSA project, where the National Strategy and Action Plan for capacity development were developed in order to implement the three Rio Conventions.

The National Strategy and Action Plan will not initiate a completely new or stand-alone strategic planning, but will build upon the existing national strategies and under the broad umbrella of the country's vision and policies. As a result it was necessary to conduct a brief review for the most important existing national strategies and plans that include Egypt's Framework for Sustainable Development, National Environmental Action Plan (NEAP), and National Action Plans for the three thematic areas. In addition, the findings of the previous stages of the NCSA project which are the stocktaking and gap identification phase, prioritization and focusing phase, and the in-depth phase were utilized in the formulation of the action plan.

The review of Egypt's Framework for Sustainable Development highlighted the environmental objectives specified under its three dimensions: (i) economic development and increase of resources; (ii) protection of natural and environmental resources and environmental conservation; and (iii) social justice in resource distribution, education, services, and social integration. Furthermore, the 16 guiding principles defined in the National Framework for the ministries and other institutions to assist them to plan and implement these environmental objectives were also listed. As to the NEAP review, that represents Egypt's agenda for environmental actions till year 2017, the environmental issues tackling the three thematic areas: biodiversity, climate change, and desertification were addressed. With regards to the National Action Plans (NAPs), the review focused on the prioritized cross-cutting issues from the analysis of the NCSA project: public participation; technology transfer and cooperation; financial mechanisms; legislation formulation and enforcement; and monitoring, evaluation, and reporting.

The current national status in relation to the implementation of the three Rio Conventions is elaborated upon through a review of the previous stages of the NCSA project. In the stocktaking and gap identification phase, the three stocktaking reports prepared by national consultants identified the capacity constraints in achieving the requirements of each convention. In the prioritization and focusing phase, prioritization for the cross-cutting constraints that were identified in the same stage was conducted and resulted in five constraints: public participation, technology transfer and cooperation, financial mechanism, legislations formulation and enforcement, and monitoring and evaluation. In the in-depth phase, a number of actions were recommended to address the identified capacity constraints in collaboration with national experts in the five cross-cutting fields based on desk study and interviews.

The recommended lines of actions were refined by removing duplications and modifying/merging of similar actions. Building upon all the previous stages, a vision and overall strategy for the action plan was formulated. The refined lines of actions, as summarized in Table (1), were then linked to the national priorities and capacity constraints.

Table 1: Summary of the recommended lines of action – National Action Plan

Capacity Needs/ Issues	Lines of Actions	Lead Agency	Timeframe	Funding Required
Stakeholder Engagement				
Co-management mechanisms	- Create National Council for Coordination between Conventions and Activate/Establish Coordination Committees (TT-5, TT-7).	Focal points	Medium (1-3 years)	Low (<60,000 EGP)
Cooperation between stakeholder groups	- Nominate a catalyzing entity for technology transfer and cooperation (TT-6).	Private entity	Medium (1-3 years)	High (> 300,000 EGP)
Building and maintaining partnerships	- Develop Guidelines for Effective Public Participation in Projects Related to the Conventions Implementation (PP-3).	EEAA	Short-term (≤ 1 year)	Low (<60,000 EGP)
	- Develop a New Model(s) of “Community Based Interventions” (PP-5).	EEAA	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
	- Develop and Implement a Clear Strategy to Encourage the Private Sector to Invest in Projects in the Three Thematic Areas (PP-7).	Ministry of Investment	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
Information & Knowledge				
Research and Science	- Promoting the Development of Research Capabilities (ME-5).	Ministry of Higher Education	Long (> 3 years)	High (> 300,000 EGP)
Information access and sharing	- Incorporate Technology Transfer and Cooperation into National Policies (TT-1).	Focal Points	Long (> 3 years)	Low (<60,000 EGP)
	- Establish a Formal Strategy for Technology Transfer and Cooperation (TT-2).	Focal Points	Medium (1-3 years)	Low (<60,000 EGP)
Planning & Policy				
Planning and strategy development	- Promoting the Incorporation of the Global Environment in National Policies and Plans (ME-3).	EEAA	Short (≤ 1 year)	Medium (60,000 – 300,000 EGP)
Regulatory frameworks	- Establish New Environmental Court to Improve Environmental Laws Enforcement (L-3).	Ministry of Justice	Long (> 3 years)	High (> 300,000 EGP)
	- Reviewing the Legal Framework in Egypt to Meet Rio Conventions Obligations (F-1, L-1, L-4, L-5, L-6, L-7)	EEAA	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
Organisation & Implementation				
Mobilisation & organisation of resources	- Rehabilitation of the Environmental Protection Fund (F-2).	EEAA	Long (> 3 years)	High (> 300,000 EGP)
	- Strengthen Small Grants Programs for NGOs and CBOs (PP-6).	EEAA	Short (≤ 1 year)	Medium (60,000 – 300,000 EGP)
Technical skills and technology transfer	- Establish a Technology Transfer and Cooperation Unit within each National Focal Point (TT-3).	Focal points	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
	- Establish a National Technology Transfer Center (TT-4).	Private entity	Medium (1-3 years)	High (>300,000 EGP)
Monitoring & Evaluation				
<i>Other (where relevant and applicable)</i>	- Establish National Mechanism to Follow Up the Implementation of the Conventions’ Obligations (L-2).	EEAA	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
	- Formulating Standardized Procedures for Monitoring, Data Collection, and Reporting (ME-1, ME-2, ME-4)	EEAA	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)

The National Strategy and Action Plan was formulated based on the principles of the National Sustainable Development Framework, the requirements of the three Rio Conventions, as well as the principles emerging from the cross-cutting/synergy analysis of the NCSA process. A general institutional setup was proposed for the action plan implementation where the Egyptian Environmental Affairs Agency (EEAA) would take the leading role with the involvement of other relevant ministries. It is recommended that EEAA establishes a National Coordination Council for the three Rio conventions (NCC) within which a Working Group shall be formed.

Three options are proposed for the structure of the *Working Group* as follows:

- **Option A:** the *Working Group* is formed as a sub-committee from the Planning Department associated with the office of the Chief Executive Officer for EEAA.
- **Option B:** the *Working Group* is formed of the three focal points of the Rio Conventions.
- **Option C:** the *Working Group* is contracted by EEAA and/or the NCC to an independent organisation within civil society, i.e., private entity, NGO, or combination of both.

As to the specific lines of actions, they were further developed as ‘project profiles’, in which a short activity description is given, the time-frame for implementation, resources, tentative budget, expected results, monitoring indicators, responsible institutions, and expected outcomes in a simple and clear way to the executing entities. Linkages were also established to clearly indicate the connection of the capacity need with the national priorities, plans and programs as stated in the environmental objectives of Egypt's National framework for sustainable development, as well as the NEAP and the NAP.

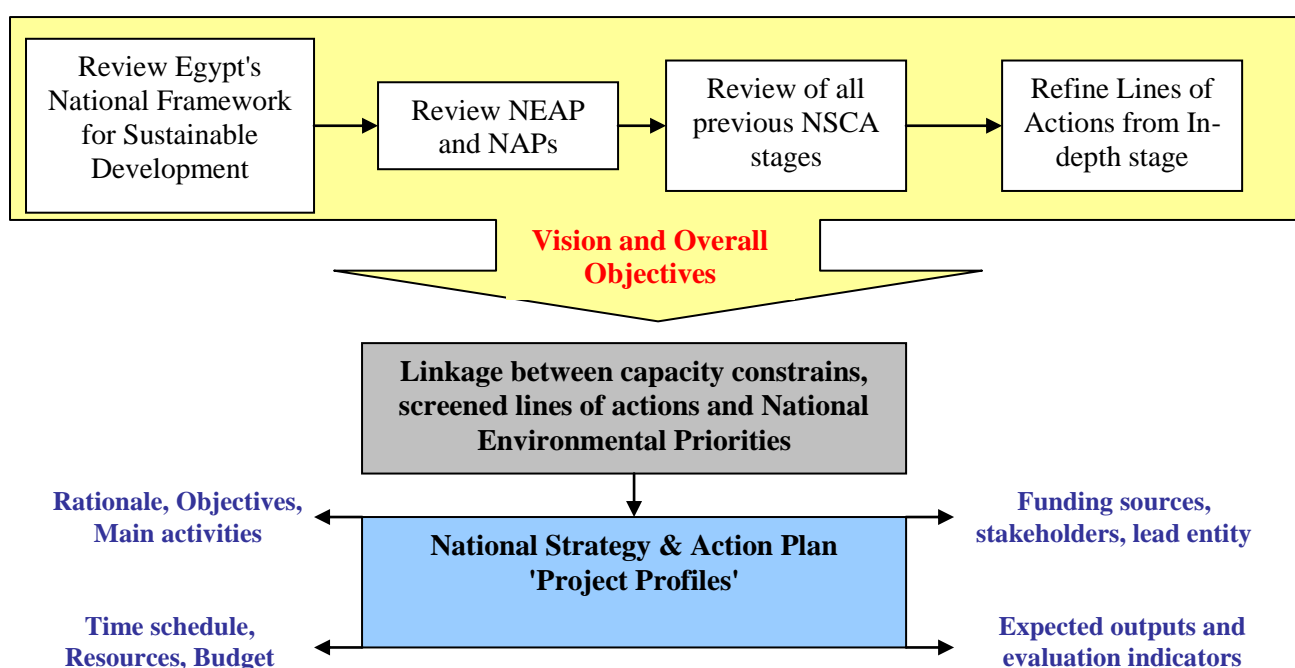
The expected total cost for implementing the National Strategy and Action Plan is on average 6.36 Million Egyptian Pounds (between 5.58 – 7.14 Million EGP). The funding for the National Strategy and Action Plan for capacity development should primarily be provided from the national financial sources. Therefore, the line of action should become part of the regular annual programmes of the respective ministries and other responsible institutions along with their budgetary programmes. The ongoing and planned future projects in the environment and similar sectors, financed not only from domestic sources, and especially the bilateral and multilateral technical support projects, may be an important source of funding as well.

Finally, the monitoring and evaluation of the National Strategy and Action Plan is a core component to ensure its successful and effective continuity and improvement throughout the duration of its implementation. The EEAA will be responsible for setting up the necessary harmonized M&E mechanisms, utilizing the necessary tools, and conducting reviews in order to ensure continuous monitoring and evaluation. The other implementing partners will provide periodic reports in accordance with the procedures and harmonized with UN agencies (UNCBD, UNFCCC, and UNCCD) on the progress, achievements and results of their projects. These reports shall outline the challenges faced in project implementation, assessment of performance against the indicators, analysis of stakeholder participation, budget performance, as well as resource utilization as articulated in the project profiles.

The National Capacity Self-Assessment in Egypt (NCSA) is implemented by the United Nations Development program and funded by the Global Environment Facility (GEF). The NCSA aims at identifying and analysing national priorities and needs for capacity development in the context of Multilateral Environmental Agreements (MEAs) obligations. These MEAs include the United Nations Framework Convention for Climate Change (UNFCCC), United Nations Convention for Biodiversity (UNCBD), and the United Nations Convention to Combat Land Degradation (UNCCD). The NCSA helps the country to assess its capabilities, define their priorities, and identify the constraints with regard to global environmental management.

In this report a National Strategy and Action Plan for capacity development is prepared to assist Egypt to overcome the capacity constraints at the national level, which will enable Egypt to fulfil its obligations in the 3 Rio Conventions taking into account its national priorities. The National Strategy and Action Plan for capacity development was developed based on the previous NCSA stages and the existing environmental national strategies and plans of the country. Several recommended lines of actions are formulated with clear objectives, main activities, resources, expected budgets, relevant stakeholders, outputs, and basic monitoring indicators are detailed.

The National Strategy and Action Plan for capacity development was developed after undergoing several stages. The first stage involved reviewing Egypt's existing environmental strategies. The main strategy is Egypt's National Framework for Sustainable Development, where all the environmental objectives relevant to the prioritized capacity constraints for achieving the Rio Conventions were listed and the guiding principles for achieving these objectives were studied. In the second stage, Egypt's National Environmental Action Plan (NEAP) as well as the three thematic National Actions Plans (NAP) for biodiversity, climate change, and desertification were reviewed as detailed in Section 4. In section 5, a summary for all the NSCA previous stages was prepared and the recommended lines of actions generated in the in-depth stage were evaluated.



The recommended lines of actions were refined by removing duplications, and modifying/ merging similar actions. Building upon all the previous stages, a vision and overall strategy for the action plan was formulated. The refined lines of actions were then linked to the national priorities and capacity constraints. Finally, the refined lines of actions were further developed as 'project profiles' in which a short activity description is given, the time-frame for implementation, tentative budget, expected results, indicators, responsible institutions, and expected outputs were detailed.

4.1 BACKGROUND

At the 1992 UN Conference on Environment and Development (UNCED) governments, including Egypt, made a commitment to adopt national strategies for sustainable development. The strategies for sustainable development are instruments intended "to ensure socially responsible economic development while protecting the resource base and the environment for the benefit of future generations". However, moving towards sustainable development presents tremendous challenges for countries as significant economic, social, and environmental structural changes are needed.

While most countries have a number of strategic planning processes in existence, few, if any, have a system to effectively coordinate them which usually results in duplication of capacities and resources. The National Strategy for achieving the commitments for the Rio Conventions should not initiate a completely new or stand-alone strategic planning. The National Strategy should be built upon the existing national strategies and under the broad umbrella of the country's vision and policies. Therefore a brief review will be conducted in this section for the most important existing national strategies and plans that include Egypt's Framework for Sustainable Development, National Environmental Action Plan (NEAP), and National Action Plans for the three thematic areas.

4.2 EGYPT'S FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

In order to achieve its goal of realizing sustainable development in Egypt, a National Framework for Sustainable Development that constitutes of three dimensions: economic, social, and environment was prepared. This framework aims to create harmony between economic and social national policies & plans and the various environmental components in Egypt. The National Framework for Sustainable Development should be a tool to achieve the following:

- Analyze economic, environmental, and social issues in a holistic and integrated method.
- Merge together the objectives of the economic, environmental, and social policies.
- Support the government efforts in establishing sustainable development policies and build a consensus about it through stakeholders' participation.
- Assist in identifying alternatives, objectives, and targets for development.
- Coordinate the activities between the sectors (horizontally) and the various geographical levels (vertically).
- Facilitate the efficient allocation of the national limited resources on the basis of identifying priorities.
- Improve sharing of development benefits based on social justice.
- Assist in building capacities in various fields.
- Assist in the coordination of donors support for projects and initiatives that were put as priority through the strategy.
- Facilitate the utilization of the national human, financial, and physical resources to support sustainable development.

4.2.1 The Framework's Environmental Objectives

The National Framework has set up objectives that were identified by various ministries and entities to achieve sustainable development. The objectives were categorized under the three dimensions: (i) *economic development and increase of resources*; (ii) *protection of natural and environmental resources and environmental conservation*; and (iii) *social justice in resource distribution, education, services, and social integration*. The focus was on the second category related the environmental objectives as well as environmental-related objectives in the other two categories. The objectives were screened to only include the most relevant to the prioritized capacity constraints for achieving the Rio Conventions as follows:

(i) ***Economic development and increase of resources***

- Encourage the use of information technology as a practical tool to advance the various industrial sectors and achieve sustainable development.
- Disseminate cleaner production technology.
- Improve the compliance with environmental laws in industrial establishments.
- Establish a comprehensive database for all the information related to industrial activities in the governorates and the new industrial areas.
- Introduce policies that stimulate research and development and its applications in the industry.
- Use finance (revolving funds) to reduce the negative environmental impacts from industry.
- Intensify scientific research and technological development in the field of water desalinization.
- Intensify scientific research programs in reuse of agricultural wastes and use of traditional, new, and renewable energy sources.
- Encourage Egyptian, Arab, and foreign investment in the agricultural sector.
- Encourage the private sector to participate in land reclamation projects through providing incentives and reduction of the prices for new desert lands.

(ii) ***Protection of natural and environmental resources and environmental conservation***

- Encourage the participation of the private sector in financing projects especially drinking water and treated waste water use projects.
- Activate the Water National Council to ensure the coordination between policies and programmes and legislation support that improves from compliance enforcement.
- Implement Polluter Pay Principle.
- Implement civil society participation in biodiversity conservation programmes.
- Improve scientific and technical capabilities in biodiversity and natural resources conservation in development areas.
- Build national capacities to conserve biodiversity.
- Implement the obligations of international agreements.
- Support the legislative base and strengthen the economic and social incentives to conserve biodiversity and natural resources.

- Achieve participatory governance through the participation of civil society, private sector, and the government in urban development projects.
- Provide necessary funding for urban development projects.
- Provide the necessary finance for projects that reduce air pollution in industry.
- Strengthen and improve the role of the local authorities.
- Provide incentives for private sector to participate in solid and hazardous waste management whether complete or partial.
- Support linkages between the information network for hazardous waste management in EEAA with the private industrial sectors.
- Increase general awareness of waste management through education, training, and media.

(iii) *Social justice in resource distribution, education, services, and social integration*

- Participation of private sector in decreasing environmental pollution.
- Improve the cooperation between governmental bodies responsible for environmental regulations implementation and achieving the requirements of sustainable development.
- Improve the cooperation between the civil society, NGOs, and governmental organizations.
- Support NGOs through micro-scale financing programmes for neglected groups and individuals.
- Promote civil society participation in environment protection and development projects.
- Increase the capacities of NGOs.
- Finding innovative solutions to finance education and scientific research.
- Provide NGOs and citizens with environmental information.
- Increase the general awareness of the importance of sustainable development and its three dimensions.
- Strengthen the communication with international entities to support national efforts in achieving the highest sustainable development rates.
- Continue Egypt's active and efficient role in coordinating with the African, Arab, and Mediterranean sustainable development committees to protect the regional resources.
- Increase the benefit from the ratified international agreements and research and study joining new agreements or protocols.
- Identify creative mechanisms to fund sustainable development.
- Support South-South cooperation efforts to get the up-to-date technologies with the least costs and experience exchange in various fields.
- Unite the Egyptian entities efforts in presenting well prepared projects to donor countries in order to achieve mutual benefits.

4.2.2 The Framework's Guiding Principles

In order to achieve the objectives of sustainable development in the National Framework, it requires a coordinated system that includes technological, economical, and social policies in a comprehensive development plan. The National framework recommended for the ministries and other institutions to follow 16 guiding principles that would assist them to develop such policies.

- ***Principle #1: Strategic Planning***

In order to achieve sustainable development, certain political and institutional changes have to be done to fulfil the requirements that have been identified which can be achieved through 'strategic planning'. The 'strategic planning' has to be implemented with the wide participation of all relevant stakeholders to attain the best outcomes.

- ***Principle #2: Technical Analysis***

The National Strategy for Sustainable Development will depend on the accurate analysis of the current situation, future plans, and the expected risks in addition to linking it with the local, national, and international challenges. In this analysis that depends on documented information, the local capabilities and available data will be comprehensively used.

- ***Principle #3: Realistic & Flexible Objectives***

Although the objectives represent a challenge, however they should be realistic, achievable, and flexible.

- ***Principle #4: Budget and Strategy Priorities***

The strategy has to be included during the budget planning to ensure providing financial resources to realize its objectives.

- ***Principle #5: Integrated Policy***

The National Committee for Sustainable Development will support the policies for sustainable development. Common committees will be formulated between the relevant ministries as necessary; in addition the central authorities, the governorates, and the local management units should include environmental and social policies in all its sectoral policies. One of the roles of the National Committee for Sustainable Development is to coordinate between the sectoral strategies, plans, and programmes while integrating the environmental and social aspects into them.

- ***Principle #6: Participatory Governance***

The governance at the national, local, and governorates levels has to be based on transparency in decision-making and the participation of the civil society in decision making and shared responsibility in implementation.

- ***Principle #7: Decentralization***

The implementation of gradual decentralization in decision making to the lowest level possible is necessary, where specialities and responsibilities move from the central level to the regional and local levels. On the other hand, the government has the upper hand in setting up policies and legal frameworks to achieve the identified objectives.

- ***Principle #8: Awareness Raising***
This principle focuses on the importance of education and capacity building in awareness raising of sustainable development issues among all levels of the society.
- ***Principle #9: Justice between Generations***
The natural resources has to be left for future generations in the same amounts current generations have received them to provide them with equal or better opportunities to meet their needs.
- ***Principle #10: Social Justice***
There should be equal distribution of income while guaranteeing the basic human needs for all levels of the society.
- ***Principle #11: Natural Resources Conservation***
There should be a conservation of natural resources, use of renewable resources, and recovery of energy in wastes to ensure sustainable development.
- ***Principle #12: Polluters Pay***
The entity that its activities cause negative impacts on the environment or uses, trades raw materials, pre-final products, or final products that contain harmful materials to the environment should pay fees due the degradation it has caused. It will also pay completely all the expenses require to prevent these environmental risks and remove the harms that have happened.
- ***Principle #13: Users Pay***
Any individual using natural resources should pay a realistic price in return for their use in order to cover the expenses of treating the waste generated from use. This principle should be implemented on services such as water supply, collection and treatment of wastewater, municipal solid waste collection and disposal, etc.
- ***Principle #14: Shared Responsibility***
In order to attain sustainable development, all the beneficiaries should realize their shared responsibility towards reducing the pressures of development on the environment, natural resources, and the society.
- ***Principle #15: Prevention***
Prevention of pollution is considered more efficient than treatment of pollution (end-of-pipe treatment). This principle should be achieved through environmental impact assessments and use of best available technologies.
- ***Principle #16: Urban Planning and Land Use***
Urban and land use planning is a major tool to achieve urban and rural sustainable development.

4.2.3 The Framework's Monitoring Indicators

The National Strategy for sustainable development requires an efficient system of indicators that provide the government with clear indications of issues related to development. These indicators should depend on monitoring of data in order to allow the government to formulate the appropriate political response. Three stages were put to prepare the monitoring indicators: (i) preparation stage, (ii) identification and selection of indicators stage, and (iii) evaluation stage. In the first stage, working groups are established to design the indicators. In the second stage, the most appropriate indicators are identified and selected to comply with national requirements and where information for it is available. Finally, in the third stage, the current development status is evaluated, non-sustainable development trends are evaluated, and the political and institutional shortcomings that caused it are identified.

