	United Nations Development Programme Country: EGYPT PROJECT DOCUMENT
Project Title	Enabling Activities for the Preparation of Egypt Third National Communication to the UNFCCC
UNDAF Outcome(s):	UNDAF Outcome 2: Environmental Sustainability.
Expected CP Outcome(s):	Sustainable Management of Environment and Natural Resources incorporated into poverty reduction strategies/key national development frameworks and sector strategies
Expected Output(s):	Increased capacity to produce national communications that meet all guidelines established by the UNFCCC CoP and that can serve as a source of information for national policies and measures in climate change and in key economic and social sectors.
Executing Entity:	Egyptian Environmental Affairs Agency (EEAA) / Ministry of State for Environmental Affairs (MSEA)
Implementing Agencies:	Egyptian Environmental Affairs Agency (EEAA) / Ministry of State for Environmental Affairs (MSEA)

#### **Brief Description**

The project will enable Egypt to prepare and submit its Third National Communication to the Conference of Parties (CoP) of the UN Framework Convention on Climate Change in accordance with its commitments as a Party to the Convention as mandated by Articles 4 and 12 of the Convention and subsequent CoP decisions. It will update and strengthen information provided regarding national circumstances, inventories of greenhouse gases, policies and measures undertaken to mitigate climate change, assessments of vulnerability to climate change and steps taken to adapt to climate change, and information on public awareness, education, training, systematic research and observation, and technology transfer. The project will also increase the capacity of experts and institutions in Egypt to produce subsequent National Communications that meet all guidelines established by the CoP and that serve as a source of information for national policies and measures to mitigate and adapt to climate change in key economic and social sectors.

Programme Period:	2011 - 2014	Total resources required: US \$ 480,000
Key Result Area (Strateg	gic Plan)	<ul> <li>Regular</li> <li>Other:</li> </ul>
PIMS No. Atlas Award ID	4455 00059810	• Donor (GEF) US \$ 480,000
Project ID: Start date:	00074967 1 May 2011	Unfunded budget: 0
End Date	30 April 2014	In-kind Contributions
PAC Meeting Date		o Govt. US \$ 100,000

Agreed by: H.E. Amb. Bassem Khalil, Deputy Assistant Foreign Minister & Director of International Cooperation, Ministry of Foreign Affairs
Signature: Date: 30 - 5 - 2011

Agreed by: Dr. Mawaheb Aboul Azm, Chief Executive Officer, Egyptian Environmental Affairs Agency (EEAA) Signature:

Agreed by: Mr. Mounir Tabet, Country Director United Nations Development Programme (UNDP) Signature:

Date: 1/6/2011

1

# List of Acronyms

	•
APF APR	Adaptation Policy Framework Annual Progress Reports
AWP	Annual Work Plan
CC	Climate Change
CCCD	Climate Change Central Department
CDM	Clean Development Mechanism
CGE	Consultative Group of Experts
CoP	Conference of Parties
CPAP	Country Programme Action Plan
DNA	Designated National Authority
EE	Energy Efficiency
EEAA	Egyptian Environmental Affairs Agency
EER	Energy and Environment Review
GDP	Gross Domestic Production
GEF	
GEF	Global Environmental Facility Greenhouse gases
GoE	Government of Equat
GPG	Good Practice Guidance
HFCs	Hydrofluorocarbon
INC	Initial National Communication
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
LUCF	Land Use Change and Forestry
MALR	Ministry of Agriculture & Land Reclamation
MDGs	Millennium Development Goals
MFTI	Ministry of Foreign Trade & Industry
MoFP	Ministry of Family & Populations
MoTR	Ministry of Transport
MSEA	Ministry of State for Environment Affairs
MSW	Municipal Solid Waste
NC	National Communication
NCSP	National Communications Support Programme
NEX	National Execution
NGOs	Non-governmental Organizations
NPM	National Project Manager
NSS-CDM	National Strategy Study for Clean Development Mechanism
PAMS	Policies and Measures
PFCs	Perfluorocarbons
PIU	
PSC	Project Steering Committee
PO	Project Officer
QA/QC	Quality Assurance/Quality Control
QPRS SBAA	Standard Basic Assistance Agreement
SBSTA	Subsidiary Body for Scientific and Technological Advice
SE.	Subhur beyafluoride
SI 6 SNC	Second National Communication
SINC	Second Ivational Communication
IL	Team Leader
TNC	Third National Communication