4.3 EGYPT'S NATIONAL ENVIRONMENTAL ACTION PLAN (NEAP)

The National Environmental Action Plan (NEAP) represents Egypt's agenda for environmental actions between years 2002 till 2017. It complements and integrates with sectoral plans for economic growth and social development and is the basis for the development of local environmental initiatives, actions, and activities. It is designed to be the framework that coordinates for future environmental activities in support of the sustainable development in Egypt.

The NEAP includes programmes and projects that address the environmental issues. Each program consists of three major components: information and monitoring, preventive and/or corrective measures, and supportive measures. Most of the information and monitoring activities are conducted by the Egyptian Environmental Affairs Agency. Most of the corrective and preventive measures are the responsibility of the central and local agencies in order to integrate environment protection into their plans.

The NEAP addressed many environmental issues which included the three thematic areas: biodiversity, climate change, and desertification.

4.3.1 Biodiversity

The aim of biodiversity conservation in Egypt is to set the bases of rational use and sustainable development of the national natural biological resources. The objective is that these resources remain fit for use and capable of production in ways that provide for the legitimate requirements of the present and for the basic needs of future generations. The goals of biodiversity conservation in Egypt are:

1. Managing the natural biological resources and the systems that support and sustain them on a scientific basis, which ensures maintenance of natural balances, protection of ecosystems against degradation and conservation of living biota.
2. Developing Egyptian scientific and technological capabilities in fields of conservation and development of natural resources, and development of institutional and managerial capacities to enable implementation of action programs in the fields of research, monitoring, and inventories and management of projects.

3. Mobilizing national capacities and resources to conserve biodiversity with its ecological taxonomical and general elements; to ensure the sustainability and rational use of these elements.
4. Setting programs of action that ensure the positive participation of people, as individuals and as organizations, in the implementation of biodiversity conservation programs, and in enjoying their equitable shares of the benefits of these endeavors.
5. Establishing legal instruments and economic and social incentives that support conservation and sustainable use of natural resources.
6. National actions should complement regional and international actions in fields of biodiversity conservation, exchange equitably available scientific information related to conservation of biodiversity resources including genetic resources.

Principles guiding biodiversity conservation

- Sustaining the use of natural resources through protecting and managing a representation system of national protectorates, created by the prime minister to conserve and rehabilitate the nation's biological diversity and to protect a sample of the nation's most outstanding natural landscapes.
- Protecting the biodiversity resources against dangers of deterioration or loss through establishing and improving natural protectorates' networks, conducting research, and adopting essential monitoring and evaluation measures.
- Ensuring the sustainable management and use of natural protectorates and promoting conservation of biological diversity.
- Ensuring that each protectorate is managed properly to optimize income generation without prejudicing the natural values for which it has been protected. This income is to be used in improving and developing other parks.
- Promoting the conservation and sustainable use of wild resources outside national protectorates in consultation and, where practicable, in cooperation with rural communities and user groups.

Specific actions of the biodiversity sector

- Improving the biodiversity sector through hiring qualified staff that is well prepared for decision-making processes.
- Adopting a program for comprehensive management of national protectorates. Through this program there would be a specific management plan for each protectorate.
- Implementing the national strategy for biodiversity to be achieved through improving the performance of existing international projects and searching for local and international funds for new projects.
- Committing the national, regional and international efforts towards biodiversity conservation.
- Adopting environmental awareness programs to be integrated in EEAA programs.
- Expanding the natural protectorates network. Declaring new protectorates will not occur without preparing a previous study and setting required human and other resources needed for managing these protectorates properly.
- Adopting programs for improving the economic sustainability of natural protectorates. This to be done through increasing the income of the successful protectorates and investing in other protectorates.

4.3.2 Climate Change

Egypt is taking the issue of climate change seriously. The Nile Delta and coastal zones are prone flooding due, in part, to rising sea levels. Agricultural productivity is another subject that climate change will potentially negatively affect as a result of increased average temperature. Human health is also at risk due to climate change. The increased temperatures might lead to the outspread of vector-borne diseases. Coral reefs are one of Egypt's natural resources that climate change adversely affects. Egypt seeks the help and support of the international community to mitigate the impact of climate change.

Egypt implemented two major projects in the field of climate change during the period 1995 to 1999. These projects were "Support for National Action Plan" and "Building Capacity for Egypt to Respond to UNFCCC". These projects ended in December 1999 by submitting Egypt's National Communication and establishing a Climate Change Unit at EEAA as the institutional focal point for climate change. In addition, a support program to build the capacity to institutionalize Clean Development Mechanism (CDM) was completed successfully during November 2001 as a step towards implementing Egypt's strategy on CDM. The strategy includes, but not limited to, improving energy efficiency, promoting use of renewable energy, and expanding current activities for afforestation using treated wastewater to plant timber trees.

The climate change targets are mainly improving energy efficiency, promoting use of renewable energy, and expanding current activities for afforestation using treated wastewater to plant wood trees.

4.3.3 Desertification

Egypt, with land extending over one million square kilometers under arid and hyperarid climatic conditions, is endowed with varied agro-ecological zones with varied and specific attributes of resource base, climatic features, terrain and geomorphic characteristics, land use patterns and socio-economic implications. A meaningful national action plan for Egypt would be comprised of sub-components, each of which is geared to address the specific attributes of each agro-ecological zone distinguished in Egypt. The zones could be identified as follows:

1. North Coastal Belts: Including North West coastal areas and Northern areas of Sinai.
2. The Nile Valley: Encompassing the fertile alluvial land of Upper Egypt, the Delta and the reclaimed desert areas in the fringes of the old Nile valley.
3. The Oases and Southern Remote Desert Areas: Including Uwienate, Toshki and Darb El-Arbien Areas and Oases of the Western Desert.
4. The Desert Inland: Including the plateau and dry valleys of Sinai and elevated areas in the Southern Eastern Desert.

The general priorities in desertification in Egypt as presented in the NEAP tackled several issues, these are:

- Degradation of irrigated farmland as a result of using low quality water in irrigation,
- Degradation of rain-fed farmland (northern coastal belt and northern Sinai rainfall 100-250mm), for insufficient water harvesting and water spreading processes.
- Degradation of rangeland (northern coastal belt) through overgrazing, degradation of plant cover,

- Encroachment of sand formations, especially from the Western desert, on the Nile Valley land (southern Egypt) and on the High Aswan Dam reservoir (in Egypt and Sudan).
- To formulate meaningful options that ensure that the introduction of irrigation into the area does not threaten the sustainable use of the marginal land or the livelihoods of the present local population.
- To conserve the ecosystem from invading pests and pollutants.
- To provide and enhance green areas for better and healthier microclimatic conditions.
- To formulate rational and innovative policies for waste management treatment and reuse of solids and effluents.
- To promote public awareness campaigns dealing with environmental issues using all available media means.
- To develop environmental institutional aspects with appropriate capacity building and training in issues specific to characteristics of the surrounding ecosystems.
- To combat damaging flash floods through appropriate water spreading and water conservation techniques; and to prevent and alleviate damages of flash floods to the infrastructures and available resources including adverse socio-economic impacts.
- To conserve, manage and utilize the highly valued and diversified natural flora and fauna resources.

4.4 EGYPT'S NATIONAL ACTION PLANS IN THE THREE THEMATIC AREAS

The first commitment of the countries that ratified the CBD, UNFCCC, and UNCCD is the preparation of National Action Plans (NAP) to preserve biodiversity, mitigate & adapt climate change, and combat desertification. According to the conventions, the NAP should identify the factors contributing to biodiversity loss, climate change, and desertification and set up practical measures to reduce it.

The priorities considered in the NAPS in this report are from the identified cross-cutting capacity in the prioritization phase of the NCSA project. The focus is only related to the prioritized cross-cutting issues: public participation; technology transfer and cooperation; financial mechanisms; legislation formulation and enforcement; and monitoring, evaluation, and reporting.

4.4.1 Biodiversity

The issues tackled in the biodiversity action plan related to the requirements of the CBD are: development of national plans, programs and institutional capabilities; improvement of legislations formulation and enforcement; enhancement and increasing scientific research capabilities; enhancement of technology transfer and cooperation; improvement of monitoring and evaluation systems; increase of public participation and the incorporation of biodiversity into public education. Also, the provision of training for people in the sector and the development of new funding strategies and financial mechanisms are within these priorities.

4.4.1.1 Public Participation

It is visualized that a number of Protectorates must be managed by the Nature Conservation Authority in partnership with local stakeholders living in the areas in

which Protectorates are located. This can be achieved through services and pricing structures that offer local people incentives to conserve and manage wild resources more sustainably. This will include community based resource management programmes that give the landholders in an area rights to use and trade freely in wild resources, in order to maximize the returns from using them sustainably. In addition, the Nature Conservation Authority should promote the awareness among decision makers and the public at large of the value of wild resources and the importance of managing them effectively.

4.4.1.2 Technology Transfer and Cooperation

The Nature Conservation Authority should use internationally recognized best practices to achieve the standards of excellence expected by the Convention on biodiversity.

4.4.1.3 Financial Mechanisms

Currently, Egypt's PAs are all chronically under-resourced, far below the norm for developing countries or even Africa. In order to match the regional or developing countries norms, Egypt would need to invest between \$7.4 million and \$15.7 million annually in its national protected area system – a 4 to 9 fold increase on current expenditure. The Nature Conservation entity should endeavour to make Protectorates as financially self supporting as possible by optimizing revenue generation from each area to the extent the market will bear and without threatening natural values. The management of PAs should be supported by a grant in aid from Government, or a donor, augmented by revenue generated by the protectorate from entry charges, concession, licenses fees or the like.

4.4.1.4 Legislations Formulation and Enforcement

The Nature Conservation Authority should promote better long term conservation of all wild resources outside Protectorates. Legal instruments will define means for deterrence and/or punishment of violations of set limits. There are a number of laws for protection of the environment at large and for conservation of natural resources and biodiversity in particular, however there is still the need for consolidating and enforcing these instruments and their statutes. This should be done through supportive regulatory mechanisms and incentives for local people.

4.4.1.5 Monitoring and Evaluation Systems

The Nature Conservation Authority (NCA) should monitor the status and trends in the wild resources throughout the country with a view to initiating appropriate action to prevent harm to valuable species, ecologically processes or aesthetically attractive scenery. The NCA should devise strategies to protect the health and livelihoods of people. It is stated that the Chief of Monitoring and Research will prepare a programme to monitor the effectiveness of the Nature Conservation Authority's management agenda in protected areas on annual basis. This should be reported through higher authority to the Council. Using objectively verifiable indicators, the former report should describe how well natural landscapes and natural values are being protected in each area, how well key species are being conserved, how

sustainable the use of the area is, its revenue generation, and the cost effectiveness of the management program.

4.4.2 Climate Change

The climate change action plan was produced in 1999 and identified the following crosscutting issues as priorities in its agenda to be considered in the policy of all involved entities: The improvement of national plans, programs and institutional capabilities; increasing scientific research capabilities, enhancement of technology transfer and cooperation; improvement of monitoring and evaluation systems; increase of public involvement and awareness of the issue; and the provision of training for people in the sector.

4.4.2.1 Public Participation

It is stated that public understanding of the phenomenon of climate change is a crucial component for the acceptance, success, participation and sustaining all the actions that are stated in the action plan. The proposed actions include using special TV and radio programs that would be written and produced by professionals. These programs should be simple and friendly in order to target a wide scope of people. It also includes preparing a climate-change newsletter addressing the higher level audience with more than secondary school certificate. Moreover, it includes inviting a media representative from time to time to a one day gathering for briefing on what is new and what message EEAA wants to send to the public.

4.4.2.2 Technology Transfer and Cooperation

Climate change is a high rank priority area within the national environmental policy of Egypt. However, as the case in most developing countries, the national resources for environmental issues allocated at the national level are rather limited which also applies on climate change. This makes the international cooperation in the field of climate change an important issue that is essential for implementing most of the actions introduced in the climate change plan.

4.4.2.3 Financial Mechanisms

This item is not tackled in the climate change NAP.

4.4.2.4 Legislations Formulation and Enforcement

This item is not tackled in the climate change NAP.

4.4.2.5 Monitoring and Evaluation Systems

The main stress in the climate change action plan was on mitigation actions rather than on monitoring and evaluation. However, there is a proposed research project in the plan for climate science for monitoring and modelling. This should be conducted by universities and research institutes and executed by appropriate and concerned institutions such as the National Authority for Remote Sensing and Space Science.

4.4.3 Desertification

In the desertification sector, the main priorities identified in the action plan that were cross-cutting with the other thematic areas are: development of national plans, programs and institutional capabilities; improvement of legislations formulation and enforcement; enhancement of technology transfer and cooperation; improvement of monitoring and evaluation systems; increase of public involvement and awareness of the issue; the provision of training for people in the sector and the development of new funding strategies and financial mechanisms for combating desertification. In addition to increase of integration and cooperation with the biodiversity and climate change sectors.

4.4.3.1 Public Participation

There should be participation of local communities, targeted groups, stakeholders, and NGOs in planning, implementation, evaluation and monitoring. Up-grading the capacity of the local community, NGOs, institutions and all partners in the various aspects of desertification control is an essential prerequisite for NAP success. Awareness raising in the field of desertification control in general and rangeland management and sand dunes fixation in particular. The promotion of public awareness campaigns dealing with environmental issues, particularly combating desertification, should be done using all available media.

4.4.3.2 Technology Transfer and Cooperation

It is important for Egypt to obtain technical assistance from concerned regional and international institutions as well as from other developed countries and donors and to adopt innovative technologies for halting the desertification processes. Further and more effective coordination and cooperation with sub-regional, regional, and international activities in the field of combating desertification are needed.

4.4.3.3 Financial Mechanisms

Allocating adequate permanent financing resources required for combating desertification. Financial assistance to Egypt should be obtained from concerned regional and international institutions as well as from other developed countries and donors, additional funds through GEF, the Global Mechanism, World Bank, the International Fund for Agricultural Development, etc. An important point that was declared in the national consultation workshop is that Egypt is in the process of establishing a national fund for implementation of UNCCD obligations as part of the NAP projects.

4.4.3.4 Legislations Formulation and Enforcement

Additional legislation and regulations at the national, governorates and local levels will be needed. Enforcement of existing and newly issued legislations and regulations are also needed to support efforts and activities of combating desertification in the different Agro-ecological zones.

4.4.3.5 Monitoring and Evaluation Systems

The NAP states that there should be measurements for the types and degrees of desertification and its extension in the four agro-ecological zones in Egypt should be monitored. In order to provide the decision makers with relevant analyses of the

desertification processes. A system to monitor the impact of desertification should be set up to quantify the extent, intensity of land degradation on special scale and some indications on temporal scale. Thematic maps and creation of relevant indicators should be generated to inform stakeholders and decision makers regularly with the scope of the desertification phenomena and provide them with an objective basis for making related plans.

This section of the study reviews the findings of the previous stages of the NCSA project which are the stocktaking and gap identification phase, prioritization and focusing phase, and the in-depth phase. In the stocktaking and gap identification phase, the three stocktaking reports prepared by national consultants identified the capacity constraints in achieving the requirements of each of the conventions.

In the prioritization and focusing phase, all the constraints that appeared in the stocktaking phase were listed and cross-cutting issues between two or more conventions were identified. Seventeen cross-cutting constraints were found to occur in two or more of the thematic areas, which were then integrated into twelve main cross-thematic synergies. After the identification of cross cutting capacity constraints, the capacity development actions were prioritized for the cross-cutting synergies and for each specific thematic area using seven evaluation criteria. The prioritized cross-cutting constraints that were identified were: public participation, technology transfer and cooperation, financial mechanism, legislations formulation and enforcement, and monitoring and evaluation.

In the in-depth phase, a number of actions were recommended to address the identified capacity constraints in collaboration with national experts in the five cross-cutting fields based on desk study and interviews. The recommended action plans were also linked to the priority environmental issues in Egypt that were identified previously in the NCSA focusing and prioritization phase.

5.1 IDENTIFIED CAPACITY CONSTRAINTS

5.1.1 Cross Cutting:

All of the national capacity constraints identified in the stocktaking stage are summarized and listed in Table 2, shown below. The cross-cutting analysis is done by inserting an 'x' sign for the capacity constraint, if exists for the theme. Each 'x' sign scores one point, and the total score which adds all values for all themes is listed in the occurrence column. The cross-cutting synergies are identified as the synergies that score a total value of two (2) or three (3). The synergies with the value of one (1) are considered only unique for that particular theme.

Table 2: Major capacity constraints in the three thematic areas

Issue	No.	Capacity Constraint	Biodiversity	Climate change	Desertification	Occurrence
National Inventories	1	Non-existence of country national specific emission factors		x		1
	2	Lack of support from different ministries and institutions to complete national inventories		x		1
Examine Obligation, assess implementation	3	Measures taken for implementation of the convention are still under formulation			x	1
	4	Division of responsibilities between institutions needs to be more specified			x	1
National and Regional programs / plans	5	Limited presence of instrumental processes to evaluate the national economical value of biodiversity and land degradation	x		x	2
	6	Outdated national action plan		x		1
	7	Ignoring the integrated approach in national policies, capacity development tools and programs	x	x	x	3
	8	Improper and irrational land policy and planning			x	1
	9	Lack of integration between biodiversity, climate change and desertification conventions on the national scale	x	x	x	3
Identification and Monitoring	10	Absence of a national indicator system for monitoring/evaluation of programs and activities and early warning systems		x	x	2
Protected Areas	11	Lack of necessary tools and practices for proper law enforcement in protected areas	x			1
Legislations	12	Absence of proper enforcement of legislations already adapted and need for further legislations to protect the environment	x	x	x	3
Financial Mechanisms	13	Lack of sustainable financial mechanism for mobilizing funds either domestic or international	x	x	x	3

	14	The allocated funds for desertification control in eastern and western deserts including Sinai are very low			x	1
	15	Lack of financial resources for the management unit		x		1
Public Education	16	Lack of long term programs for awareness and education	x	x	x	3
	17	Limited presence of national knowledge, awareness and management skills	x	x	x	3
Public Participation	18	Lack of mechanisms for enhancing citizen's participation in community decision making and for fostering and institutionalizing local resource generation	x	x	x	3
	19	Weak local communities capabilities	x			1
	20	Inactive role of NGOs		x		1
Research and Scientific Studies	21	Absence of proper link between research institutes/universities, policy makers, and the national implementing agencies	x	x	x	3
	22	Lack of motivation for research programs	x	x	x	3
	23	Lack of a regional model for prediction of climate change impacts		x		1
	24	Lack of scientific research capabilities to support all goals of the convention	x		x	2
	25	Absence of departments for climate change in universities to study the impacts of climate change on different regions		x		1
	26	Dispersion of research efforts amongst institutions and agencies	x	x	x	3
	27	Limited presence of proper institutional capabilities to implement the convention	x	x	x	3
	28	Weak technical capabilities of some institutions to carry out			x	1

		comprehensive studies and follow-up on land degradation issues				
Information Exchange	29	Absence of country data, networking system and information exchange that facilitate the acquisition, processing and dissemination of technical knowledge	x	x	x	3
	30	Non-existence of national data base and reporting system for the climate change information		x		1
Data Collection	31	Lack of database for EIA	x			1
	32	Lack of database for penalties and violations	x			1
Technology Transfer and Cooperation	33	Lack of clear national policy for regional and international technology transfer and consultation	x	x	x	3
	34	Lack of proper access to knowledge and information	x			1
	35	Lack of effective cooperation on the national and international levels	x		x	2
	36	Weak obligatory tool on the global level in the field of technology transfer and cooperation	x			1
Training, Personal training and Retraining	37	Limited training and capacity building due to shortage in staffing, equipment and tools	x	x	x	3
	38	Lack of training on strategic impact assessment	x			1
Environmental Assessment	39	Lack of a regional model for environmental assessment (North Africa, Nile Basin countries)		x		1
	40	Limited presence of the institutional mechanism to assess the impact of other regional and international conventions and agreements on biodiversity	x			1

		and vice versa				
Kyoto Protocol	41	Inadequate number of participants in CDM COP/MOP meetings to cover all responsibilities		x		1

From the above table, Seventeen cross-cutting capacity constraints were found to occur in two or more of the thematic areas. These were further grouped into twelve cross-thematic synergies, as follows:

- **National Plans, Programs and Institutional Capabilities: Ignoring the integrated approach in national policies, capacity development tools and programs (capacity constraints #5, 6, #7, 8, and 9)**

The lack of adequate skills in planning, issuance of legislations, risk impact assessment and economics comes as a major barrier for strengthening the national capacity to undertake full assessment in each of the three thematic areas. Development and implementation of strategies and central action plans encompassing national and regional obligations for the conventions is missing. Furthermore, enhancing national capacity to formulate and implement systemic policies and laws, as well as strengthening national reporting to the respective conference of parties is not adequate.

- **Legislations Formulation and Enforcement: Absence of proper enforcement for legislations already adapted and needs for further legislations to protect the environment (capacity constraint # 12)**

The absence of adequate and coherent policies and legislative measures constitutes one of the main constraints to implement the goals of the conventions. The absence of explicit policies and legislations or existence of conflicting policies and laws in Egypt, for the three thematic areas, acts as major limitations to implementing the goals of the convention.

- **Scientific Research Capabilities: Lack of scientific research capabilities to support all goals of the conventions and absence of proper link between research institutes, universities and the national implementing agencies (capacity constraints # 21, 22, 23, 24,26, 27 and 28)**

An important capacity development priority concerning the three conventions is creating an enabling system for linking scientific research to policy making. Scientific research should focus on cumulative and synergistic impact assessment of the linkages between biodiversity losses, desertification and climate change and produce information decisions on integrated responses and mitigation plans.

- **Technology Transfer and Cooperation: Absence of networking with sub-regional, regional and international organizations and lack of clear national policy for regional and international technology transfer (capacity constraints # 33, 34, 35 and 36)**

The Rio conventions emphasize the importance of technology co-operation and transfer in achieving their respective goals. Mutually supportive technologies will be

of value to address the common elements and synergies from a technological perspective.

- **Monitoring and Evaluation Systems: Absence of a national indicator system for evaluating and monitoring programs and activities for implementation of the three conventions (capacity constraint # 10)**

There is an essential need to develop and implement national programs for monitoring and evaluating programs and activities for desertification, biodiversity, and climatic change based on sound integrated systems of indicators. These systems should be linked to national programs for knowledge management on the three thematic areas that are accessible to all stakeholders.

- **Public Participation: Lack of awareness of the community, particularly in rural population, and lack of mechanisms for enhancing citizen's participation in community decision making and for fostering and institutionalizing local resource generation (capacity constraints # 18, 19 and 20)**

The capacities of the local communities to address issues of biodiversity, desertification and climate change should be developed in a sound technical way, keeping close attention to the linkages with sustainable development. This can be done through capacity development for local institutions (municipalities, NGO's, etc.) to enable them to develop their own initiatives for implementing global environmental thinking within the local context.

- **Public Education: Relevant educational and training programs pertaining to national resources, management and conservation are actually absent or undeveloped, and lack of long term programs for awareness and education (capacity constraints # 16 and #17)**

The existing educational system in environmental sciences and natural sciences in general does not adequately address scientific and practical linkages between themes of biodiversity, desertification and climate change, and the natural environment. Education on global environment issues can promote the development of an increased awareness and understanding of the impact of the local actions that degrade the environment. Subjects related to the conventions should be integrated in educational programs and curricula to ensure a sustainable flow of education packages for environmental management and linkages between the three themes.

- **Training Programmes: Training courses and programs dealing with the concepts of the Rio conventions are generally missing (capacity constraints # 37 and 38)**

Environmental and technical training packages developed by and for the national institutions should begin to focus on linkages and synergies between the conventions. Programs must be developed to utilize existing national and regional specialized centers to provide courses in technical areas relevant to the three conventions.

- **Financial Mechanisms : Lack of sustainable financial mechanisms for mobilizing funds whether domestic or international (capacity constraints # 13, 14 and 15)**

Apart from some exceptions, one of the major constraints facing accomplishing the targets of the three Rio conventions is that most institutions lack the technical and practical knowledge for financial and technical mobilization in order to implement

projects and programs tackling synergies between the three themes. No permanent financial resource has been ensured for the concerned areas although it is the key for achieving sustainable development.

- **Economic Evaluation: Limited presence of instrumental processes to evaluate the national economical value of biodiversity and desertification (capacity constraint # 5)**

There is limited presence of instrumental processes to evaluate the national economical value of biodiversity and desertification or the cost of their degradation. Moreover, feasibility studies and cost-effectiveness of sustainable management and options to provide a rationale for continued environmental management, and allow for priority setting of environmental actions on the national level are still missing.

- **Integration between Conventions: Lack of clear and systematic integration of the cross-cutting concepts in the national policy formulation process (capacity constraint # 9)**

The main cross-cutting concepts advocated by the conventions are not well reflected in the current national development and sectoral policies in a clear and integrated manner. Linkages between the Rio conventions and poverty eradication should be emphasized to ensure the credibility of integrating the themes into development policies.

- **Information Exchange: Absence of country data, networking system and information exchange that facilitate the acquisition, processing and dissemination of technical knowledge (capacity constraints # 29 and 30)**

5.1.2 Each thematic area

Other constraints were identified specifically for certain thematic areas; these are the constraints that should be addressed within the framework of each convention separately and are not cross-cutting issues.

In Biodiversity:

- Mechanisms for enhancing citizen's participation in community decision making and for fostering and institutionalizing local resource generation are generally lacking
- Lack of proper access to knowledge and information
- Weak local communities capabilities
- Lack of necessary tools and practices for proper management and law enforcement in protected areas
- Weak obligatory tool on the global level in the field of technology transfer and cooperation

In Climate change:

- The CCU/EEAA requires more financial resources.
- Need for establishment of national data base and reporting collection for the climate change information.
- Need to develop a regional model for prediction of climate change impacts.
- Number of participants in CDM COP/MOP meetings is not enough to hold all responsibilities.

- Need to establish departments for climate change in the universities to study the impacts of climate change on different regions.
- Need to update national action plan.

In Desertification:

- Enhance technical capabilities of some institutions to carry out comprehensive studies and follow -up of land degradation issues
- The allocated funds for desertification control in eastern and western deserts including Sinai are relatively low
- Division of labour between institutions needs to be more specified
- Need to incorporate combating desertification aspects into policies and planning
- Measures taken for implementation of the convention are to be complemented and continued (according to the review of the previous activities that were completed in the NAP)

5.2 PRIORITIZATION OF CAPACITY CONSTRAINTS

The next step was the prioritization of the (i) cross-cutting constraints and the (ii) specific thematic constraints. The prioritization was based on a quantitative scoring system based on a three-scale point method. The criteria selected for prioritizing capacity development actions for the constraints are as follows:

Criterion	3-scale point method			
	3	2	1	0
Presence in Egypt's National Environmental Action Plan (NEAP) - (only in cross-cutting constraints prioritization)	<i>N/A</i>	<i>Yes</i>	<i>Partially</i>	<i>No</i>
Presence in the National Action Plan (NAP) for each specific thematic area	<i>N/A</i>	<i>Yes</i>	<i>Partially</i>	<i>No</i>
Identified by focal points	<i>N/A</i>	<i>Yes</i>	<i>Partially</i>	<i>No</i>
The time required for implementation (higher priority for shorter time)	<i>Short 2-3 years</i>	<i>Medium 5-6 years</i>	<i>Long 6-7 years</i>	<i>/</i>
The time anticipated to achieve significant results (higher priority for shorter time)	<i>Short 2-3 years</i>	<i>Medium 5-6 years</i>	<i>Long 6-7 years</i>	<i>/</i>

Table 3: Prioritization of cross-cutting synergies

Synergies	Presence in NEAP	Presence in NAP			Presence in focal point priorities			Implementation Timeframe	Time anticipated for significant results	Priority
		Biodiversity	Climate change	Desertification	Biodiversity	Climate change	Desertification			
Technology transfer and cooperation: Absence of networking with sub-regional, regional and international organizations and Lack of clear national policy for regional and international technology transfer	Yes (2)	Partially (1)	Partially (1)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Short (3)	Medium (2)	17
Public participation : Lack of awareness of the community, particularly in rural population, and lack of mechanisms for enhancing citizen's participation in community decision making and for fostering and institutionalizing local resource generation	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	No (0)	Long (1)	Medium (2)	15
Scientific research capabilities: Lack of scientific research capabilities to support all goals of the conventions and absence of proper link between research institutes, universities and the national implementing agencies	Yes (2)	Yes (2)	Yes (2)	No (0)	Yes (2)	Yes (2)	No (0)	Medium (2)	Medium (2)	14
Financial mechanisms : No permanent financial resource has been ensured for the concerned areas although it is the key for achieving sustainable development, and	Yes (2)	Yes (2)	No (0)	Partially (1)	Yes (2)	Yes (2)	No (0)	Medium (2)	Short (3)	14

Synergies	Presence in NEAP	Presence in NAP			Presence in focal point priorities			Implementation Timeframe	Time anticipated for significant results	Priority
		Biodiversity	Climate change	Desertification	Biodiversity	Climate change	Desertification			
lack of sustainable financial mechanisms for mobilizing funds either domestic or external										
Legislations formulation and enforcement: Absence of proper enforcement for legislations already adapted and needs for further legislations to protect the environmental issues	Yes (2)	Partially (1)	No (0)	Yes (2)	Yes (2)	No (0)	No (0)	Short (3)	Short (3)	13
Monitoring and evaluation systems: Absence of national indicator system for evaluating and monitoring programs and activities for implementation of the three conventions	No (0)	Yes (2)	Yes (2)	Yes (2)	No (0)	Yes (2)	No (0)	Medium (2)	Short (3)	13
Training programmes: Training courses and programs dealing with the concepts of the Rio conventions are generally missed and mechanisms for enhancing citizen's participation in community decision making and for fostering and institutionalizing local resource generation are also lacking	No (0)	Yes (2)	Yes (2)	Yes (2)	No (0)	No (0)	No (0)	Short (3)	Short (3)	12

Synergies	Presence in NEAP	Presence in NAP			Presence in focal point priorities			Implementation Timeframe	Time anticipated for significant results	Priority
		Biodiversity	Climate change	Desertification	Biodiversity	Climate change	Desertification			
National plans, programs and institutional capabilities: Ignoring the holistic approach in national policies, capacity development tools and programs	No (0)	Yes (2)	Yes (2)	Yes (2)	No (0)	No (0)	Yes (2)	Medium (2)	Long (1)	11
Public education : Relevant educational and training programs pertaining to national resources, management and conservation are actually absent or undeveloped, and Lack of long term programs for awareness and education	No (0)	Yes (2)	Yes (2)	No (0)	No (0)	Yes (2)	No (0)	Long (1)	Long (1)	8
Integration between conventions: Lack of clear and systematic integration of the cross-cutting concepts in the national policy formulation process	No (0)	No (0)	No (0)	Yes (2)	No (0)	No (0)	No (0)	Short (3)	Medium (2)	7
Information Exchange: Absence of country data, networking system and information exchange that facilitate the acquisition, processing and dissemination of technical knowledge	Partially (1)	No (0)	No (0)	No (0)	Yes (2)	No (0)	No (0)	Medium (2)	Medium (2)	7
Economic evaluation	No (0)	No (0)	No (0)	No (0)	No (0)	No (0)	No (0)	Medium (2)	Medium (2)	4

According to Table 3, the top high priority cross-cutting capacity constraints are as follows:

1. Technology transfer and cooperation
2. Public participation
3. Scientific research capabilities
4. Financial mechanisms
5. Legislations formulation and enforcement
6. Monitoring and evaluation

5.3 RECOMMENDED LINES OF ACTION

5.3.1 Cross Cutting:

Several actions were recommended in the in-depth phase of the NCSA project to address the main prioritized constraints specifically and all the identified gaps that were identified in the stocktaking and gap identification phase generally. These actions should be applied to achieve the goals of the three Rio conventions (Biodiversity, Desertification, Climate change). These actions are:

Public Participation:

- Restructuring the National Institutional Settings (PP-1).
- Awareness Raising and Capacity Building for Effective Public Participation and Partnership (PP-2).
- Develop Guidelines for Effective Public Participation in Projects Related to the Conventions Implementation (PP-3).
- Effective Exchange and Dissemination of Information Related to the Rio Conventions (PP-4).
- Develop a New Model(s) of “Community Based Interventions” (PP-5).
- Strengthen Small Grants Programs for NGOs and CBOs (PP-6).
- Develop and Implement a Clear Strategy to Encourage the Private Sector to Invest in Projects in the Three Thematic Areas (PP-7).

Technology Transfer and Cooperation:

- Incorporate Technology Transfer and Cooperation into National Policies (TT-1).
- Establish a Formal Strategy for Technology Transfer and Cooperation (TT-2).
- Establish a Technology Transfer and Cooperation Unit within each National Focal Point (TT-3).
- Establish a National Technology Transfer Center (TT-4).
- Create National Council for Coordination between Conventions and Activate/Establish Coordination Committees (TT-5).
- Nominate a catalyzing entity for technology transfer and cooperation (TT-6).
- Implement Technology Transfer Projects Linking the Three Thematic Areas (TT-7).

Financial Mechanisms:

- The Application of Law 8 of 1997 for the Reduction of Custom Duties on Environmental Goods (F-1)

- Rehabilitation of the Environmental Protection Fund (F-2)

Legislation Formulation and Enforcement:

- Establish Legal Protection Strategy for Formulation and Enforcement of Environmental Legislations (L-1).
- Establish National Mechanism to Follow Up the Implementation of the Conventions' Obligations (L-2).
- Establish New Environmental Court (L-3).
- Developing Legal Framework for Sustainable Financial Mechanisms (L-4).
- Modifying The Current Article of Law No. 4/1994 and Law No. 102/1982 Related to the Role of Civil Society towards Environmental Issues (L-5).
- Adding Specific Article to the Code of Intellectual Properties Related to the Role of Private Sector in Protecting Intellectual Properties (L-6).
- Unifying Local Legislations to Cover Rio Conventions Obligations (L-7).

Monitoring, Evaluation, and Reporting:

- Developing a Framework Methodology for Monitoring and Data Collection (ME-1).
- Improving Reporting (ME-2).
- Promoting the Incorporation of the Global Environment in National Policies and Plans (ME-3).
- Improving Inter-Agency Coordination (ME-4).
- Promoting the Development of Research Capabilities (ME-5).

The recommended lines of actions in the five cross cutting areas and their relation to Egypt's national environmental priorities as stated in the NEAP and NAPs are summarized in the following table.

Table 4: Linkages between the proposed recommended lines of action and the NEAP and NAPs

Proposed Action	Egypt's Environmental Priorities – NEAP & NAP																												
	Biodiversity											Climate Change				Desertification													
	Conservation of wetlands	Biodiversity conservation	Endangered species	Protected areas	Habitat damage	Sustainable use of biological resources	Biosafety	Invasive Alien species	Mountain biodiversity	Exploitation of biotechnology	Remote sensing	Mitigation - GHGs reduction	Adaptation	Sea level rise	Vulnerability to climate change	Sustainable land Management and Use	Sustainable use of water resources	Soil erosion and loss (due to irrigation practices)	Urban encroachment	Mismanagement practices and water pollution due to agricultural activities	Enhance afforestation	Agro-biodiversity	Habitat damage	Coastal management	Coastal erosion	Sustainable use of marginal land	Initial salinity of virgin desert soils	Degradation of rangeland and cultivated rain fed areas	Remote sensing and Early
Public Participation																													
PP-1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
PP-2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x									
PP-3		x	x	x	x							x							x	x	x		x						
PP-4																													
PP-5		x	x	x	x	x										x		x	x	x	x		x						
PP-6		x	x	x	x	x						x	x			x	x		x		x								
PP-7		x	x	x			x	x		x		x	x			x		x											
Technology Transfer and Cooperation																													
TT-1		x	x		x	x	x	x				x	x			x	x	x					x	x			x	x	
TT-2		x	x			x	x	x				x	x			x	x	x						x				x	
TT-3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
TT-4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
TT-5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
TT-6	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
TT-7								x		x	x	x	x					x		x	x	x							

Proposed Action	Egypt's Environmental Priorities – NEAP & NAP																												
	Biodiversity											Climate Change				Desertification													
	Conservation of wetlands	Biodiversity conservation	Endangered species	Protected areas	Habitat damage	Sustainable use of biological resources	Biosafety	Invasive Alien species	Mountain biodiversity	Exploitation of biotechnology	Remote sensing	Mitigation - GHGs reduction	Adaptation	Sea level rise	Vulnerability to climate change	Sustainable land Management and Use	Sustainable use of water resources	Soil erosion and loss (due to irrigation practices)	Urban encroachment	Mismanagement practices and water pollution due to agricultural activities	Enhance afforestation	Agro-biodiversity	Habitat damage	Coastal management	Coastal erosion	Sustainable use of marginal land	Initial salinity of virgin desert soils	Degradation of rangeland and cultivated rain fed areas	Remote sensing and Early Warning Systems
Financial Mechanisms																													
F-1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
F-2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Legislation Formulation and Enforcement																													
L-1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
L-2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
L-3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
L-4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
L-5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
L-6	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
L-7	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Monitoring, Evaluation, and Reporting																													
ME-1	x		x	x	x									x	x	x	x	x					x	x		x			
ME-2				x								x							x				x						
ME-3		x	x		x	x						x				x	x	x					x	x				x	x
ME-4		x											x	x	x	x													x
ME-5	x						x	x		x	x	x	x	x	x			x				x			x		x	x	

6.1 NATIONAL STRATEGY FOR CAPACITY DEVELOPMENT

The National Strategy and Action Plan for Capacity Development for Egypt in the three thematic areas of biodiversity, climate change and desertification was formulated based on an inverted pyramid flowing from the generic National Framework on Sustainable Development, then moving to the National Environmental Action Plan (NEAP), the three National Action Plans (NAP), and finally to the more specific previous stages of the NCSA project as illustrated in Figure (1). The main objective of the National Strategy is to strengthen the systemic, institutional and individual capacities for implementation of the three Rio Conventions.

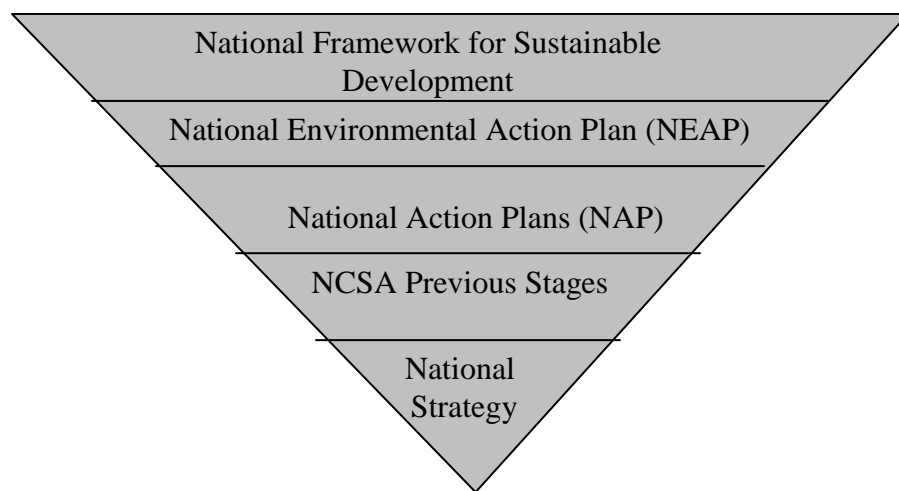


Figure 1: The basis of the National Strategy for Capacity Development

The National Strategy is formulated on strategic principles of the National Sustainable Development Framework, the requirements of the three Rio Conventions, as well as the principles emerging from the cross-cutting/synergy analysis of the NCSA process. For accomplishment of the capacity development objectives, the responsible entities shall be governed by the following strategic principles:

- **National ownership and leadership:** The efforts should be nationally owned, led and driven, including strategic planning, self-monitoring, and self-evaluation. A high degree of national political commitment is essential, but in the same time there should be decentralization in responsibilities.
- **Stakeholders' participation and partnership:** multiple stakeholders should be involved in national decision making and have shared responsibility in implementation to maximize impact and create synergies.

- **Holistic and integrated approach:** capacity-building efforts should be realistic, recognize and build on existing strengths, knowledge and experience. Capacity development must be integrated with ongoing initiatives to enhance capacities for broader environmental managements and for sustainable development in general without duplication of efforts or resources. Parallel to this, the outcomes of the action plan should be taken in consideration in national planning and decision-making.
- **Flexibility:** Capacity-building efforts should be supported by a variety of tools and methodologies. These could range from the more traditional methods to capacity building (such as workshops, training, awareness raising, etc) to those that offer greater scope both methodologically and institutionally (such as networking, horizontal exchanges and cooperation, etc.).
- **Continual improvement:** capacity building is a dynamic process therefore adequate monitoring and evaluation techniques are essential for adaptive management and improvement.

Usually in Egypt, the same as most developing countries, there is a gap between most written actions plans and their implementation on the ground. In order to ensure that the National Strategy and Action Plan for Capacity Development is implemented; several practical, simple, and clear measures are proposed and detailed in the coming sections.

6.2 GENERAL INSTITUTIONAL SETUP

The leading ministry for implementation of the National Strategy and Action Plan, in accordance with the legal provisions, should be the Egyptian Environmental Affairs Agency (EEAA) with involvement of other relevant ministries. Having in mind the complexity of the issues in the three Rio Conventions and their relevance to other ministries, it is recommended that EEAA establish a National Coordination Council for the three Rio conventions (NCC), as a continuation of the NCSA Steering Committee, and regulate the issues of composition, number of members and its responsibilities. The National Coordination Council would directly cooperate with existing National Committees for climate change and desertification, as well as with the Committee for biodiversity when it is established as shown in Figure (2).

The EEAA shall continue to support the work of the NCC in the period of implementation of the Action Plan. This may be carried out by establishing a *Working Group* where it should be the executive arm of the NCC and may be logistically supported by some of the EEAA's Departments. In this sense the EEAA shall continue to play main role in the process of monitoring and evaluation. The mandate and the responsibility of this *Working Group* would be the following:

- Coordination and implementation of the National Strategy and Action Plan (NSAP) implementation;
- Cooperation with partner institutions, committees, and individuals responsible for implementation of the NSAP. These parties can also provide expertise and help monitor progress on specific topics in the Action Plan;

- Exchange information on programmes and projects with environmental capacity development components that are underway in Egypt;
- Review proposals for national and donor-supported projects, and make suggestions on how actions proposed in the Action Plan might be incorporated;
- Organize the NCC meetings and prepare annual reports, to be presented to the NCC for adoption;
- Provide regular update of the web page/ network databases with information and data from the three thematic areas;
- Development of indicators for monitoring of the implementation and monitor the implementation of the Action Plan and report periodically (e.g., quarterly or biannually) to the NCC on progress and constraints facing the Action Plan with recommendations;
- Implement corrective actions and improvement recommendations by NCC.