UNEP	
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	US Dollar (\$)
V&A	Vulnerability and Adaptation [to climate change]
WHO	World Health Organization
WMO	World Meteorological Organization

# **Table of Contents**

1	Situation Analysis	5
1. 2	Stuation Analysis	5
2. D	Strategy	U C
	Diect Kationale and Approach	0
3.	Project Outcome, Outputs, and Activities	1
4.	Project Results Framework	16
5.	Project Budget	18
6.	Project Work Plan	20
7.	Management Arrangements	25
8.	Institutional arrangements for Project Implementation	26
9.	Monitoring Framework and Evaluation	26
10.	Legal Context	28
11.	ANNEXES	29
An	nex A. Report on Stocktaking Analysis	30
1	A.1 METHODOLOGICAL APPROACH	30
1	A. 2 Findings	30
1	A.3 MEETINGS HELD FOR PSC, EXPERTS AND STAKEHOLDERS DURING THE STOCKTAKING PHASE	Error!
]	BOOKMARK NOT DEFINED.	
1	A.4 LITERATURE REFERENCED IN STOCK-TAKING	37
An	nex B: Risk Analysis	38
AN	NEX C: TERMS OF REFERENCE	39
-	Ensuring effective dissemination of and access to information on project activities and results, (i	including
an	regularly updated project website);	39
An	nex D. Stakeholder involvement matrix	46
An	nex E: Comparison between the total GHG indicators 1990/2000 in Egypt	55
An	nex F: Country at a Glance	56
An	nex G: Endorsement and Commitment Letters	58

#### **1.** SITUATION ANALYSIS

1. The Egyptian Environmental Affairs Agency (EEAA) was founded in 1982, followed by establishing the Ministry of State for Environment affairs in 1997. Environmental policies in Egypt are directed at halting environmental degradation, creating conditions for rehabilitation of polluted areas and promoting the sustainable use of natural resources. The Law No. 4/1994 and its amendments on Environmental Protection form the basis for environmental management in Egypt. The law addresses the prevention and reduction of pollution, sustainable management of natural resources, and provides binding provisions for environmental impact assessment.

2. In 1994, Egypt ratified the United Nations Framework Convention on Climate Change (UNFCCC). The Intergovernmental Panel on Climate Change in its Third assessment report, IPCC (1995), identified Egypt's Mediterranean coast and the Nile Delta as vulnerable regions to sea level rise. In this respect, Egypt set up the Climate Change institutional structure at the national level, and a Climate Change Unit (CCU) was established in 1996 in EEAA.

**3.** In 2007, Egyptian Prime Minister issued Decree No. 272 to reform the National Climate Change Committee that was established in 1997. The new Climate Change Committee is chaired by the Minister of State for Environmental Affairs and includes members representing a wide range of governmental and non-governmental representatives. In addition, Ministry of State for Environmental Affairs upgraded CCU to be a Central Department in EEAA in 2009, in order to strengthen the climate change institutional structure on the national level.

4. Two ministerial climate change committees in the Ministry of Agriculture & Land Reclamation and the Ministry of Irrigation & Water Resources have been established. In addition, a climate change information centre in the Agriculture Research Centre has been established. However, many barriers still exist that are challenging Egypt efforts to comply with UNFCCC such as inadequate capacity and weak coordination and cooperation between governmental bodies, NGOs and private sector. Furthermore there is a lack of mainstreaming the adaptation measures in the national planning process, particularly in comparison with mitigation measures

5. Egypt submitted Initial and Second National Communication reports to UNFCCC in 1999 and 2010 respectively. According to INC and SNC Egypt's most vulnerable sectors to climate change are identified as follows: 1) coastal zones, 2) water resources and 3) agriculture. The sea level rise is the cause of the most serious climate change impacts that threatens the densely populated River Nile Delta which includes extensive infrastructure and fertile agriculture lands. In this respect, sea level rise is expected to inundate large areas of low lying lands in the Nile Delta and sea water intrusion will increase water logging conditions and soil salinity in other lands. Furthermore, there is also a high degree of uncertainty regarding the climate change impacts on the annual Nile flood, the expected decline in precipitation along the North Coast and a projected increase in the population estimated between 115 and 179 million by 2050. Moreover, temperature rise is expected to reduce the productivity of major crops, increase crop water requirements coupled with an expected water stress and loss of some lands and fertility in the Nile Delta and consequently the overall food production maybe significantly reduced. Impacts of climate change on other vulnerable sectors to climate change will be further investigated in the TNC. Accordingly, climate change risks may threaten Egypt's efforts to achieve the MDGs and to face those threats; INC & SNC presented several adaptation measures to climate change impacts, as well as, many mitigation measures to play an effective role in achieving the main target of the UNFCCC.