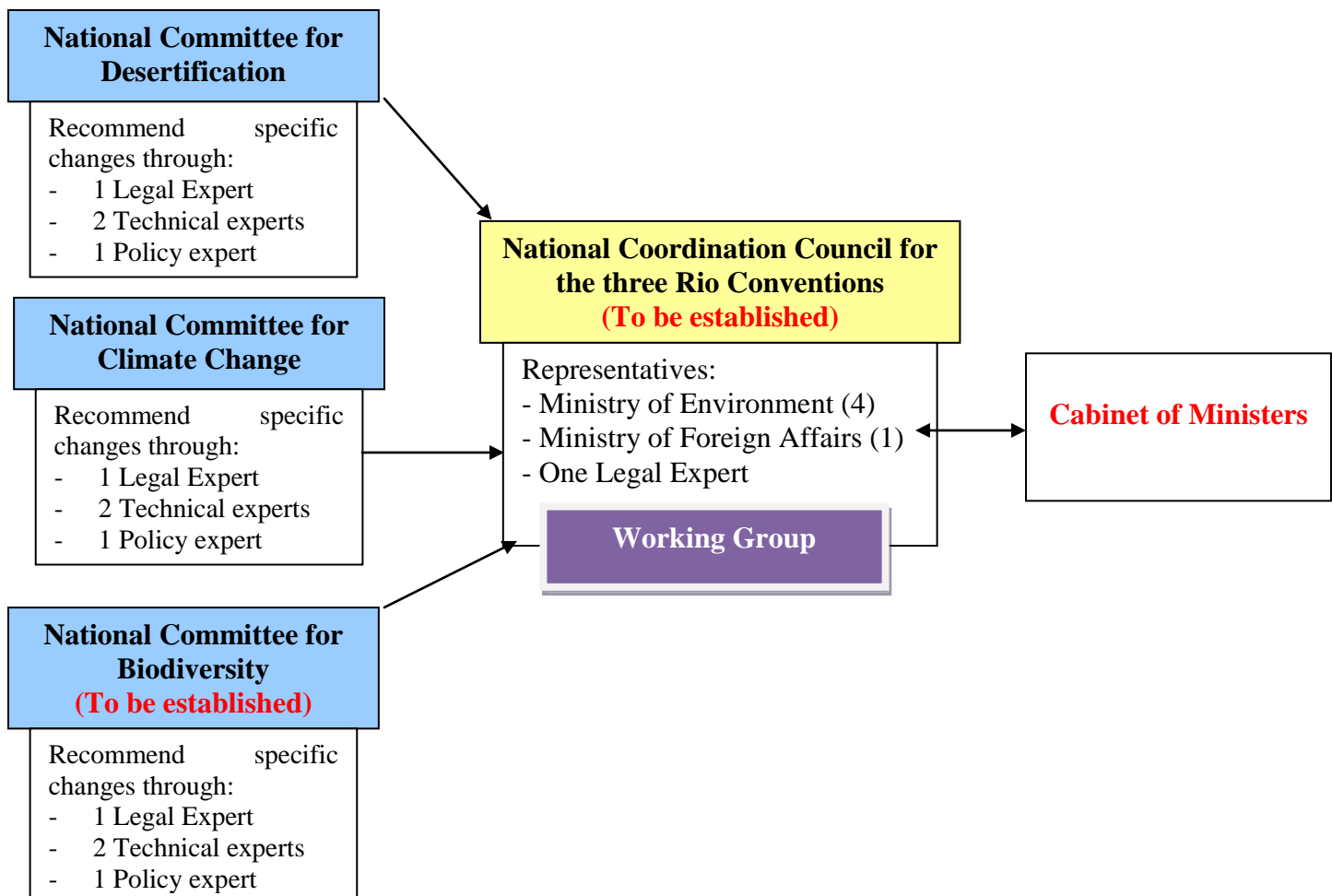


Figure 2: The organizational setup of the National Coordination Council (NCC) for the Rio Conventions

Three options are proposed for the implementation structure of the *Working Group* to be considered by EEAA.

1. **Option A:** the *Working Group* is formed as a sub-committee from the Planning & Follow-up Department associated with the office of the Chief Executive Officer for EEAA.
2. **Option B:** the *Working Group* is formed of the three focal points of the Rio Conventions.
3. **Option C:** the *Working Group* is contracted by EEAA and/or the NCC to an independent organisation within civil society, i.e., private entity, NGO, or combination of both.

Option A: Working Group is formed as Sub-Committee of EEAA Planning Department

In this option, the responsibility for implementation of the Action Plan would be assigned to the institutional structure already in place at EEAA as shown in Figure (3); which is the Planning and Follow-up Department. The role of the Planning and Follow-up Department is to prepare policies and the general planning of EEAA activities through studies and researches and the follow up and evaluation of these annual plans. This department is directly connected to the office of the Chief Executive Officer of EEAA. Since capacity development is one of EEAA priorities, therefore the Action Plan for Environmental Capacity Development will fall within the Planning and Follow-up Department mandate.

The structure of the *Working Group* in **Option A** will be as follows:

- A “*Capacity Development Working Group*” would be established from among the Planning and Follow-up Department members and given responsibility to follow up on the Action Plan, to promote implementation of specific actions, and to monitor and evaluate progress. Since it is already a day-to-day task performed by this department, therefore this option would not require new procedures.
- Other members can be drawn from departments/organizations that have responsibility for capacity development, or an interest in it. The *Working Group* members should be well selected to follow up on the Action Plan, represent diverse stakeholders, and are knowledgeable about and interested in capacity development.
- Specific actions in the Plan would be delegated to related EEAA departments or coordinated with other ministries or agencies in accordance with their responsibilities.

The advantages of **Option A** are:

- Integrated with an existing implementation structure in EEAA, therefore no duplication of national efforts or resources should occur.
- The Action Plan will receive high commitment and will have enough authority to influence actions needed by other implementing organizations, committees and project managers. Its members will be decision-makers with experience and previous background of the country's implementation structure.

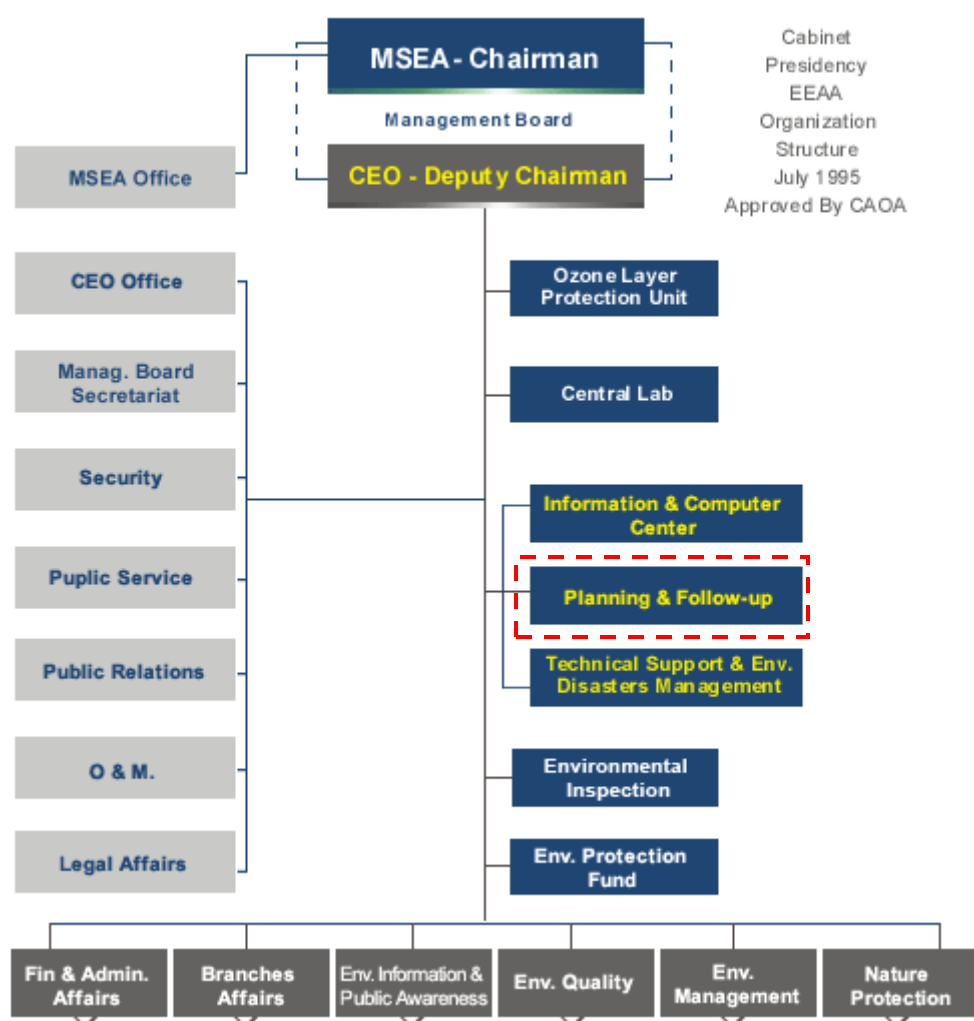


Figure 3: Organizational chart of EEAA

The disadvantages of **Option A** are:

- The Planning Department may be facing operational obstacles that have hampered the implementation of other plans/programs. Therefore, adding the Action Plan to its responsibilities could delay its implementation.
- There could be a limitation on bringing in new and innovative approaches to the planning and implementation of the Action Plan as it will follow mainly the traditional methods of governmental institutions.

Option B: the Working Group is formed of the three focal points of the Rio Conventions

In this option, the three focal points for the CBD, UNFCCC, and UNCCD would be designated as the lead entities with direct responsibility for ensuring that the Action Plan is implemented. The lead entities would establish a “*Capacity Development Working Group*” which would be independent from, but parallel to, the National Committees structure (biodiversity, climate change, and desertification).

The structure of the *Working Group* in **Option B** will be as follows:

The *Working Group* members would be selected from relevant committees and institutions with wide range of stakeholders to be involved in implementing the Action Plan. Currently, the National Committee for Climate Change has among its members the two focal points for UNCCD and UNCCD. Therefore, it is recommended that the National Committee for Climate Change acts as the *Working Group* temporarily until its structure is finalized if this option will be chosen.

The advantages of **Option B** are:

- Places direct responsibility for the Action Plan with three key entities, rather than a large committee/department (i.e, EEAA Planning and Follow-up department); and therefore involves a small, focused group of individuals with direct responsibility for environmental capacity development.
- Having key members of the NCSA Project in the *Working Group* takes advantage of their experience, historical overview, and their motivation to take the Action Plan further.
- Already falls within the responsibilities of the three focal points.

The disadvantages of **Option B** are:

- The *Working Group* might not have enough authority to influence actions by other organizations, committees, and project managers.
- It may require additional human, financial, and logistical resources.
- This adds a new working group and committee structure in a country where institutions and individuals are already spread very thin among existing committees and projects. (“committee fatigue”).
- The delegation of executive powers to a working group/sub-committee might create problems with the whole committee (conflict of authorities).

Option C: Working Group is contracted by EEAA and/or the NCC to an independent organisation within civil society

Under this option, the goals and functions performed by the organisation(s) in Options A and B would be the similar, but all or some of the technical and secretariat functions would be moved to a separate entity within civil society (outside government). A government body (EEAA and/or NCC) would delegate responsibility for driving and coordinating implementation of the Action Plan to this entity on a contractual basis.

The structure of the *Working Group* in **Option C** will be as follows:

An independent organization outside government would be contracted to partially or fully drive and coordinate implementation of the Action Plan. The entity could be an NGO, a consultant and/or a small consortium of individuals from different sectors selected through a transparent tendering process. As a result, the members of the *Working Group* will be independent experts and consultants in multi-specialities. The terms of reference (TOR) and a contract would delineate accountability and legal and institutional areas of responsibility, including a methodology for stakeholder involvement

The advantages of **Option C** are:

- Ensures that the Action Plan is followed up, since there is a contractual responsibility.
- This relatively new and innovative idea may stimulate interest among stakeholders.
- Takes advantage of the technical, managerial and logistical capacity available outside of government (that are usually operational constraints).
- Outside organizations, whether NGO or private or both, may bring in fresh, new approaches and innovative partnerships.

The disadvantages of **Option C** are:

- The model is new and would have to be investigated to determine legal, contractual, and technical implications.
- Additional funds would be required to pay for the services of the independent organization.
- Some lines of actions require to be implemented by a governmental body (e.g. activation of committees or enforcement of laws), this can't be implemented outside the government.
- The *Working Group* will not have authority to influence actions by other organizations, committees, and project managers.

6.3 RECOMMENDED ACTION PLAN

The Action Plan will detail the recommended lines of actions through identification of overall objectives for capacity development for the prioritized cross-cutting issues determined in the previous NCSA In-depth phase. The recommended lines of actions in the Action Plan were screened (modified, combined, or removed) and categorized according to the priority five capacity needs as shown in Table (5): stakeholder engagement, information & knowledge, planning & policy, organization & implementation, and monitoring & evaluation. This categorization is based on the UNDP default capacity assessment framework, which was also the basis for the methodology suggested in the NCSA Resource Kit. It was also recommended to be followed by the NCSA project reviewers during the preparation of the Action Plan. Each capacity need is linked to the environmental objectives of Egypt's National Framework for Sustainable development which is further linked to the screened recommended lines of actions as shown in Table (4).

The recommended lines of actions in the Action Plan shown in Table (5) are further developed as 'project profiles' in which a short activity description is given, the time-frame for implementation, tentative budget, expected results, indicators, responsible institutions, etc. The tabular presentation is used in this document in order to show the basic information on the activities proposed in order to achieve the overall and the specific capacity-development objectives in a simple and clear way to the executing entities. The information in the project profiles has the following meaning:

- **Title & ID Number:** The title for the recommended line of action and the Identification number given in the NSCA in-depth phase.
- **Rationale:** a brief description of the recommended line of action.
- **Linkages to National Priorities, Plans, and Programs:** clearly indicating the connection of the capacity need with the national priorities, plans and programs as stated in the environmental objectives of Egypt's National framework for sustainable development (Table 5), as well as the NEAP and the NAP (Table 4).
- **Objectives:** the objectives expected to be achieved after implementing the line of action.
- **Activities:** a task break-down for the required activities to implement the line of action.
- **Evaluation indicators:** basic indicators for monitoring and evaluating progress and achievements.
- **Activities time schedule:** the sequence of the activities and the total duration of the line of action. The recommended lines of actions are presented as short-term, mid-term, and long-term actions for the fulfilment of the conventions requirements.

- **Required inputs:** it is composed of three components: resources, total budget, funding sources. The resources include the technical experts, administrative personnel, equipment, and facilities needed to implement the line of action. The tentative budget and a cost break-down for each resource is then presented in Egyptian Pounds. Finally, the funding sources are proposed for implementation of the line of action. It should primarily be provided from the national financial sources, and to secure this the line of action should become part of the regular annual programmes of the respective ministries and other responsible institutions and organizations along with their budgetary programmes. The ongoing and planned future projects in the environment and similar sectors, financed not only from domestic sources, and especially the bilateral and multilateral technical support projects, may be an important source of funding as well.
- **Expected output:** quantifiable and specific outputs expected after the completion of the line of action.
- **Stakeholders:** all the relevant stakeholders expected to participate in the implementation of the recommended line of action.
- **Proposed executing entity:** the lead entity to implement the line of action.

Table 5: Summary of the recommended lines of action

Capacity Needs/ Issues	Egypt's National Framework Environmental Objectives	Lines of Actions	Lead Agency	Timeframe	Funding Required
Stakeholder Engagement					
Co-management mechanisms	<ul style="list-style-type: none"> - Activate the Water National Council to ensure the coordination between policies and programmes and legislation support that improves from compliance enforcement. 	<ul style="list-style-type: none"> - Create National Council for Coordination between Conventions and Activate/Establish Coordination Committees (TT-5, TT-7). 	Focal points	Medium-term (1-3 years)	Low (<60,000 EGP)
Cooperation between stakeholder groups	<ul style="list-style-type: none"> - Improve the cooperation between governmental bodies responsible for environmental regulations implementation and achieving the requirements of sustainable development. - Continue Egypt's active and efficient role in coordinating with the African, Arab, and Mediterranean sustainable development committees to protect the regional resources. 	<ul style="list-style-type: none"> - Nominate a catalyzing entity for technology transfer and cooperation (TT-6). 	Private entity	Medium-term (1-3 years)	High (> 300,000 EGP)
Building and maintaining partnerships	<ul style="list-style-type: none"> - Implement civil society participation in biodiversity conservation programmes. - Participation of private sector in decreasing environmental pollution. - Encourage the private sector to participate in land reclamation projects through providing incentives and reduction of the prices for new desert lands. - Provide incentives for private sector to participate in solid and hazardous waste management whether complete or partial. - Achieve participatory governance through the participation of civil society, private sector, and the government in urban development projects. 	<ul style="list-style-type: none"> - Develop Guidelines for Effective Public Participation in Projects Related to the Conventions Implementation (PP-3). 	EEAA	Short-term (≤ 1 year)	Low (<60,000 EGP)
		<ul style="list-style-type: none"> - Develop a New Model(s) of “Community Based Interventions” (PP-5). 	EEAA	Medium-term (1-3 years)	Medium (60,000 – 300,000 EGP)

	<ul style="list-style-type: none"> - Improve the cooperation between the civil society, NGOs, and governmental organizations. - Promote civil society participation in environment protection and development projects. - Increase the capacities of NGOs. 	- Develop and Implement a Clear Strategy to Encourage the Private Sector to Invest in Projects in the Three Thematic Areas (PP-7).	Ministry of Investment	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
Information & Knowledge					
Research and Science	<ul style="list-style-type: none"> - Introduce policies that stimulate research and development and its applications in the industry. - Intensify scientific research and technological development in the field of water desalinization. - Intensify scientific research programs in reuse of agricultural wastes and use of traditional, new, and renewable energy sources. - Finding innovative solutions to finance education and scientific research. 	- Promoting the Development of Research Capabilities (ME-5).	Ministry of Higher Education and Scientific Research	Long-term (> 3 years)	High (> 300,000 EGP)
Information access and sharing	<ul style="list-style-type: none"> - Encourage the use of information technology as a practical tool to advance the various industrial sectors and achieve sustainable development. - Establish a comprehensive database for all the information related to industrial activities in the governorates and the new industrial areas. - Support linkages between the information network for hazardous waste management in EEAA with the private industrial sectors. - Provide NGOs and citizens with environmental information. - Improve scientific and technical capabilities in biodiversity and natural resources conservation in development areas. - Support South-South cooperation efforts to get the up-to-date technologies with the least costs and experience exchange in various fields. - Disseminate cleaner production technology. 	- Incorporate Technology Transfer and Cooperation into National Policies (TT-1).	Focal Points	Long-term (> 3 years)	Low (<60,000 EGP)
		- Establish a Formal Strategy for Technology Transfer and Cooperation (TT-2).	Focal Points	Medium-term (1-3 years)	Low (<60,000 EGP)

Planning & Policy					
Planning and strategy development	<ul style="list-style-type: none">- Integrated policies principle.	<ul style="list-style-type: none">- Promoting the Incorporation of the Global Environment in National Policies and Plans (ME-3).	EEAA	Short-term (≤ 1 year)	Medium (60,000 – 300,000 EGP)
Regulatory frameworks	<ul style="list-style-type: none">- Improve the compliance with environmental laws in industrial establishments.- Implement the obligations of international agreements.- Support the legislative base and strengthen the economic and social incentives to conserve biodiversity and natural resources.- Implement Polluter Pay Principle.- Increase the benefit from the ratified international agreements and research and study joining new agreements or protocols.	<ul style="list-style-type: none">- Establish New Environmental Court to Improve Environmental Laws Enforcement (L-3).	Ministry of Justice	Long-term (> 3 years)	High (> 300,000 EGP)
		<ul style="list-style-type: none">- Reviewing the Legal Framework in Egypt to Meet Rio Conventions Obligations (F-1, L-1, L-4, L-5, L-6, L-7)	EEAA	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
Organisation & Implementation					
Mobilisation & organisation of resources	<ul style="list-style-type: none">- Use finance (revolving funds) to reduce the negative environmental impacts from industry.- Support NGOs through micro-scale financing programmes for neglected groups and individuals.- Encourage Egyptian, Arab, and foreign investment in the agricultural sector.- Encourage the participation of the private sector in financing projects especially drinking water and treated waste water use projects.- Build national capacities to conserve biodiversity.- Provide necessary funding for urban development projects.- Provide the necessary finance for projects that reduce air pollution in industry.- Identify creative mechanisms to fund sustainable development.	<ul style="list-style-type: none">- Rehabilitation of the Environmental Protection Fund (F-2).	EEAA	Long-term (> 3 years)	High (> 300,000 EGP)
		<ul style="list-style-type: none">- Strengthen Small Grants Programs for NGOs and CBOs (PP-6).	EEAA	Short-term (≤ 1 year)	Medium (60,000 – 300,000 EGP)
Technical skills and technology transfer	<ul style="list-style-type: none">- Improve scientific and technical capabilities in biodiversity and natural resources conservation in development areas.	<ul style="list-style-type: none">- Establish a Technology Transfer and Cooperation Unit within each National Focal Point (TT-3).	Focal points	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)

	<ul style="list-style-type: none"> - Support South-South cooperation efforts to get the up-to-date technologies with the least costs and experience exchange in various fields. - Disseminate cleaner production technology. - Encourage the use of information technology as a practical tool to advance the various industrial sectors and achieve sustainable development. - Establish a comprehensive database for all the information related to industrial activities in the governorates and the new industrial areas. - Support linkages between the information network for hazardous waste management in EEAA with the private industrial sectors. - Provide NGOs and citizens with environmental information. 	- Establish a National Technology Transfer Center (TT-4).	Private entity	Medium (1-3 years)	High (>300,000 EGP)
Monitoring & Evaluation					
<i>Other (where relevant and applicable)</i>	<ul style="list-style-type: none"> - Strengthen and improve the role of the local authorities. - Unite the Egyptian entities efforts in presenting well prepared projects to donor countries in order to achieve mutual benefits. 	- Establish National Mechanism to Follow Up the Implementation of the Conventions' Obligations (L-2).	EEAA	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)
		- Formulating Standardized Procedures for Monitoring, Data Collection, and Reporting (ME-1, ME-2, ME-4)	EEAA	Medium (1-3 years)	Medium (60,000 – 300,000 EGP)

A] SHORT-TERM LINES OF ACTIONS

Strengthen Small Grants Programs for NGOs and CBOs (PP-6)

2.1 Rationale

Small Grants Program helps facilitate ownership of development initiatives by a broader sector of society, that is often excluded from the public arena, through increasing their capacity to influence policy and program decisions. Small grants to NGOs and CBOs represent one of the very effective tools to enhance implementation at the very local/micro level, in addition to disseminating a well articulated public message that will eventually contribute in awareness building. The small grants mechanism needs to be strengthened in order that it effectively achieves its objectives.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of supporting NGOs through micro-scale financing programmes for neglected groups and individuals, building national capacities to conserve biodiversity, and identifying creative mechanisms to fund sustainable development. In addition, in the desertification NAP it is stated that there should be participation of NGOs and up-grading of their capacities in the various aspects of desertification control is an essential prerequisite for NAP success.

2.3 Objectives

Strengthen the small grants mechanism as an effective financial tool to meet the conventions obligations by NGOs and CBOs.

2.4 Activities:

- | | |
|----|--|
| #1 | Analyze the current operation of the small grant mechanism for NGOs and CBOs (interviews, questionnaires, desk study, etc) |
| #2 | Identify the gaps present at the current system for small grants |
| #3 | Optimize the use of current resources by filling in the gaps |
| #4 | Seek new financing resources that supports small grants mechanism |
| #5 | Measure progress at the end of the project |

Evaluation Indicators:

- % of fulfilled gaps at the end of the project
- Number of new sources and total amount of allocated grants

2.5 Activities Time Schedule

YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
Total Duration	Short-term (≤ 1 year)											

2.6 Required Inputs

Resources:	Total Cost (EGP)	Funding Sources:
Financial experts		<ul style="list-style-type: none"> • International donors • EEAA/EPF
Administrative staff		
Office facilities		
Total Budget:	Medium	

(60,000 – 300,000 EGP)	
2.7 Expected Output:	
<ul style="list-style-type: none"> • Assessment Report • Directory of new funding sources • Achievements Report 	
2.8 Stakeholders	
EEAA, focal points, Ministry of Local Development, Environmental Protection Fund (EPF), GEF small grants program, national federation of NGOs, federation of environmental NGOs, National Center for Environment and Development, and donor agencies.	
2.9 Proposed Executing Entity:	
EEAA	

Develop Guidelines for Effective Public Participation in Projects Related to the Conventions Implementation (PP-3)	
2.1 Rationale	
Public participation guidelines will be developed to promote active and representative participation toward enabling all community members to meaningfully influence the decisions that affect them related to the conventions implementation. The specific design of these guidelines should render it to be as flexible and applicable to all projects supported by donor agencies and those supported by public finance under the sponsorship of national committees. The language used in the guidelines should be easily understood by the layman and not only for specialists. The guidelines should be verified through implementing it on an actual case study(ies) and open discussion in a public workshop. The guidelines should acquire a binding and committing force (semi-legal power) through administrative and legal procedures (e.g. Ministerial decree) to secure compliance. Within the same context, guideline design should be realistic and flexible to facilitate its implementation.	
2.2 Linkages to National Priorities, Plans, and Programs	
This recommended line of action links with the national priorities of improving the cooperation between the civil society, NGOs, and governmental organizations; promoting civil society participation in environment protection and development projects (specifically biodiversity conservation programmes); and achieving participatory governance through the participation of civil society and the government in urban development projects. In the biodiversity NAP, it is visualized that a number of Protectorates must be managed by the Nature Conservation Authority in partnership with local stakeholders living in the areas in which Protectorates are located. In the desertification NAP, it requires the participation of local communities, targeted groups, stakeholders, and NGOs in planning, implementation, evaluation and monitoring.	
2.3 Objectives	
<ol style="list-style-type: none"> 1) Methods and procedures for effective public participation during implementing different programs and projects. 2) Encouraging the involvement of local stakeholders in all phases of planning, implementation, monitoring, feedback, etc. 	
2.4 Activities:	
#1	Formulate technical working group to prepare the guidelines
#2	Prepare draft guidelines
#3	Send draft guidelines for technical review by independent experts & officials in EEAA
#4	Develop the semi-final version of the guidelines

#5	Public workshop to discuss the guidelines											
#6	Implement the guidelines on actual case study (refer to PP-5)											
#7	Incorporate the feedback from the case study (verification report from PP-5) and the public workshop into the guidelines											
#8	Officially endorse the final version of guidelines through a Ministeral decree											
Evaluation Indicators:												
<ul style="list-style-type: none">• Feedback from the technical review• Responses during the public workshop• Discrepancies with the case study (model) in PP-5												
2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
Activity #6												
Activity #7												
Activity #8												
Total Duration	Short-term (≤ 1 year)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
Working Group experts (public participation, legal, etc)								<ul style="list-style-type: none">• International donors• EEAA• NGOs				
EEAA officials												
Independent experts												
Administrative staff												
Workshop expenses												
Office facilities												
Total Budget:				Low (<60,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">• Public participation guidelines• Official endorsement of the guidelines• Technical review & EEAA officials report• Public Workshop report												
2.8 Stakeholders												
National committees, focal points, EEAA, Ministry of Local Development, NGOs, and donor agencies.												
2.9 Proposed Executing Entity:												
EEAA												

Promoting the Incorporation of the Global Environment in National Policies and Plans (ME-3)

2.1 Rationale

Global environmental issues, though identified as a priority area for action in Egypt, are not always effectively integrated in national policies and plans. This is a result of not only inadequate monitoring, evaluation and reporting, but more importantly non-optimized use of outputs from monitoring evaluation and reporting in the decision making process.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of the integrated policies principle that focuses on integrating significant environmental aspects to the existing national policies.

2.3 Objectives

This aims at promoting the utilization of monitoring, evaluation and reporting outputs for better incorporating global environmental issues in national policies and plans.

- 1) Improved incorporation of global environmental issues in national policies and plans.
- 2) Developed feedback mechanisms to improve the utilization of monitoring evaluation and reporting by decision makers. These would primarily entail reporting mechanisms comprising very concise information, generated at frequent regular intervals (daily/weekly) and targeting decision makers. These mechanisms can make use of information technology, GIS, etc. where applicable. This outcome would necessitate this line of action to be carried out in close coordination with lines of action 1 and 2, described above.

2.4 Activities:

- | | |
|----|---|
| #1 | Identify all global environmental issues relevant to Egypt |
| #2 | Draft the national policies to incorporate global environmental issues |
| #3 | Send the draft for official approval |
| #4 | Develop feedback mechanism to improve the utilization of monitoring evaluation and reporting by decision makers |

Evaluation Indicators:

- The number of global issues in national policies and plans
- Feedback mechanism

2.5 Activities Time Schedule

YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Total Duration	Short-term (≤ 1 year)											

2.6 Required Inputs

Resources:	Total Cost (EGP)	Funding Sources:
A task force with a membership from data management departments, and technical		<ul style="list-style-type: none"> • EEAA • International donors

offices of key decision makers would closely work with the decision makers to identify the primary information, its forms and frequencies which would be needed. This would then be followed by developing the specific reporting mechanisms for this information, identifying any information technology tools which would be applicable.		
Total Budget:		Medium (60,000 - 300,000 EGP) excluding any information technology needed
2.7 Expected Output:		
<ul style="list-style-type: none"> • Integrated national policies with global environmental issues • Efficient feedback mechanism 		
2.8 Stakeholders		
EEAA and Ministry of Agriculture		
2.9 Proposed Executing Entity:		
EEAA		

B] MEDIUM-TERM LINES OF ACTIONS

Develop and Implement a Clear Strategy to Encourage the Private Sector to Invest in Projects in the Three Thematic Areas (PP-7)

2.1 Rationale

Develop and implement a strategy to deliberately attract the private sector to invest in environmental projects. Introduction of the private sector should be based on clear development and articulation of innovative economic instruments and public private partnership. A consultation with the potential private sector that could finance environmental project should be made before drafting the strategy in order to take in consideration their areas of interest, preferred investment methods, and expected benefits.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with several national priorities which are: the participation of private sector in decreasing environmental pollution; encourage the private sector to participate in land reclamation projects through providing incentives and reduction of the prices for new desert lands; provide incentives for private sector to participate in solid and hazardous waste management whether complete or partial; and achieve participatory governance through the participation of civil society, private sector, and the government in urban development projects.

2.3 Objectives

- 1) To trigger the private sector to invest in environmental projects that contributes to the conventions implementation.
- 2) Create a sustainable funding tool through the civil society rather than temporary funds from donors.

2.4 Activities:

#1	Conduct economical feasibility study for projects that fulfill the commitments under the Rio Conventions.											
#2	Implement consultation workshop with private sector and disseminate brief information related to the economic benefit from the projects.											
#3	Develop a strategy to encourage private sector investment.											
#4	Develop criteria for private companies’ selection.											
#5	Prepare a database of all private sources of financing interested after screening in accordance with the developed criteria.											
#6	Distribute information about private sources of financing for projects that fulfill the commitments under the Rio Conventions to stakeholders.											
#7	Coordinate and follow-up the control of projects funding from private enterprises.											
#8	Document and record successful and unsuccessful case studies.											
#9	Review and modify the strategy based on the projects’ outcomes and funding experience.											
Evaluation Indicators:												
<ul style="list-style-type: none">• Number of projects financed through private sector.• Yearly amount of funds allocated to finance the projects.• Number of private sources of financing.• Type of projects that were financed.• Evaluation if implemented projects has achieved their targets (% achievement)												
2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
Activity #6												
Activities #7, 8,												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activities #7, 8												
YEAR 3												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activities #7, 8												
Activity #9												
Total Duration	Medium (1-3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
Environmental experts								• Private Sector				

Financial experts / financial services		<ul style="list-style-type: none"> • EEAA / EPF • Commercial banks
Administrative staff		
Office facilities		
Total Budget: Medium (60,000 – 300,000 EGP)		
2.7 Expected Output:		
<ul style="list-style-type: none"> • At least 10 projects implemented and financed/co-financed by the private sector • National strategy to encourage private sector investment in environmental projects • Public accessible document with the successful and unsuccessful case studies 		
2.8 Stakeholders		
EEAA, Ministry of Investment, Ministry of International Cooperation, private sector environmental association, private sector federations and association, the General Federation of Productive Cooperation, commercial banks, and the EPF.		
2.9 Proposed Executing Entity:		
Ministry of Investment		

Develop a New Model(s) of “Community Based Interventions” (PP-5)

2.1 Rationale

The model should establish a clear and practical paradigm for community based projects. The experts should fully interact with local community in order that the scientific expertise is well blended with local traditional knowledge. A different individual project should be designed for each of the three conventions. Current and ongoing projects could be selected for model application if they match the model selection criteria. However, it is recommended to endeavor designing a model with a selected community that could integrate implementation of the three conventions or two of them at minimum (such as biodiversity and desertification).

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of improving the cooperation between the civil society, NGOs, and governmental organizations; promoting civil society participation in environment protection and development projects (specifically biodiversity conservation programmes); and achieving participatory governance through the participation of civil society and the government in urban development projects. In the biodiversity NAP, it is visualized that a number of Protectorates must be managed by the Nature Conservation Authority in partnership with local stakeholders living in the areas in which Protectorates are located. In the desertification NAP, it requires the participation of local communities, targeted groups, stakeholders, and NGOs in planning, implementation, evaluation and monitoring.

2.3 Objectives

- 1) Apply and verify the developed guidelines (PP-3) of public participation in implementation projects.
- 2) Create a highly feasible, replicable, and successful model for "Community Based Interventions" for implementation of conventions obligations to be widely disseminated and replicated.
- 3) Promote public participation and community based projects utilizing this project model.

2.4 Activities:

- | | |
|----|----------------------------------|
| #1 | Selection of the team of experts |
|----|----------------------------------|

#2	Set up selection criteria for the community based projects											
#3	Design/select 3 individual projects for each convention and one integrated project											
#4	Implement the model based on the guidelines developed in PP-3											
#5	Document the experience from the community based projects											
Evaluation Indicators:												
<ul style="list-style-type: none">Degree of convention fulfillment by the selected projectReplicablty of the modelDiscrepancies with the developed guidelines in PP-3												
2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #4												
Activity #5												
YEAR 3												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #4												
Activity #5												
Total Duration	Medium-term (1-3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
Team of experts (public participation, socio-economic, etc)								<ul style="list-style-type: none">International donorsEEAANGOsPrivate sectorSmall grants program				
Administrative staff												
Field visits												
Office facilities												
Total Budget:				Medium (60,000 – 300,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">Model for "Community Based Interventions"Documented case studiesReport on public participation guidelines (verification report)												
2.8 Stakeholders												
EEAA, ministries, national committees, focal points, donor agencies, and selected NGOs.												
2.9 Proposed Executing Entity:												

EEAA

Establish a Formal Strategy for Technology Transfer and Cooperation (TT-2)**2.1 Rationale**

Improvement of technology transfer and cooperation in the three thematic areas can be achieved through a systematic strategy build upon the national policy and laws & regulations related to technology transfer and cooperation. The strategy should include objectives to encourage the adoption of 'green technologies' through both international technology transfer & cooperation and small-scale production of affordable technologies appropriate to Egypt. The concept of this action is illustrated in Figure (4).

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of achieving the prevention principle through the use of best available technologies. In the NEAP, one of the goals of biodiversity conservations is developing Egyptian scientific and technological capabilities in fields of conservation. In the biodiversity NAP, it is stated that the Nature Conservation Authority should use internationally recognized best practices to achieve the standards of excellence expected by the Convention on biodiversity. In the climate change NAP, it addresses international cooperation in the field of climate change as an important issue that is essential for implementing most of the actions introduced in the climate change plan. In the desertification NAP, it is stressed that it is important for Egypt to obtain technical assistance from concerned regional and international institutions as well as from other developed countries and donors and to adopt innovative technologies for halting the desertification processes.

2.3 Objectives

- 1) Develop a strategy for technology transfer and cooperation on the national, regional, and international levels.
- 2) Set up specific and measurable objectives for technology transfer and cooperation to be achieved within a specified time frame.
- 3) Integrate the objectives with the current programs or establish new programs for technology transfer & cooperation within the organization.

2.4 Activities:

#1	Set up objectives for technology transfer and cooperation on the national, regional, and international levels. The objectives should be SMART (Specific, Measurable, Applicable, Realistic, within a Time-frame) and relevant to each organization.
#2	Review the objectives to ensure it meets national policies, priorities, and regulations
#3	Draft a strategy based on the objectives developed
#4	Independent external review of draft strategy
#5	Final strategy approved by decision maker in the organization
#6	For each objective, either integrate it to current program(s) or establish new program(s) for technology transfer & cooperation within the organization. The programme should have set up targets, resources, budget, responsibilities, methods, and deadlines.
#7	Implement programmes
#7	Yearly measurement and evaluation of programmes. Review of the set up objectives & programmes (modify as necessary based upon the achievements)

Evaluation Indicators:

- Objectives meets national environmental priorities, policies, and regulations
- Objectives are SMART
- % achievement of objectives & programmes

2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
Activity #6												
Activity #7												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #7												
Activity #7												
Total Duration	Medium-term (1-3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)			Funding Sources:					
Local team of experts (within the organization)							<ul style="list-style-type: none">• Hosting organizations for focal points• National Center for Research					
Independent expert												
Office facilities												
Total Budget:				Low (<60,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">• Formal strategy for technology transfer and cooperation for each participating organization• Objectives for technology transfer and cooperation for each participating organization• Programmes for technology transfer and cooperation for each participating organization• Annual achievements reports												
2.8 Stakeholders												
All relevant biodiversity, climate change, and desertification entities; including focal points, EEAA, National Center for Research, etc.												
2.9 Proposed Executing Entity:												
Focal Points												

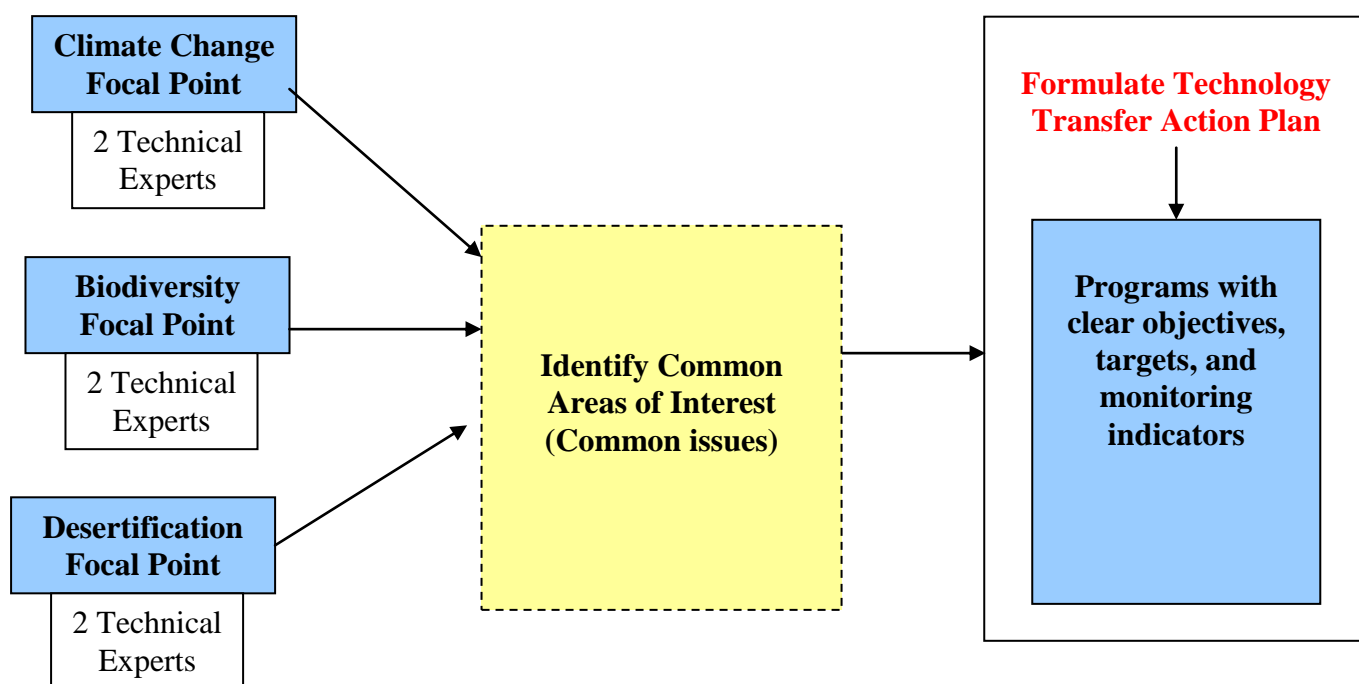


Figure 4: Establish a Formal Strategy for Technology Transfer and Cooperation (TT-2)

Establish a Technology Transfer and Cooperation Unit within each National Focal Point (TT-3)

2.1 Rationale

Each focal point will establish a technology transfer & cooperation unit through optimizing its available resources. The main aim for the unit is to identify technology needs, initiate cooperation with national, regional, and international entities, and conduct fundraising activities to sustain funds required for technology transfer & cooperation. The technology transfer unit at each focal point will focus on its own thematic area, while the technology transfer center proposed in the next recommended line of action should focus on common areas between the three thematic areas. The concept of this action is illustrated in Figure (5).

For the desertification, it already has a complete research center – Desert Research Center (DRC)- that can act as the technology transfer and cooperation unit building upon the existing capacities instead of establishing a new unit. As to climate change, it is already planned to establish a national-regional ‘Centre of Excellence’ for climate change research that can act as the technology transfer and cooperation unit in addition to its other activities.

Two priority projects are suggested to be initiated by these units, which are:

A1 Bioenergy for Sustainable Rural Development

The objective of this project is to remove the technical, institutional, information, financial, and market barriers to the increasing use of biomass energy in promoting sustainable rural development in Egypt and in reducing the negative global and local environmental impacts associated with the use of fossil fuels and the environmentally not sound management of the agricultural and solid waste. This is envisaged to be achieved by (i) testing the technical and, in particular, the economic and financial feasibility of selected bioenergy technologies on the basis of new business and financing models and developing further the financial, institutional and

market strategies for their large-scale replication; (ii) supporting the development and adoption of an enabling policy framework to implement and leverage financing for the recommended strategies; iii) building the capacity of the supply side to market, finance and deliver rural bioenergy services; and iv) institutionalizing the support provided by the project to facilitate sustainable growth of the market after the end of the project.

B| Sustainable Transport

The objective of the project is to reduce the growth of the energy consumption and the related greenhouse gas emissions of the transport sector in Egypt, while simultaneously mitigating the local environmental and other problems of increasing traffic such as deteriorated urban air quality and congestion by 1) initiating the concept for the development of new, integrated transport services for Greater Cairo and its satellite cities on the basis of public-private partnerships; 2) promoting non-motorized transport in medium sized provincial cities; 3) introducing new traffic demand management measures; 4) improving the energy efficiency of freight transport; and 5) enhancing the awareness and capacity of local professionals on different aspect of sustainable transport and strengthening the institutional basis to promote sustainable transport during and after the project.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of improving scientific and technical capabilities in biodiversity and natural resources conservation in development areas; encourage the use of information technology as a practical tool to advance the various industrial sectors and achieve sustainable development; establish a comprehensive database for all the information related to industrial activities in the governorates and the new industrial areas; support linkages between the information network for hazardous waste management in EEAA with the private industrial sectors; provide NGOs and citizens with environmental information; support South-South cooperation efforts to get the up-to-date technologies with the least costs and experience exchange in various fields; disseminate cleaner production technology; and achieving the prevention principle through the use of best available technologies. In the NEAP, one of the goals of biodiversity conservations is developing Egyptian scientific and technological capabilities in fields of conservation. In the biodiversity NAP, it is stated that the Nature Conservation Authority should use internationally recognized best practices to achieve the standards of excellence expected by the Convention on biodiversity. In the climate change NAP, it addresses international cooperation in the field of climate change as an important issue that is essential for implementing most of the actions introduced in the climate change plan. In the desertification NAP, it is stressed that it is important for Egypt to obtain technical assistance from concerned regional and international institutions as well as from other developed countries and donors and to adopt innovative technologies for halting the desertification processes.