6. Egypt ratified Kyoto protocol in January 2005, followed by the establishment of the Egyptian Designated National Authority for Clean Development Mechanism "DNA-CDM". Egypt participated with some North African Countries from 2003 - 2006 in a UNEP regional program entitled "Capacity Development for Clean Development Mechanism (CDM)" The regional program assisted Egypt in building one of the largest CDM portfolio in Africa with an investment cost of initially approved projects estimated in 2011 at around USD 3.05 billion which are expected to reduce GHG emissions by about 9.4 million ton CO2 equivalent per annum. In the meantime, seven projects are internationally registered and claiming CERs.

7. The outputs of a set of sector programs currently under implementation and others under development will be integrated in the outputs of the TNC Project.. The UN Joint Programme on *Climate Change Risk Management program* aims to assist Egypt in aligning its climate risk management and human development efforts in pursuing the achievement of MDGs to face climate change and the anticipated serious threats to the country. Meanwhile, a climate change adaptation strategy and *Climate Change Socio-Economic Impacts Study* are currently under preparation. Furthermore, the Ministry of Agriculture is implementing several adaptation programs are currently under implementation and others in Agriculture Sustainable Development Strategy 2030 that published in 2009.

8. Since 1990, UNDP is supporting Egypt in terms of sustainable environmental development including assistance towards compliance with international environmental conventions, aiming at: (a) promoting environmental governance in mainstreaming sustainable development and implementing relevant policy, legal and regulatory measures, (b) preparation of the first and second National Environmental Action Plans in 1992 and 2003 respectively and (c) capacity development to implement global environmental conventions primarily through *Egypt's First and second National Communications to the UNFCCC*.

9. The proposed TNC will build on the outputs of the INC, SNC and other relevant studies and national reports to identify priorities for interventions, and further translate assessments into concrete sector policies and measures. In this respect, the TNC will become a key tool for decision makers at all levels, and shall contribute to deepening understanding of the needs for and consequences of implementing mitigation and adaptation policies and measures. It will demonstrate the potential contribution to the sustainable development of the principal economic sectors of Egypt, and help integrating climate change considerations into national sector policies and programs.

#### 2. STRATEGY

#### **PROJECT RATIONALE AND APPROACH**

10. The global path of CO2 emissions already surpasses the worst case scenario (SRES)<sup>1</sup>. Although there are uncertainties with regard to exact consequences, there is high confidence (IPCC 2007) that impacts from climate change, even under significantly more modest emission scenarios than the current trends predict, will affect the functioning and integrity of key ecosystems worldwide. While the impacts are being felt globally, the effects of climate change will likely impact African continent heavily. This is a region with substantial, but intrinsically fragile, natural capital, and where there are a number of climate sensitive regions (climate hotspots).

11. Egypt has been identified as particularly vulnerable to the impacts of climate change. Significant vulnerabilities anticipated in the INC and SNC, as well as international reports such as IPCC 2007 and UNDP Human Development Report 2007/08. In 2007, World Bank carried out a study regarding the impacts of Sea Level Rise (SLR) on developing countries. Among all 84 countries under that study, Egypt was considered as one of the most impacted countries.

12. In this context, National Communications (NCs) provide essential information for supporting decision making to enable reaching the ultimate goal of the UNFCCC. According to Article 4, paragraph 1, and Article 12, paragraph 1 of the UNFCCC, each Party shall communicate to the Conference of the Parties (COP), through the secretariat, the following elements of information: (a) a national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the COP; (b) a general description of steps taken or envisaged by the Party to implement the Convention; and (c) any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global *emission trends*.

<sup>&</sup>lt;sup>1</sup> SRES (Special Report on Emission Scenarios) prepared by the IPCC in 2001. The worst case scenario, A1FI, assumed business as usual and runaway expansion in the use of fossil fuels.