2.3 Objectives

- 1) Transfer technology according to the focal point needs and priorities.
- 2) Initiation of communication and cooperation between all relevant entities (research institutes, NGOs, etc).
- 3) Correspond with international funding agencies, especially at developed countries committed to the convention, and the mobilization of funds to support technology transfer and cooperation objectives.
- 4) Create database for the projects of the focal point through technology transfer & cooperation. The database should be linked with the National Technology Transfer Center.
- 5) Provide the focal point personnel, as relevant, with training to learn about new technologies.

2.4 Activities:												
#1	Conduct an assessment for the technology needs (know-how, software & hardware, training, etc) of the focal point ‘Gap Analysis’.											
#2	Formulate a programme/project to meet the identified technology needs (concept paper); this may include capacity building in certain technology (training, recruitment of experts, etc)											
#3	Create a database with local entities, international entities, funding sources, previously implemented projects, and on-going/ suggested projects. This database should be linked to National Technology Transfer Center as per TT-4.											
#4	Communicate with relevant national and international entities to investigate willingness to participate in each project or implement it independently if possible. Use the database to match between the proposed project and relevant entities.											
#5	Seek financing for each project by corresponding with funding sources											
#6	Sign agreements with selected entity to implement the project											
#7	Implement the project/programme											
#8	Enter the implemented projects in the database including all documents related to the project.											
#9	Repeat cycle (back to #1)											
Evaluation Indicators: <ul style="list-style-type: none">Implemented projects meet technology needsYearly % fulfillment of technology needs (is there yearly progress??)Meet the formal strategy objectives in TT-2Number of communication initiationNumber of entities cooperation was established withDatabase Completeness (entities, funding sources, projects information, etc)												
2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
Activity #6												
Activities #7, 8												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activities #7, 8												
Activity #9												
Total Duration	Medium-term (1-3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				

Highly trained personnel, fundraising experts, and IT specialists		<ul style="list-style-type: none">• International donors• Hosting organizations for focal points• National Technology Transfer Center
Administrative staff		
Well equipped office (computers, international calls, internet & intranet, meeting rooms, etc)		
Total Budget: Medium (60,000 – 300,000 EGP)		
2.7 Expected Output:		
<ul style="list-style-type: none">• Technology transfer unit in each focal point• Database for projects linked to the National Technology Transfer Center.• Provide training to the focal point personnel, as relevant, with training to learn about new technologies.• Initiate communication between all relevant entities and correspond with international funding agencies.		
2.8 Stakeholders		
Focal points, National Technology Transfer Center, funding agencies, ministries, research centers, research institutions and universities, NGOs, and other related entities.		
2.9 Proposed Executing Entity:		
Focal Points		

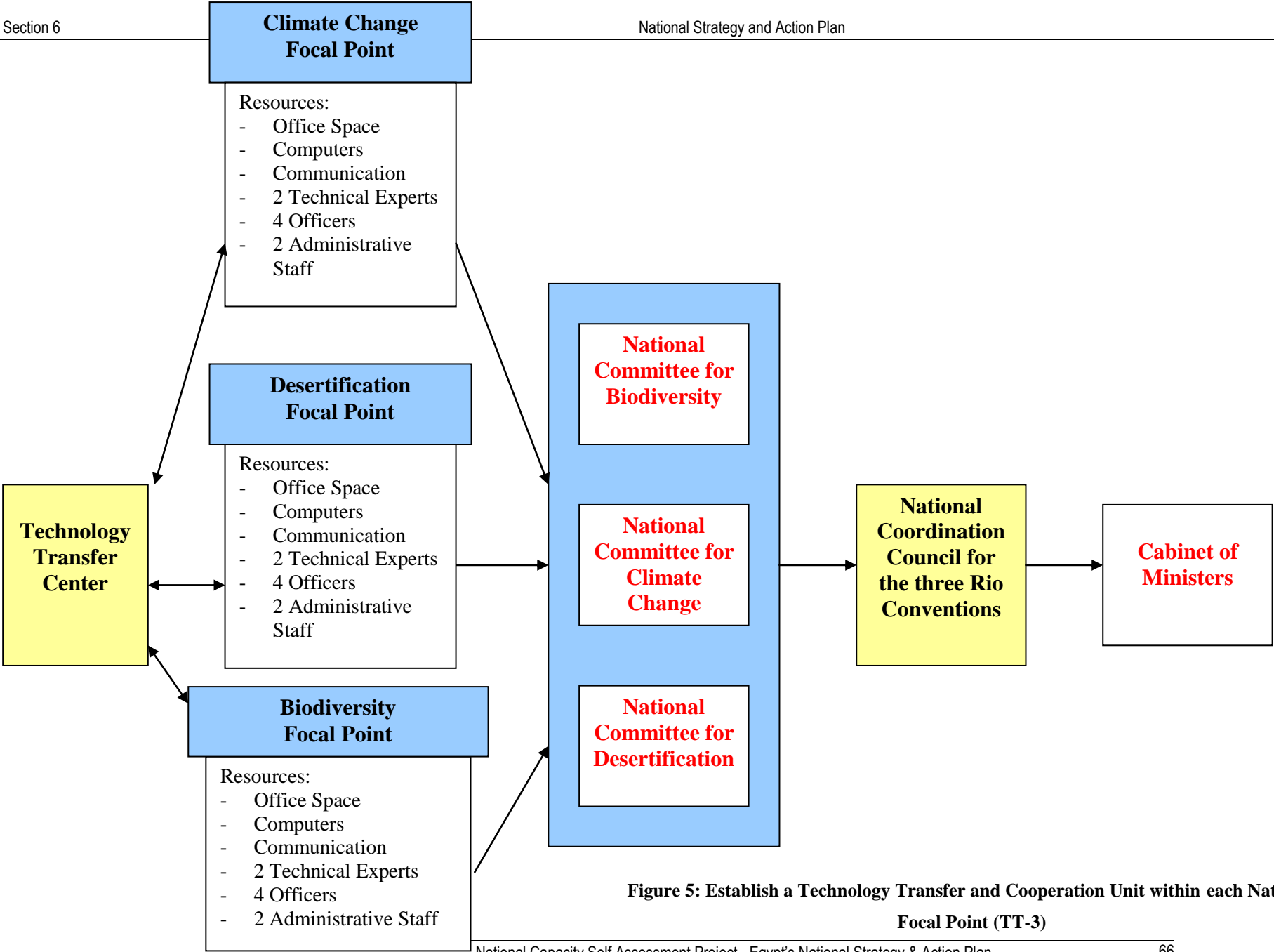


Figure 5: Establish a Technology Transfer and Cooperation Unit within each National Focal Point (TT-3)

Create National Council for Coordination between Conventions and Activate/Establish Coordination Committees (TT-5, TT-7)

2.1 Rationale

The role of the National Council for Coordination between the Conventions is to identify common fields between the three themes and create joint implementation programs. The committee will minimize the duplication of effort and maximize the benefit from the three focal points resources. As to the current/absent National Coordination Committee for each theme, it has to be activated. The concept of this action is illustrated in Figure (2).

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links to the national priorities that focuses on the integration and coordination between policies, programmes, and projects.

2.3 Objectives

- 1) Facilitate cooperation between the three focal points in joint implementation programs.
- 2) Developing an overall policy for technology transfer & cooperation between the three themes according to each theme priority (to be base on TT-2) and synergies between the three themes.
- 3) Implement technology transfer projects linking the three thematic areas.

2.4 Activities:

#1	Establish National Committee for Biodiversity
#2	Establish the National Coordination Council (NCC) for the Rio Conventions
#3	Review, strengthen, and restructure (if necessary) the National Climate Change Committee and the National Desertification Committee
#4	Assign a team of experts in each thematic national committee and members of NCC and its Working Group
#5	Formulate an Agenda for each committee meeting and hold periodic meetings to discuss strategic goals and adopting common interest objectives (continuous activity). As a start, develop an overall policy for technology transfer & cooperation between the three themes according to each theme priority (to be base on TT-2) and synergies between the three themes. Then, implement technology transfer projects linking the three thematic areas.
#6	Allocate responsibilities, funds, and resources to items agreed upon in the committee meetings
#7	Follow-up on items agreed upon in previous meetings (to be included in the Agenda of the next meeting)

Evaluation Indicators:

- Outcomes of each national committee meeting
- Outcomes of NCC meeting
- Number of strategies, programs/plans, and projects that take into account the objectives of the conventions.
- Degree of synergies between the three themes
- % of meeting outcomes achieved yearly

2.5 Activities Time Schedule

YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												

Activity #3												
Activity #4												
Activity #5				Continuous								
Activity #6				Continuous								
Activity #7				Continuous								
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #5	Continuous											
Activity #6	Continuous											
Activity #7	Continuous											
Total Duration	Medium-term (1-3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)			Funding Sources:					
Four (4) legal experts							<ul style="list-style-type: none">• Hosting organizations for focal points (EEAA & DRC)					
Three (3) policy experts												
Six (6) Technical experts												
Office facilities												
Total Budget:				Low (<60,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">• Active National Committee for Biodiversity• Active National Coordination Council for the Rio Conventions• Overall policy for technology transfer and cooperation between the three themes												
2.8 Stakeholders												
Focal points and related stakeholders												
2.9 Proposed Executing Entity:												
Focal Points												

Establish a National Technology Transfer Center (TT-4)

2.1 Rationale

The National Technology Transfer Center, as an independent entity or affiliated to any other entity, will be a data bank for all local entities. It will facilitate data sharing and will systemize its accessibility. It will provide all three main elements of generic transfer of technologies: “materialized” technology (prototypes, components, new materials), know-how (documents, research results), expertise and acquired skills (manuals, training programmes, databanks, codes of practice, visits of experts). In addition, it will link the local entities together as well as network them to the international entities. Moreover, the technology transfer center will be responsible for the implementation of the pilot projects and joint programs for technology transfer. Example of projects that can be initiated as joint programs could be climate vulnerability adaptation strategies and practices that target agriculture, water, and coastal zones.

At the beginning the center will mainly depend on donors agencies as means of finance, then it should gradually be more dependent on the private sector, its main market as well, after the center would have proved its credibility.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of improving scientific and technical capabilities in biodiversity and natural resources conservation in development areas; encourage the use of information technology as a practical tool to advance the various industrial sectors and achieve sustainable development; establish a comprehensive database for all the information related to industrial activities in the governorates and the new industrial areas; support linkages between the information network for hazardous waste management in EEAA with the private industrial sectors; provide NGOs and citizens with environmental information; support South-South cooperation efforts to get the up-to-date technologies with the least costs and experience exchange in various fields; disseminate cleaner production technology; and achieving the prevention principle through the use of best available technologies. In the NEAP, one of the goals of biodiversity conservations is developing Egyptian scientific and technological capabilities in fields of conservation. In the biodiversity NAP, it is stated that the Nature Conservation Authority should use internationally recognized best practices to achieve the standards of excellence expected by the Convention on biodiversity. In the climate change NAP, it addresses international cooperation in the field of climate change as an important issue that is essential for implementing most of the actions introduced in the climate change plan. In the desertification NAP, it is stressed that it is important for Egypt to obtain technical assistance from concerned regional and international institutions as well as from other developed countries and donors and to adopt innovative technologies for halting the desertification processes.

2.3 Objectives

- 1) Provide technology evaluation and market assessment services.
- 2) Facilitate easy access to experts, services, technologies and research.
- 3) Market promising new technologies to potential clients.
- 4) Create centralized national information and database network connecting participating entities.
- 5) Categorize entities according to similar activities/projects and allow the database to be searchable.
- 6) Assists in developing partnerships between local, regional, and international entities.
- 7) Conduct regular general and tailored training courses for subjects under technology transfer theme.
- 8) Implement pilot projects and joint programs

2.4 Activities:

#1	Create the centralized database
#2	Link it to the databases of the technology transfer units in the focal points and other available databases in other entities (form a network). Most of the database will be available to public. Some data will be restricted due to confidentiality, therefore it will be password protected for only selected personnel.
#3	Update the database on a monthly basis by uploading new data or modifying existing data (continuous activity)
#4	In-depth assessment of technology transfer and cooperation needs among the various stakeholders. This report will identify the gaps and recommend tailored services to be conducted by the center.
#5	Organize and implement services to meet TTC needs (continuous activity); such as: <ul style="list-style-type: none"> • technology evaluation and market assessment, • marketing of new technologies, • partnership with private sector (research & provide a requested technology to private sector, joint programs/projects, etc),

	<ul style="list-style-type: none">Fundraising assistance,training courses/study tours/conferences, etc											
#6	Evaluate the performance of the center and take immediate corrective actions (back to Activity #4)											
Evaluation Indicators: <ul style="list-style-type: none">Database completeness (entities, funding sources, projects information, etc) and user friendlinessNumber of linked databases to the network / participating entitiesNumber of joint programs / cooperation levelNumber of technology transfers per type (equipment, know-how, etc)Evaluation survey to be filled by client at the end of each serviceMeeting technology needs (based on Activity #4)												
2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3							Continuous					
Activity #4												
Activity #5						Continuous						
Activity #6						Continuous						
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #3	Continuous											
Activity #5	Continuous											
Activity #6	Continuous											
Total Duration	Medium-term (1-3 years) for establishment & active operation											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
Multidisciplinary scientists and experts (local and international)								<ul style="list-style-type: none">International donorsPrivate sectorNational Research CenterEEAA/EPF				
Computer information specialists and programmers												
Market and financial analysts												
Intellectual-property management experts												
Administrative/support staff												
Highly equipped office facilities and building (training facilities, meeting rooms, offices, computers & laptops, international calls, etc)												
Total Budget:				High (>300,000 EGP)								
2.7 Expected Output:												

<ul style="list-style-type: none"> • Active and operational National Technology Transfer Center • Centralized database accessible to the public • National technology assessment report • Diverse services based on the yearly technology assessment report
2.8 Stakeholders
Focal points, research centers, ministries, universities, industry/business community, NGOs
2.9 Proposed Executing Entity:
Private Entity

Nominate a Catalyzing Entity for Technology Transfer and Cooperation (TT-6)

2.1 Rationale

In order to ensure the sustainability and quality of performance of the technology transfer center and the technology transfer units, an independent entity for the supervision and overall coordination is proposed. This entity will serve as a supervisor for activities, facilitator, and fund raiser. Moreover, the entity will ensure regional coordination of technology transfer programs with countries that has similar interests. The structure of the entity is shown in Figure (7).

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of improving the cooperation between governmental bodies responsible for environmental regulations implementation and achieving the requirements of sustainable development; and continuing Egypt's active and efficient role in coordinating with the African, Arab, and Mediterranean sustainable development committees to protect the regional resources. In the NEAP, one of the goals of biodiversity conservations is developing Egyptian scientific and technological capabilities in fields of conservation. In the biodiversity NAP, it is stated that the Nature Conservation Authority should use internationally recognized best practices to achieve the standards of excellence expected by the Convention on biodiversity. In the climate change NAP, it addresses international cooperation in the field of climate change as an important issue that is essential for implementing most of the actions introduced in the climate change plan. In the desertification NAP, it is stressed that it is important for Egypt to obtain technical assistance from concerned regional and international institutions as well as from other developed countries and donors and to adopt innovative technologies for halting the desertification processes.

2.3 Objectives

- 1) Supervision of technology transfer center and ensure quality performance
- 2) Regional coordination and support of activities
- 3) Fund raising for technology transfer

2.4 Activities:

#1	Recruit experts and staff
#2	Establish separate building, facilities, and up-to-date equipment
#3	Conduct fundraising campaign
#4	Conduct communication and cooperation campaign with all relevant institutions
#5	Create IT databases and networks & upload available information
#6	Supervise, coordinate, and support technology transfer activities

Evaluation Indicators:

- Number of relevant institutions communication & cooperation was initiated with
- Number of fundraising agencies contacted

<ul style="list-style-type: none">• Amounts of funds raised• Quality performance of technology transfer activities												
2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3										Continuous		
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity # 3	Continuous											
Activity # 4	Continuous											
Activity # 5	Continuous											
Activity # 6	Continuous											
Total Duration	Medium-term (1-3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
Multidisciplinary scientists								<ul style="list-style-type: none">• Private Sector• International donors• EEAA				
Computer information specialists and programmers												
Market analysts												
outreach specialists and technology transfer negotiators, intellectual-property management experts												
Administrative and support staff												
Office facilities and equipment												
Total Budget:				High (> 300,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">• Technology Transfer Center• High quality technology transfer activities• Support for technology transfer centers/activities												
2.8 Stakeholders												
Private entity, focal points, technology transfer center												
2.9 Proposed Executing Agency:												
Private entity												

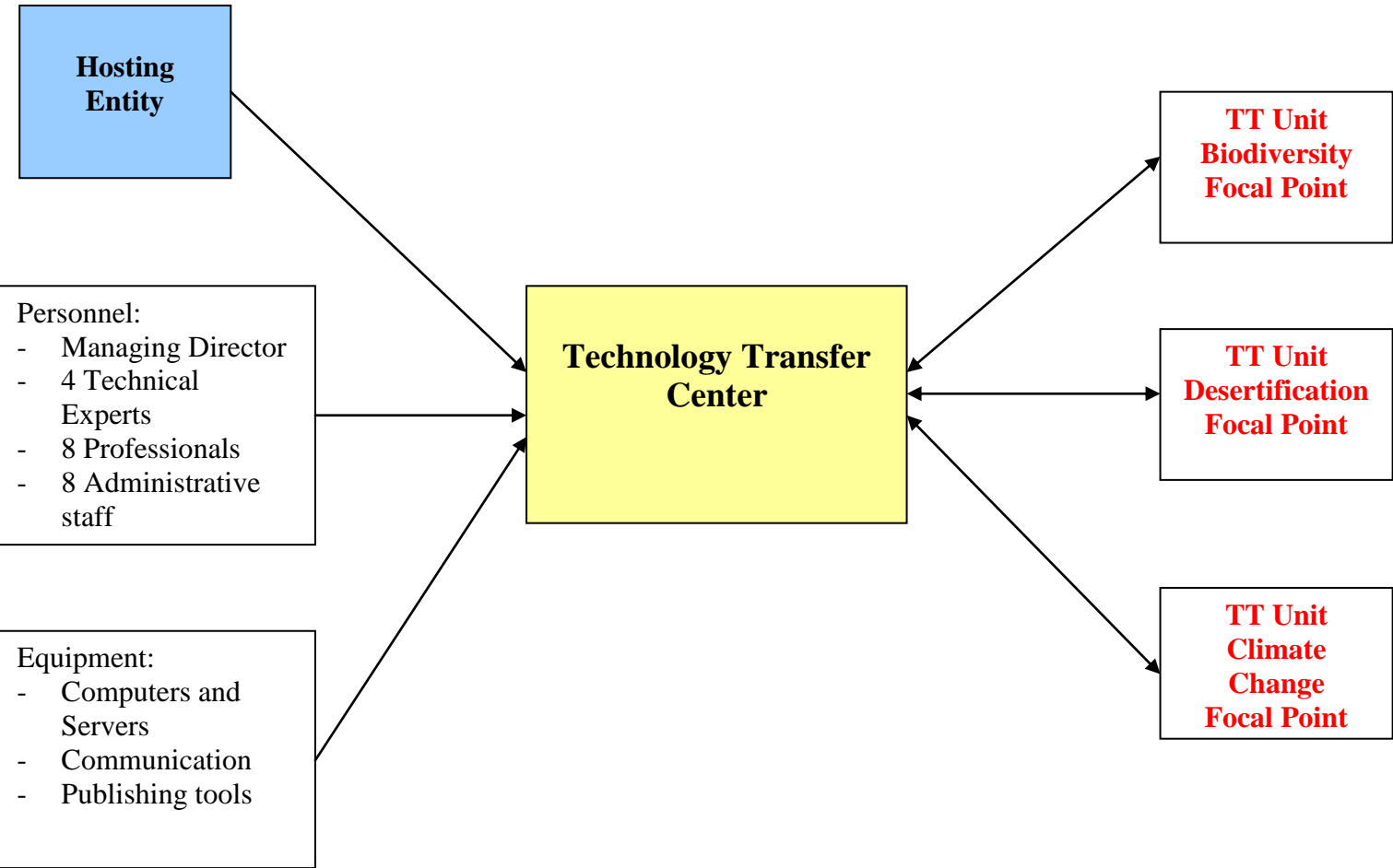


Figure 7: Nominate a Catalyzing Entity for Technology Transfer and Cooperation (TT-6)

Reviewing the Legal Framework in Egypt to Meet Rio Conventions Obligations (F-1, L-1, L-4, L-5, L-6, L-7)

2.1 Rationale

An intensive review should be conducted for the legal framework in Egypt to incorporate within it the requirements for the Rio Conventions for biodiversity, climate change, and desertification. This review will mainly cover the following:

The Application of Law 8 of 1997 for the Reduction of Custom Duties on Environmental Goods (F-1)

As an incentive to environmental investments specifically targeting solid waste and also covering industrial and hazardous waste, the Executive Regulations of the Investment Guarantees and Incentives 8 of 1997 were amended to include custom duties reduction on equipment relating to the mentioned environmental sector. While this would be a strong economic instrument for investors in this area, the application of this article is very tedious and sometimes in-applicable due to the lack of a well defined procedure that would facilitate the application for the potential investors. There should be a development of a detailed procedure that defines the steps to be taken by the investors in the above sectors for benefiting of the incentives that have been incorporated within the Executive Regulations of Law 8/1997. This should be documented and made available to the public.

Establish Legal Protection Strategy for Formulation and Enforcement of Environmental Legislations (L-1)

Improvement of environmental legislations formulation and enforcement related to the three thematic areas can be achieved through a systematic legal strategy based upon the national policies. Add to the proposed legal protection strategy the following provisions:

At formulation level

- a- Integration philosophy for legislative and penalty polices of Rio obligations.
- b- Integration Pollution Control principle Between Rio obligations at legislative and penalty polices.

At enforcement level

- a- Set up specific objectives for legal and judicial training.
- b- Integrate the objectives with new programs / actions to be achieved according to applicable timeframe.

Developing Legal Framework for Sustainable Financial Mechanisms (L-4)

Improvement of sustainable financial mechanism resources in the three thematic areas can be achieved through the development of legal framework.

Modifying The Current Article of Law No. 4/1994 and Law No. 102/1982 Related to the Role of Civil Society towards Environmental Issues (L-5)

Modifying the current articles of law No. 4/1994 and law No. 102/1982 related to the role of civil society towards environmental issues for encouraging the national initiatives to improve the environment and supporting the efforts of non governmental, private and investment institutions concerned with the environment protection. Assist civil society obtaining eco-rights as follow:

- a) Public hearing, public advocating, public consulting and advising.
- b) Unifying and cooperating the effort with national private sector.

- c) Preparing the public policy and national strategic and actions plans in Co-operation with business communities.
- d) Preparing and carrying out an integral action for training personnel on the means and ways of environmental protection in coordination with the concerned authorities.
- e) Reviewing and considering the environmental impacts of the basic development projects before its implementation by concerned authorities.

Adding Specific Article to the Code of Intellectual Properties Related to the Role of Private Sector in Protecting Intellectual Properties (L-6)

Enhancing the role of private sector in protecting the intellectual properties can be achieved by adding specific article to the new code of intellectual properties (civil law).

Unifying Local Legislations To Cover Rio Conventions Obligations (L-7)

Unifying the current legislations to cover Rio conventions issues and obligations not included in current legislations can be achieved through updating local legislations (laws, regulations decree, etc.) by reviewing and making overall revision to specific following current laws according to Rio obligations such as:

- Law No. 4/1994 and its executive regulations.
- Law No. 338/1995 and its proposed amendment.
- Law No. 102 /1982 of the Protected areas.
- Law No. 124/ 1983 concerning fishing & marine animals
- The Agriculture law No. 52/1966 and The Egyptian Law for punishment No. 58 (1973).

Enhancing the issuance and modification for penalty system to be more proportional to the negative environmental impacts in the field of Rio conventions by adapting the following penalties: a) polluter pay principle (P.P.P.), b) restoration, c) imprisonment penalty, c) fines, and d) confiscations.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of improving the compliance with environmental laws in industrial establishments; implementing the obligations of international agreements; increasing the benefit from the ratified international agreements and research and study joining new agreements or protocols; supporting the legislative base and strengthen the economic and social incentives to conserve biodiversity and natural resources; and implementing the Polluter Pay Principle. In the biodiversity NAP, it is mentioned that there is still the need for consolidating and enforcing laws for protection of the environment at large and for conservation of natural resources and biodiversity in particular. This should be done through supportive regulatory mechanisms and incentives for local people. In the desertification NAP, it is stated that additional legislation and regulations at the national, governorates and local levels will be needed as well as enforcement of existing and newly issued legislations and regulations are also needed to support efforts and activities of combating desertification in the different Agro-ecological zones.

2.3 Objectives

- 1) Enhance investments in the pollution prevention projects in line with the objectives of Rio Conventions.
- 2) Establish a formal legal strategy for environmental legislations formulation and enforcement of environmental related to Rio conventions obligations at the national, regional, and international levels.
- 3) Improve institutional and individual capacities for mobilizing funds and develop legal alternative for sustainable financial resources for the Rio conventions.
- 4) Enhancing indirectly participation and supporting civil society related to environmental issues and in obtaining eco-rights.
- 5) To make the necessary funding vehicle available and equipped with the necessary capacity and flexibility to manage and allocate funds can be achieved through the modifications of the new code of intellectual properties.
- 6) Regulate regional and international technology transfer through the modification of the current intellectual rights code to enhance the private sector role in environmental issues.

2.4 Activities:

#1	Establish working groups for each component and assign a team of experts for each group
#2	Undertake extensive review of existing legislation to identify strengths and gaps (per working group)
#3	Hold a meeting for all the working groups to present the results (strength & gaps)
#4	Provide recommendations for improving the legislations (per working group)
#5	Hold a meeting for all the working groups to present the results (recommendations)
#6	Prepare a draft revision for the legislation and submit to Cabinet of Ministers
#7	Prepare a final revision for the legislation and submit to Cabinet of Ministers
#8	Official issuance of the revised legislations

Evaluation Indicators:

- Meeting Rio Conventions obligations

2.5 Activities Time Schedule

YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #6												
Activity #7												
YEAR 3												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #8												
Total	Medium (1-3 years)											

Duration			
2.6 Required Inputs			
Resources:		Total Cost (EGP)	Funding Sources:
National experts on establishment of procedures and regulations (financial and legal), policy-makers, experts and consultants.			<ul style="list-style-type: none">• International Donors• EEAA
Office facilities			
Total Budget:		Medium (60,000 – 300,000 EGP)	
2.7 Expected Output:			
<ul style="list-style-type: none">• Legislation gap analysis report• Recommendation report• Revised versions for legislations			
2.8 Stakeholders			
EEAA, focal points, Ministry of Finance, Ministry of Industry, Ministry of Justice, Ministry of Internal Affairs, Policy makers, Ministries of Commerce and trade industry, Ministry of International Cooperation, EPF, Donors.			
2.9 Proposed Executing Agency:			
EEAA			

Establish National Mechanism to Follow Up the Implementation of the Conventions' Obligations (L-2)
2.1 Rationale
The national mechanism under the supervision of EEAA will be the legal databank that identifies and includes the classifications of Egyptian obligations against the ratified environmental conventions in general and the Rio conventions in specific.
2.2 Linkages to National Priorities, Plans, and Programs
This recommended line of action links with the national priorities of improving the compliance with environmental laws in industrial establishments; strengthening and improve the role of the local authorities; implementing the obligations of international agreements; increasing the benefit from the ratified international agreements and research and study joining new agreements or protocols; supporting the legislative base and strengthen the economic and social incentives to conserve biodiversity and natural resources; and implementing the Polluter Pay Principle. In the biodiversity NAP, it is mentioned that there is still the need for consolidating and enforcing laws for protection of the environment at large and for conservation of natural resources and biodiversity in particular. This should be done through supportive regulatory mechanisms and incentives for local people. In the desertification NAP, it is stated that additional legislation and regulations at the national, governorates and local levels will be needed as well as enforcement of existing and newly issued legislations and regulations are also needed to support efforts and activities of combating desertification in the different Agro-ecological zones.
2.3 Objectives
1) Enhance the legislative lead role of EEAA according to Article 4 of Law No. 4/1994 as the following obligations:

- a) Participating in the efforts aimed at preparing or reviewing the international agreements on the environmental in general and on the three thematic Rio area in specific, attending the specialized conferences, meetings and seminars on the regional and international levels and coordinating stance on the local level and with the Arab states and the nations witnessing the same development circumstance, by joining them or taking reservations against their stances.
 - b) Strictly abiding by the follow up for the implementation of the provisions of the national or international accords concerned with the environment affairs to which Egypt is apart, promulgating the necessary legislation, and improving effectiveness of the institutions entrusted to perform such tasks.
 - c) Study the environmental reports submitted to it relating to the state of the environment in the country to take necessary actions.
 - d) Coordinate the relation of the state with the international and regional organizations concerned with the environmental affairs in cooperation with foreign and international cooperation ministries.
- 2) Study and review the ratification, signature of accession of the regional and international conventions related to environmental affairs and in coordination with the concerned authorities.
 - 3) Conduct an assessment for following up the execution and implementation of the ratified multilateral agreements (MEAs) obligations especially the Rio conventions for supporting the efficiency and coordination between the different authorities according to article (4) of Environment law No. 4/ 1994.
 - 4) Follow-up the new developments in the international law in the field of the protection of the environment relevant to Egypt.
 - 5) Fulfill Egypt's obligations especially for Rio obligations to meet coefficient of Article 151 of 1971 Egyptian constitution.

There are five proposed units under the EEAA supervision :

- 1- The unit of the biological resources and the natural environments.
- 2- The unit of the water/ marine environments.
- 3- The unit of pollution and environmental hazards
- 4- Strengthen the international affairs and multilateral environmental agreements department.
- 5- The unit for three thematic area (Rio obligations)

Each one of the five proposed units should include:

- 1- The chairman of the committee (from the side responsible for the action required).
- 2- The technical secretary from the environmental affairs agency (EEAA).
- 3- Scientific consultant and legal consultant from outside the agency.
- 4- A member from the ministry of foreign affairs.
- 5- Two members in charge to be responsible of following up regional international agreements / conventions and protocols.
- 6- A general coordinator, assisted by a unit representing the databank which includes all the stored data required for implementation.

2.4 Activities:

#1	Establish the supervisory team in each EEAA unit (as explained above)
#2	Study and review the ratification, signature of accession of the regional and international conventions related to environment. Identify gaps in the compliance with the international and regional conventions.

#3	Create the legal databank for Egypt and upload in EEAA network/webpage to be publicly accessible (it can be linked to other external databases as well such as in TT-4).											
#4	Promote greater awareness and knowledge of the regional and international environmental conventions among the 5 units in EEAA											
#5	Monitor and supervise the implementation of the provisions of the regional and international environmental conventions, specifically identified gaps, and take necessary corrective actions (continuous activity).											
#6	Follow-up the new developments in the international law in the field of the protection of the environment relevant to Egypt, and update the legal databank (continuous activity).											
Evaluation Indicators:												
<ul style="list-style-type: none">• Compliance to environmental conventions specifically in relation to Rio Conventions obligations• Level of awareness of Rio Convention obligations among the 5 units												
2.5 Activities Time Schedule												
YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5						Continuous						
Activity #6		Continuous										
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #5	Continuous											
Activity #6	Continuous											
Total Duration	Medium-term (1-3 years) 1.5 year to initiate the program and to conduct the first follow-up, then the cycle will be repeated every year											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
International and national environmental legal experts, consultants, and advisors								<ul style="list-style-type: none">• EEAA				
IT specialists												
Administrative staff												
Office facilities												
Total Budget:				Medium (60,000- 300,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">• Legal databank for Egypt’s ratified environmental conventions• Follow-up mechanism for compliance with the environmental conventions (continuous)• Training for the 5 units in relation to Egypt’s obligations in the MEAs• Annual follow-up report with corrective actions												

2.8 Stakeholders

EEAA, focal points, Ministry of foreign affairs and all ministries/ agencies / entities concerned.

2.9 Proposed Executing Entity:

EEAA

Formulating Standardized Procedures for Monitoring, Data Collection, and Reporting and Improving Inter-Agency Coordination (ME-1, ME-2, ME-4)
2.1 Rationale**Developing a Framework Methodology for Monitoring and Data Collection (ME-1)**

One of the challenges facing monitoring, evaluation, and reporting for the three conventions is concerned with inconsistencies and incompatibilities of data collected through monitoring activities carried out by different entities. Different data definitions, collection and update frequencies, validation, designs and structures used for data storage and manipulation limit data exchange and use. In this respect, there is a need to develop fundamental specifications for all data collection, and management activities, with the aim of harmonizing all such activities between all concerned entities, as well as across the three thematic areas.

Improving Reporting (ME-2)

Reporting to the three conventions, though carried out regularly, and, generally, in line with reporting requirements, could be improved, particularly with regards to the preparatory process of these reports. This process relies on obtaining the necessary data and information from different entities, which is currently not conducted efficiently. This is due to a lack of common reporting formats, and in some instances, unclear lines of reporting. More importantly, inter-agency reporting is mostly not institutionalized, rendering it irregular and inconsistent.

The formulated procedures should take into account the existing data collection & management, exchange practices, and reporting within the different entities. The procedures should include quality control indicators for each process.

Improving Inter-Agency Coordination (ME-4)

A number of different entities are concerned with the thematic areas of the three Rio Conventions. Currently coordination between these different agencies and entities is random, particularly with regards to monitoring, evaluation and reporting. This leads to significant hindrances to effective monitoring evaluation and reporting, with adverse effects on the inclusion of global environmental issues in national policies and plans.

The institutionalization of inter-departmental coordination would necessitate a coordinator from the office of the head of the concerned entity where these departments exist to follow up on the implementation of the improved data collection, monitoring, and reporting mechanisms developed. For Inter-agency improved coordination, there would be a need to sign cooperation protocols (or update existing ones). This would be followed by a key representative within each agency for follow up.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of strengthening and improving the role of the local authorities; uniting the Egyptian entities efforts in presenting well prepared projects to donor countries in order to achieve mutual benefits. In the

biodiversity NAP, it is stated that the Nature Conservation Authority (NCA) should monitor the status and trends in the wild resources throughout the country with a view to initiating appropriate action to prevent harm to valuable species, ecologically processes or aesthetically attractive scenery. In the climate change NAP, although there were not much emphasis on monitoring on evaluation but it was mentioned a proposed research project in the plan for climate science for monitoring and modelling. As to the desertification NAP, it is stated that there should be measurements for the types and degrees of desertification and its extension in the four agro-ecological zones in Egypt should be monitored. In order to provide the decision makers with relevant analyses of the desertification processes.

2.3 Objectives

- 1) Formulating standardized procedures specifying monitoring, data and data collection attributes, and reporting.
- 2) Improved individual capacities for carrying out monitoring, data collection and data management, and reporting.
- 3) Clear lines of reporting, and reporting guidelines comprising compatible formats, frequencies of reporting, as well as items reported on.
- 4) Institutionalized coordination and cooperation mechanisms between different concerned agencies and entities.

2.4 Activities:

#1	Select the technical team (monitoring – data collection – reporting).
#2	Formulate standardized procedures specifying monitoring, data and data collection attributes, and reporting. The procedures should refer to guidelines and/or templates to unify the methods and formats, which should be accessible to the responsible personnel in the internal IT network.
#3	Provide training and technical assistance on the standardized procedures in order that the staff can better prepare reports and improve monitoring and data collection. The training should be mainly on-job training with real on-going exercises on the three areas (monitoring – data collection – reporting).
#4	Let the trainee prepare a complete inventory and assessment of existing data and information for each convention and the quality and the compatibility of the data formats in various agencies and organizations.
#5	The experts team should review the trainee output after 3 months, 6 months and then by the end of the year. A report should be submitted to the head of their relevant departments each review period.
#6	All the data collected and reports generated should be uploaded to the central network once it is approved and authorized. This network will be linked to other external networks as per TT-4. This item should be included in the standardized procedures.

Evaluation Indicators:

- Meeting standardized procedures
- Process quality control indicators
- Clear lines of reporting
- Consistency of data and report formats
- Completeness of data & reports uploaded on the network
- Cooperation and coordination level

2.5 Activities Time Schedule

YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												

Activity #2												
Activity #3												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #4												
Activity #5			*			*						*
Activity #6												
Total Duration	Medium (1-3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
A working group with representative members of the different entities, preferably from the departments concerned with data collection/management. External experts should also be recruited.								<ul style="list-style-type: none">EEAAInternational donors				
An overall coordinator from EEAA												
A coordinator from the office of the head of the concerned entity												
Administrative staff												
IT specialists												
Training facilities												
Total Budget:				Medium (60,000 -300,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">Standardized procedures for monitoring, data collection, and reporting.Any accompanying guidelines, forms, and templates that would be required.Training of at least 6 personnel from each involved entity (preferable from different units).Three review reports (3, 6, 12 months) for each unit.Upload of all data and reports to the central networkDifferent concerned agencies and entities implementing the procedures for monitoring, data collection and management and reporting.Different concerned agencies and entities using common reporting format and following the agreed upon lines of reporting.												
2.8 Stakeholders												
EEAA, Central Agency for Mobilization and Statistics (CAPMAS), Decision Support Center (DSC) of the Cabinet of Ministries, Ministry of Agriculture; Ministry of Petroleum, Ministry of Electricity, Governorates, Ministry of Planning, Ministry of Foreign Affairs.												
2.9 Proposed Executing Entity:												
EEAA												

C] LONG-TERM LINES OF ACTIONS

Promoting the Development of Research Capabilities (ME-5)

2.1 Rationale

Adequate monitoring, evaluation and reporting for the three thematic areas of the Rio Conventions rest on a need for a solid knowledge base of technical and scientific issues with the three thematic areas. In this respect, technical and scientific expertise is not equally adequate in these areas, necessitating its further promotion and development.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities introducing policies that stimulate research and development and its applications in the industry; intensify scientific research and technological development in the field of water desalinization; intensifying scientific research programs in reuse of agricultural wastes and use of traditional, new, and renewable energy sources; and finding innovative solutions to finance education and scientific research. In the NEAP, one of the goals of biodiversity conservations is developing Egyptian scientific and technological capabilities in fields of conservation. In the biodiversity NAP, it is stated that the Nature Conservation Authority should use internationally recognized best practices to achieve the standards of excellence expected by the Convention on biodiversity.

2.3 Objectives

This aims at promoting the development of necessary technical and scientific research capacities within the three thematic areas of the Rio Conventions.

- 1) Strengthened technical and scientific expertise in the three thematic areas of the Rio Conventions, in particular with regards to climate change.
- 2) Improved technical and scientific cooperation between different concerned research entities.

2.4 Activities:

#1	Conduct an assessment for the research capabilities in the research institutions related to the three thematic areas.
#2	Prepare a 5-year plan for capacity building in scientific and specialized institutions related to the three thematic areas based on the assessment in Activity #1. This plan should tackle means to improve national capability to conduct credible field and lab research, including development of standardized methods and protocols for data collection, analysis, exchange, and dissemination. The plan will be achieved through programmes to be implemented within a certain time-frame.
#3	Develop mechanisms and incentives (financial and non-financial) to promote locally driven research through agreements that encourage cooperation between the various stakeholders and sharing of lab facilities. Special attention should be given to cooperation with the private sector as it can generate funds and research topics as per PP-7.
#4	Implement the programmes by each research institution
#5	Annual evaluation for achievements and corrective actions
#6	Re-conduct the assessment after 5 years (repeat the cycle)

Evaluation Indicators:

- % fulfillment of gaps in the assessment report (annual basis).
- Number of joint research between different research entities.
- Number of collaborations with the private sector.

2.5 Activities Time Schedule

YEAR 1

Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #2												
Activity #3												
Activity #4						Continuous						
YEAR 3												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #4	Continuous											
Activity #5						Continuous						
Activity #6	Repeat the assessment after 5-years											
Total Duration	Long-term (> 3 years)											
2.6 Required Inputs												
Resources:				Total Cost (EGP)			Funding Sources: <ul style="list-style-type: none">• Private sector• International donors					
Team of experts												
Researchers												
Administrative and support staff												
Field and lab equipments												
Training and office facilities												
Total Budget:				High (> 300,000 EGP)								
2.7 Expected Output:												
<ul style="list-style-type: none">• Capacity building assessment report• 5-year plan for capacity building (per research institution)• Mechanisms and incentives to promote locally driven research• Annual evaluation report• 5-year evaluation report												
2.8 Stakeholders												
Ministry of Higher Education and Scientific Research, EEAA, Ministry of Agriculture, universities and research institutes.												
2.9 Proposed Executing Entity:												
Ministry of Higher Education and Scientific Research												

Incorporate Technology Transfer and Cooperation into National Policies (TT-1)

2.1 Rationale

The general awareness of technology transfer and cooperation should be incorporated into national policies. These policies at the decision maker's level should be transformed into regulations that enhance the process of technology transfer and cooperation at the national, regional, and international levels. The concept of this action is illustrated in Figure (8).

The national committee for each theme will recommend specific changes through a team of experts then present them to the National Coordination Council for the Rio Conventions,

which is recommended to be established. Upon approval by the coordination council, it will be presented to the Cabinet of Ministers to be endorsed and incorporated to Egypt's national policies.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of improving scientific and technical capabilities in biodiversity and natural resources conservation in development areas; encourage the use of information technology as a practical tool to advance the various industrial sectors and achieve sustainable development; establish a comprehensive database for all the information related to industrial activities in the governorates and the new industrial areas; support linkages between the information network for hazardous waste management in EEAA with the private industrial sectors; provide NGOs and citizens with environmental information; support South-South cooperation efforts to get the up-to-date technologies with the least costs and experience exchange in various fields; disseminate cleaner production technology; and achieving the prevention principle through the use of best available technologies. In the NEAP, one of the goals of biodiversity conservations is developing Egyptian scientific and technological capabilities in fields of conservation. In the biodiversity NAP, it is stated that the Nature Conservation Authority should use internationally recognized best practices to achieve the standards of excellence expected by the Convention on biodiversity. In the climate change NAP, it addresses international cooperation in the field of climate change as an important issue that is essential for implementing most of the actions introduced in the climate change plan. In the desertification NAP, it is stressed that it is important for Egypt to obtain technical assistance from concerned regional and international institutions as well as from other developed countries and donors and to adopt innovative technologies for halting the desertification processes.

2.3 Objectives

- 1) Add to the current national policies specific clauses for technology transfer and cooperation.
- 2) Regulate regional and international technology transfer through the modification of current laws and regulations.