13. The goal of this project is to prepare Egypt's Third National Communication through building on the previous and ongoing work carried out under Egypt's Initial and Second National Communication, Egypt National Environmental, Economic and Development Study (NEEDS) for Climate Change and other climate change related studies which lay a sound ground and baseline for developing such a product. Working with priority areas / issues selected under the stocktaking exercises would be the main focus of the project. The TNC project is also considered as a vehicle to facilitate integrating climate change in development planning and policies.

14. The project will encourage engagement of experts who worked in climate change and related fields and institutions that have already been involved for the purpose of facilitation of administrative arrangements. New qualified experts in the relevant fields and institutions will be invited to join the TNC teams. Hands on training will be provided on the GHG inventory, methods and tools for mitigation, vulnerability and adaptation assessments and planning, in addition to related training on cross cutting issues such as analysis of climate change socio-economic impacts. This project will enhance the sustainability of the teams and the process of preparation of national communications. This will also foster internal networking of national experts. The project will also hire short-term international consultants if deemed necessary.

15. The expertise of governmental institutions, international organizations, academia, private sector and NGOs that have contributed to Egypt's INC and SNC will be utilized and improved by bringing more stockholders on board and building partnership with the private sector that is crucial for promoting investments of cleaner technologies.

16. The initial emphasis of the project will be on developing GHG inventory for year 2005, analyzing the abatement measures of GHG in Egypt as well as assessment of Egypt vulnerability to climate change impacts and identifying adaptation measures with related entry points for the selected areas. Building on results of these studies, the options to mitigate climate change by addressing GHG emissions and facilitating adaptation to climate change for the selected areas will be analyzed and reviewed in the light of country development context. Gaps, uncertainties and constraints along with other information related to the UNFCCC will be addressed as indicated by 17/CP8.

17. The project will assess the climate change impacts on the most vulnerable sectors in Egypt and the ways to overcome its threats by addressing agriculture, coastal areas, water resources, health, biodiversity, tourism and human habitat & settlements as the main vulnerable areas to the ongoing and expected climate change, in addition to identifying the required adaptation measures and policies, as well as required entry points such as EIA, in order to mainstream those suggested measures and policies in the national planning process.

18. The project will identify and, to the extent feasible, develop proposals for projects related to climate change adaptation and mitigation; projects which may be eligible for further funding or co-funding by GEF, other multilateral or bilateral organizations and national funding sources or eligible for funding under Clean Development Mechanism.

19. Finally, the project will contribute to enhancing general awareness and knowledge on climate change related issues in Egypt, and to strengthen the dialogue, information exchange and cooperation among all the relevant stakeholders including governmental, non-governmental, academic, and private sectors in accordance to the Article 6 of the UNFCCC and Implementation of Buenos Aires Plan of Action.

#### 3. PROJECT OUTCOME, OUTPUTS, AND ACTIVITIES

**20. Project Outcome:** To enable Egypt to prepare and submit its TNC to the CoP of the UNFCCC in accordance with its commitments as a non-Annex 1 Party to the Convention. The project will also result in an increased capacity to produce subsequent NCs that meet all guidelines established by the CoP and that

can serve as a source of information for national policies and measures in climate change and in key economic and social sectors.

Outcome 1: Updated GHG inventory prepared and capacity to collect this information on an on-going basis for future NCs enhanced

**Output 1.1:** The GHG inventory team and data collection and analysis process maintained and strengthened.

Activity 1.1.1: Identify and mobilize national experts in targeted sectors and areas of relevance. Responsible party: TL.

Activity 1.1.2: Review the existing information on previous GHG inventories already archived and documented. Responsible party: TL, National Experts.

Activity 1.1.3: Identify specific training needs for enterprises in data collection (particularly for those in key source sectors that are major point sources of emissions)

Activity 1.1.4: Procure and implement training for enterprises on data collection as necessary

Activity 1.1.5: Review and update the current QA/QC plan. Responsible parties; NPM, TL.

Activity 1.1.6: Prepare a series of recommendations for institutionalizing the data collection process and for harmonizing the process with national statistical data collection processes.