2.4 Activities:

#1	Recommend specific changes through the team of experts in the national committees
#2	Hold national committees meeting individually
#3	Hold the NCC first meeting and discuss recommendations of each thematic committee
#4	Send approved recommendations to the Cabinet of Ministers
#5	Official endorsement and integration to National Policy
#6	Incorporate technology transfer amendments in the National Policy into the regulations

Evaluation Indicators:

- Outcomes of each national committee meeting
- Outcomes of NCC meeting

2.5 Activities Time Schedule

Activity # /Month	YEAR 1											
	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
Activity #4												
Activity #5												
Activity #6	3-5 years											

Total Duration	Long-term (>3 years) 1 year to incorporate into policies 3-5 years to incorporate into legislations	
2.6 Required Inputs		
Resources:	Total Cost (EGP)	Funding Sources:
Four (4) legal experts		<ul style="list-style-type: none">• Hosting organizations for focal points (EEAA & DRC)
Three (3) policy experts		
Six (6) Technical experts		
Office facilities		
Total Budget: Low (<60,000 EGP)		
2.7 Expected Output:		
<ul style="list-style-type: none">• Amended National Policy to include Technology Transfer component• Modified legislations to include Technology Transfer component		
2.8 Stakeholders		
The main stakeholders would be the focal points, national committees, NCC, and policy makers such as Prime Minister, Ministers, and their advisors.		
2.9 Proposed Executing Entity:		
Focal Points		

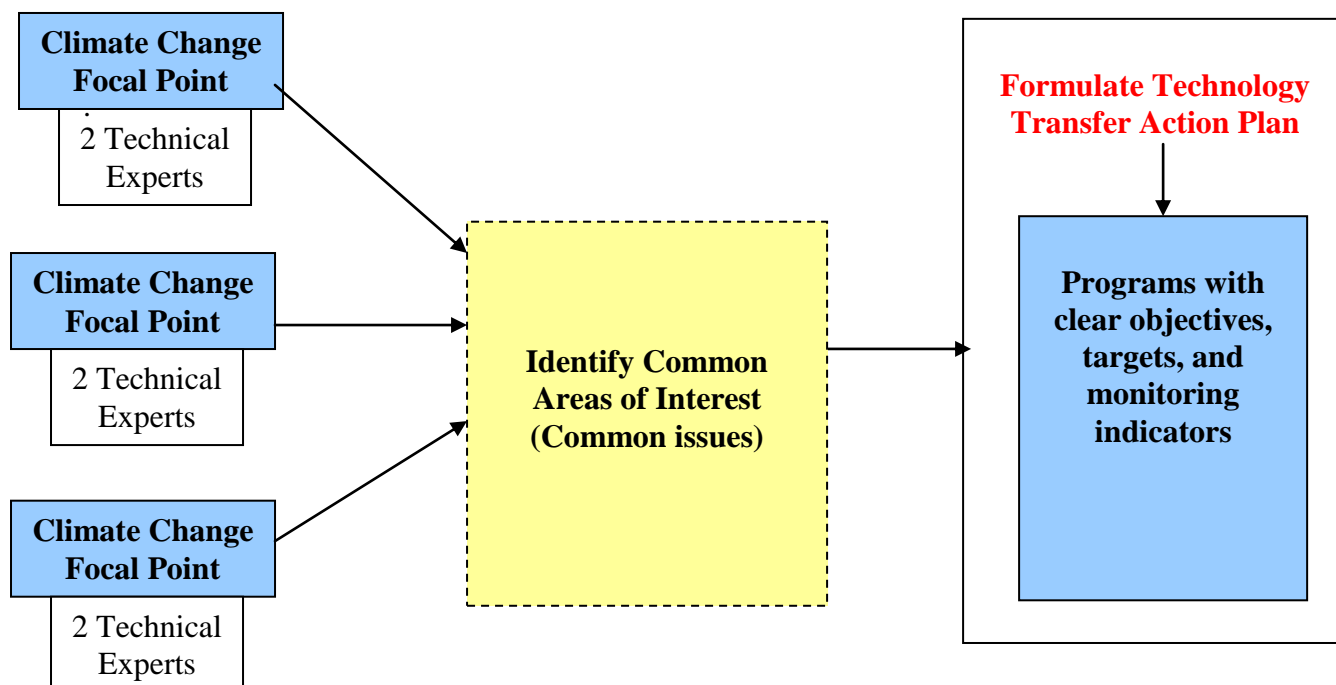


Figure 8: Incorporate Technology Transfer and Cooperation into National Policies (TT-1)

Rehabilitation of the Environmental Protection Fund Program (F-2)
2.1 Rationale
The Environmental Protection Fund is the fund established by Law 4 of 1994 for Environmental Protection. Its strategic objective is to become a tool for achieving the environmental policies within a framework of sustainable development and to stimulate financing in the environmental sector by leveraging the investment resources throughout the period of economic transition. This action plan seeks to upgrade the capacity of the EPF to

involve it in the environmental activities in order for it to assume its role as the main financial mechanism for directing the financial resources to the targeted activities in line with the purpose of its inception and to achieve the national and international environmental objectives. This action plan is divided into four components:

Component 1: Revenue Enhancement of the EPF

The revenue sources of the EPF according to Article 14 of Law 4/94 and Article 7 of its Executive Regulations include inter alia: *“Resources of the Protectorates Fund, as prescribed in Law No. 102 of the year 1983. Resources include budget allocations, donations, and aid ascribed to protectorates, in addition to user fees, and fines as ruled for violating Law No. 102.”*

This Component will address the above mentioned Revenue Source which represents the resources of the Protectorates Fund. This revenue source represents the major source for the EPF. The other sources of revenue are not fully operational and are not vigorously implemented. The focuses that should be developed under this Component will address how to further develop the revenue generating areas to protect and enhance the revenue generated by them and how to develop new ones that will generate income. This will have to be done along economically feasible project financing principles:

Focus 1.1: Project development for the existing entrance fees generating areas, namely: Ras Mohamed, Red Sea and/or St. Katherine's. These projects will be directed towards the areas where the NCS itself manages the operations of the areas concerned. They will be concerned with investments that would render these areas better conserved in lieu of the consistent use and to provide more services for the visitors, focusing on generating higher revenues.

Focus 1.2: Project development for new areas either based on own management or on concessions. Although it has not been customary for concessions to provide major revenue for comprehensive environmental funds¹, yet concessions for tourism exploitation under the supervision and monitoring of the NCS would be an ideal management structure considering the commercial aspect, which, in principle, is more suitable for a private operator. In this case, the concession values will be calculated relative to the revenues these areas generate, perhaps with a floor that is established as a minimum, and would provide a steady un-fluctuating income for the EPF. This could also be tendered internationally on a BO (Build and Operate) basis and could be considered for already existing areas that are the subject of Focus 1.1. This also represents a sustainable mechanism for the effective management and conservation of the protected areas.

Component 2: EPF Revolving Fund

Egypt's National Strategy Study on the Clean Development Mechanism (ENSS CDM) estimated the share of the international market in carbon credits and the revenues that Egypt might expect in various scenarios. With full implementation of all options the ENSS CDM calculated that Egypt could sell up to 2.6 MtC of credits generating an income of US\$20.28 million, assuming a price of 7.8 \$/tC. Two major types of customers are involved in the projects to which CDM applies: Government entities: Ministry of Agriculture, MSEA/EEAA, Ministry of Petroleum and municipalities and the Private Sector. One major constraint facing the demand on these activities, despite the economic feasibility, is how to finance the initial investment costs of these projects (The average tenor of a CDM project until approval has

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¹ Revenue Sources for Environmental Funds: International Experience, Patrick Francis, March 2002, Egyptian Environmental Policy Program

been found to be 1.5 years).

Agreements with local banks will involve the extension of the soft loans from EPF extended funds at concessionary interest rates in the range of 4 – 5%, out of which the banks will earn a management fee of 1.5 – 2% and the outflow of funds from the EPF account will be based on actual disbursement to the customer. Liaison and cooperation with the World Bank carbon financing mechanisms is also an option.

Component 3: Communities Small Grants

This component targets communities small projects in the solid waste disposal, production of recyclable and agricultural products (feed, fodders and compost) from municipal solid waste, and agricultural residues, low cost technology sanitation, forestation, etc. The EPF is in a position to assemble the small projects that together could result in GHG reduction that could qualify for CDM. EPF could also act as a liaison with the GEF Small Grants Program and the Social Fund for Development whereby a number of funding options are available for the small communities' projects that fall within the priorities. The transparency of this grants component advises the use of a competitive projects mechanism for choosing the funded projects. The successful candidates will be the projects that provide the most environmental benefits within a framework of sustainable development.

Component 4: Desertification Fund

This is a temporary component for the EPF that is recommended to be established in order to facilitate the flow of funds related to the desertification projects, bridging the gap until the formalities for establishing the Desertification Fund within the Ministry of Agriculture are completed. Once the Desertification Fund is established at the Ministry of Agriculture, the balance of this Fund will be credited to it and all the outstanding projects will automatically become the responsibility of the new Fund, subject to completing the legal documents for such transfer. This Component will be managed by a joint management committee including EEAA and Desert Research Center representatives. Funds will be separated in a sub-account of the EPF Central Bank Account for independent financial recording and management.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of using finance (revolving funds) to reduce the negative environmental impacts from industry; supporting NGOs through micro-scale financing programmes for neglected groups and individuals; providing necessary funding for urban development projects; providing the necessary finance for projects that reduce air pollution in industry; and identifying creative mechanisms to fund sustainable development. In the biodiversity NAP, the Nature Conservation entity is obliged to endeavour to make Protectorates as financially self supporting as possible by optimizing revenue generation from each area to the extent the market will bear and without threatening natural values. In the desertification NAP, it is stated that there should be allocation of adequate permanent financing resources required for combating desertification.

2.3 Objectives

- 1) Achieve self funding for Biodiversity and Protected Area management programs, as well as economic-based institutional development of the nature protection sector.
- 2) Catalytic financial support to pollution abatement projects and projects working towards reduction of the GHG emissions.
- 3) Re-enforcing and encouraging community development projects in the areas of pollution abatement related to the three conventions based on the collaboration and participation of the various stakeholders by leveraging the community resources and achieving cost recovery systems.

4) Temporary funding vehicle until formalities for the establishment of the Desertification Fund are finalized.												
2.4 Activities:												
#1	Component 1: Revenue Enhancement of the EPF											
#2	Component 2: EPF Revolving Fund											
#3	Component 3: Communities Small Grants											
#4	Component 4: Desertification Fund											
Evaluation Indicators:												
<ul style="list-style-type: none">• % annual increase in revenue• income sources for funds• Annually utilized funds for environmental projects meeting Rio conventions												
2.5 Activities Time Schedule												
YEAR												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1	5 years (to be rolled over)											
Activity #2	<u>Loan tenor: 2-5 years including grace period (to be rolled over every 5 years)</u> <u>Implementation period: 5 years for disbursement of loans, up to 10 years or the longest tenor loan for management</u>											
Activity #3	5 years (to be rolled over)											
Activity #4	1-2 years											
Total Duration	Long-term (>3 years) The Program duration is for a five year term, of which inception is for the first 4 months. Component 4 may terminate any time the Ministry of Agriculture establishes and activates the Desertification Fund. Components 1, 2 & 3 could be rolled over for more than one term.											
2.6 Required Inputs												
Resources:				Total Cost (EGP)				Funding Sources:				
Component 1				100,000,000 EGP (co-funding for LE 50 million)				<ul style="list-style-type: none">• EPF resources (USD funds could be allocated from the interest on the USD account separated in a subsidiary account for that purpose)• CDM/DNA management fees• World Bank Prototype Carbon Fund• Seed money for the NAP• local and international donors grants				
Component 2				-								
Component 3				25,000,000								
Component 4				-								
Staff & Experts fees				1,000,000								
Operating Expenses				4,000,000								
Equipment and vehicles				1,500,000								
<i>Note 1: Operating expenses will include the awareness raising and promotion costs for the demand driven components, documentation and capacity building for the EPF/EEAA staff and related stakeholders, in addition to the normal running costs.</i>												
<i>Note 2: In addition to the resources indicated for each component, the implementation of the Program will need the necessary organizational structure, skills and knowledge of the staff of the EPF to be able to carry out the</i>												

<p><i>various activities. It is necessary to establish the Projects Unit, the Revenues Unit, in addition to the Financial Unit that will monitor and control the various inflows and outflows of the EPF.</i></p>	
<p>Total Budget: 131,500,000 EGP High (>300,000 EGP)</p>	
<p>2.7 Expected Output:</p>	
<ul style="list-style-type: none"> • Operations of the EPF would acquire the autonomy that is needed in order for it to become a tool for achieving environmental objectives. • EPF would be a financial bridge that leverages the funds of the Government and private investors in the environmental sector. • The Government would offload the operations and management of these Biodiversity and nature conservation areas to private operators where possible, and focus on efficiently and effectively playing the role of the control, monitor and policy maker. • Economic benefits from improving tourism by efficient management of the natural resources. 	
<p>2.8 Stakeholders</p>	
<p>Component 1: EEAA (NCS – EPF), concerned governorates, Ministry of Tourism, private sector.</p>	
<p>Component 2: EPF, CCU/DNA, local banks, private sector, UNFCCC, Prototype Carbon Fund, Ministry of Petroleum, Ministry of Agriculture, Ministry of Finance</p>	
<p>Component 3: EPF, Municipalities, NGOs, CDAs, youth centers, clubs, professional and labor unions, Ministry of Social Solidarity (MOSS), (possibly: CDM/DNA, GEF Small Grants Program).</p>	
<p>Component 4: EEAA (EPF), Ministry of Agriculture (Desert Research Center), Ministry of Finance, UNCCD, other public and private entities.</p>	
<p>2.9 Proposed Executing Entity:</p>	
<p>EEAA</p>	

Establish New Environmental Court to Improve Environmental Laws Enforcement (L-3)

2.1 Rationale

The integrated management for the execution of environmental issues at national, regional, and international level should be incorporated into judicial structure within determinative specific authority within, such as environmental courts, in order to enhance the environmental diction court towards the judicial procedure and judgments the responsible of comprehensive execution for environmental protection legislations.

2.2 Linkages to National Priorities, Plans, and Programs

This recommended line of action links with the national priorities of improving the compliance with environmental laws in industrial establishments; implementing the obligations of international agreements; increasing the benefit from the ratified international agreements and research and study joining new agreements or protocols; supporting the legislative base and strengthen the economic and social incentives to conserve biodiversity and natural resources; and implementing the Polluter Pay Principle. In the biodiversity NAP, it is mentioned that there is still the need for consolidating and enforcing laws for protection of the environment at large and for conservation of natural resources and biodiversity in particular. This should be done through supportive regulatory mechanisms and incentives for local people. In the desertification NAP, it is stated that additional legislation and regulations at the national, governorates and local levels will be needed as well as enforcement of

existing and newly issued legislations and regulations are also needed to support efforts and activities of combating desertification in the different Agro-ecological zones.

2.3 Objectives

- 1) Enhance the judicial dictions of the environmental protection executive at courts.
- 2) Improving the integrated management for the execution of environmental legislations.
- 3) Decrease the long time needed for judicial procedures related to environmental issues at the courts.
- 4) Increase the number of well trained legal and judicial personal in the field of the execution of environmental issues.
- 5) Create relevant legislations databases to facilitate environmental law enforcement.

2.4 Activities:

#1	Establish the court and select qualified personnel with legal and environmental expertise (judges, Attorney Generals, enforcement officers, etc)
#2	Create a databank of national laws and legislations and be linked to Egypt's MEAs database in LR-2. A separate database will also be created for cases/disputes submitted to the court to facilitate its follow-up (it should contain follow-up reminders and scheduling of cases).
#3	Develop a coordinated environmental law enforcement strategy with multiple techniques to promote more consistent application of laws and regulations (e.g. increase the number and quality of enforcement officers, ensure that the political and managerial levels provide strong direction to enforcement officers, improve coordination between law enforcement agencies, identify topic where public community, Media, and NGOs might help improve law enforcement etc)
#4	Train legal and judicial personnel in the court
#5	Begin the environmental court operation
#6	Evaluate the performance of the environmental court

Evaluation Indicators:

- Annual number of environmental cases
- Annual number of resolved disputes
- The time needed to complete the judicial procedure
- Citizen / Media complaints

2.5 Activities Time Schedule

YEAR 1												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #1												
Activity #2												
Activity #3												
YEAR 2												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #4												
Activity #5												
Activity #6												
YEAR 3												
Activity # /Month	1	2	3	4	5	6	7	8	9	10	11	12
Activity #5	Continuous											

Activity #6	Continuous	
Total Duration	Long-term (>3 years) 1.5 years: to establish the court 1 year: pilot operation	
2.6 Required Inputs		
Resources:	Total Cost (EGP)	Funding Sources:
Legal and environmental expertise (judges, Attorney Generals, enforcement officers, etc)		• EEAA
Court building (design & construction, computers & equipment, furniture, etc)		
Training facilities		
IT and network security specialists		
Administrative and support staff		
Total Budget:	High (>300,000 EGP)	
2.7 Expected Output:		
<ul style="list-style-type: none">• Efficient environmental court• At least 50 trained personnel in the field of environmental legislation and enforcement• Database for national laws and legislations• Database for the court’s environmental cases/disputes with scheduling and follow-up reminders• Environmental law enforcement strategy• Annual court performance reports		
2.8 Stakeholders		
EEAA, focal points, Ministry of Justice, legislative institutions, and all other ministries/agencies / entities concerned.		
2.9 Proposed Executing Entity:		
Ministry of Justice		

Monitoring and evaluation are core components of the NCSA strategy and Action Plan, as it provides opportunities for continual improvement. The lead entity, the Egyptian Environmental Affairs Agency (EEAA) that is responsible for ensuring implementation of the Action Plan should also be responsible for undertaking systematic monitoring, evaluation, and reporting on the Action Plan through the National Coordination Council for the three Rio Conventions (NCC) and its Working Group. The objectives of monitoring and evaluation should be:

1. To provide systematic method of collecting & recording, analyzing, and reporting the progress of implementing of capacity building programs and projects; and
2. To generate useful information for improving the planning and implementation of capacity building programs to ensure its sustainability and success.

A proper monitoring and evaluation (M&E) system has to be put in place and should be built upon existing M&E systems which are operating successfully in focal agencies. Once the M&E system is defined, EEAA/NCC should lay out the organizational support infrastructure required to administer and operate the system within the various collaborating entities. This includes defining responsibilities for data collection and processing, data analysis, database development, and reporting of results. In order that the M&E system would be functional, it should be easy to operate and maintain by designing it to be of simple data input but with useful data output, clear methods for computing and analysis to the operators, and ease of accessibility to its users.

The monitoring and evaluation will depend on a set of indicators as listed in the 'project profiles' of the recommended lines of action. These indicators should be further refined and detailed by EEAA/NCC. The various types of indicators outlined in Table (6) can be used as guidance. These monitored indicators and their analysis should be summarized in the periodic progress reports issued by EEAA/NCC.

Monitoring and evaluation of the NCSA strategy and Action Plan should be undertaken in line with the UNDAF monitoring and evaluation plan and indicators throughout its five year duration (2007 – 2012). This should be coordinated with the Sub-committee on Environment chaired by the CEO of EEAA and the CO of the UNDP, which already meets quarterly and then reports its results to the Outcome Board responsible for the follow up of the UNDAF indicators. The members of the Sub-committee on Environment include representatives from the Ministry of Water Resources and Irrigation, Ministry of Agriculture, Ministry of Electricity, Ministry of Electricity, Ministry of Housing & Utilities, Ministry of Environment, and other UN agencies concerned with monitoring indicators.

Table 6: Various types of capacity development indicators (NCSA, 2005e)

Type	Description	Examples
<i>Output indicators</i>	measure completion levels, timeliness of delivery, efficiency and quality of outputs of capacity development undertakings and interventions	<ul style="list-style-type: none"> • Targets vs. accomplishments • Actual vs. standards • Target date vs. actual date of completion • Output per unit input
<i>Effect indicators</i>	measure the immediate effects (+ or -) of the project. They measure the immediate changes created by project outputs or resulting from the use of these outputs	<ul style="list-style-type: none"> • Change in technical competence • Change in financial capability • Change in institutional commitment • Change in political support
<i>Impact indicators</i>	measure the level attained by a capacity development undertaking or intervention in meeting its goals and objectives; they gauge long-term benefits brought about by the undertaking's outputs and effects	<ul style="list-style-type: none"> • Social goal/objectives vs. accomplishments • Economic goal/objectives vs. accomplishments • Environment goal/objectives vs. accomplishments
<i>Sustainability indicators</i>	measure whether or not [and to what extent] the impacts of a capacity development undertaking or the changes brought about by it are sustained [i.e., manifested continually through time]	<ul style="list-style-type: none"> • Interventions are internalized by recipient organizations (program is sustained, regular staff implement the program and regular funding is sourced) • Effects are sustained through time (changes in technical competence, financial capability, organizational commitments, and breadth of public support)
<i>Equitability indicators</i>	measure the equitability of the distribution of benefits among target organizations and entities; they determine whether or not [and to what extent] the impacts are more or less evenly distributed among stakeholders	<ul style="list-style-type: none"> • Collaborating organizations and different sectors are given equal opportunity to access capacity building programs • Gender equity in capacity development • Regional and local (municipal and city) offices are given equal opportunity to avail of, participate, or execute capacity development programs

The EEAA/NCC will be responsible as well for the conducting the reviews and progress reports in order to ensure continuous monitoring and evaluation of the status of the National Strategy and Action Plan. The other implementing partners will provide periodic reports on the progress, achievements and results of their projects, outlining the challenges faced in project implementation, should include an assessment of performance against the indicators, an analysis of stakeholder participation, budget performance, as well as resource utilization as articulated in the project profiles. The progress reports issued should be transparent, with measurable and meaningful values, and presentable at all three participation levels: public,

technical, and political. The reporting will be in accordance with the procedures and harmonized with UN agencies (CBD, UNFCCC, and UNCCD) to the extent possible.

A midterm review should also take place every three years to guide adjustments to the National Strategy and Action Plan. The approaches to this mid-term review can include internal review, external review, or a combination of both. The internal reviews can be undertaken by government bodies/personnel to assess progress towards delivering strategy commitments or in achieving set targets against strategy indicators. External reviews are undertaken by bodies which have no direct responsibility for either developing or implementing the strategy. Such review can be undertaken by organisations/consultants either from within the country or from other countries. External reviews can include also national peer reviews where it involves inviting other countries (peers) that implemented their own National Strategy and Action Plan to review Egypt's progress, which allows an exchange of experiences.

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