Activity 1.1.7: Submit recommendations for endorsement by the EEAA and MSEA

Output 1.2: GHG inventory data collected and methodologies confirmed and strengthened

*Activity 1.2.1:* Identify all new sources of information for filling data gaps (see also Activity 2.2.4). Responsible party: TL, National Experts

Activity 1.2.2: Identify new activity data needed for estimates of GHG emissions, incorporating UNFCCC in-depth review team recommendations where applicable. Responsible party: TL, National Experts

Activity 1.2.3.: Identify existing sources of data for fluoric gas emissions (PFC, HFC, SF6) and outline any additional source information needed for Tier 1 analysis. Responsible party: TL, National Experts

Activity 1.2.4: Utilize IPCC good practice methodology to fill in data gaps. Responsible party: TL, National Experts.

**Output 1.3:** A completed national inventory of anthropogenic greenhouse gas emissions by sources and removals by sinks for 2005 following the guidelines adopted by the CoP (17/CP8) developed. Suggestions from the review process incorporated into the new inventory.

Activity 1.3.1: Re-estimate GHG emissions inventory for 2000 as provided in the SNC. Responsible party: TL, National Experts.

Activity 1.3.2: Assess the current estimate of the GHG emissions inventory for 2005 as provided in the Initial and Second Inventory Report and develop a time series for 1990-2005. Responsible party: TL, National Experts.

*Activity 1.3.3:* Prepare a draft inventory of anthropogenic greenhouse gas emissions by sources and removals by sinks for 2005 and a time series for 1990-2005 following the guidelines adopted by CoP. Responsible party: TL, National Experts.

Activity 1.3.4: Develop key sources analysis (for the year 2005) and sensitivity analysis as guided by IPCC GPG. Responsible party: TL, National Experts.

Activity 1.3.5: Develop a key sources inventory for 2005. Responsible party: TL, National Experts.

Activity 1.3.6: Undertake uncertainty assessment as guided by IPCC good practice guidelines. Responsible party: TL, National Experts

Activity 1.3.7: Circulate the inventory for internal review as part of QA/QC plan. Responsible party: NPM, TL, National Experts.

Activity 1.3.8: Commission a technical peer review as part of QA/QC plan and incorporate its recommendations into the inventory. Responsible party NPM, TL, NCSP.

Activity 1.3.9: Organize a national workshop to present findings from the GHG inventory exercise and obtain additional comments. Responsible party: NPM, TL.

Activity 1.3.10: Incorporate comments received from the review process, including comments received by any in-depth reviews of the Initial Inventory Report or the SNC organized by the UNFCCC Secretariat. Responsible party: TL, National Experts.

Activity 1.3.11: Finalize the inventory to be submitted as a part of the TNC of Egypt. Responsible party: NPM, TL, National Experts.

Output 1.4: GHG inventory data and estimates documented and archived

Activity 1.4.1: Archive activity data, emission factors (if any) and estimates to the template developed under GEF regional project on GHG inventories. Responsible party: TL, National Experts, and Information & PA Assistant.

Activity 1.4.2: Update the Manual of Procedures and National Inventory Report with new GHG inventory data and estimates. Responsible party: TL, National Experts, and Information & PA Assistant

# Outcome 2: Updated report on policies and measures to mitigate CC prepared and capacity to collect this information on an on-going basis for future NCs strengthened

**Output 2.1:** Necessary data and relevant information for scenario development, collected, analyzed and used in the scenario development

Activity 2.1.1: Consider estimates of GHG inventories for the base year 1990 which will serve as starting point for the analysis of the GHG emissions towards 2025-2050; Responsible party: TL and, National Experts.

*Activity 2.1.2:* Develop a comparative analysis of figures /estimates obtained under the GHG Inventory for the Initial Inventory Report to those figures forecasted for the same year (2000) under Egypt's SNC. Define the *uncertainty level* for such a case and take it into account for the scenario development/update. Discuss any changes in the uncertainty level as reported in the SNC. Responsible party: TL and, National Experts.

Activity 2.1.3: Collect all relevant macro-economic data and set assumptions to be made for the purpose of emission scenario development. This data should include data from the new energy balance and from all recent sectoral economic plans, particularly the Energy Sector Development Plan, Transport sector Development Plan, Industry Sector Development Plan, and Agriculture sector Development Plan and rural development trends. Responsible party: TL, Information and PA Assistant and, National Experts.

Activity 2.1.4: Identify any difference / change to the Business as Usual (BAU) scenario developed under Egypt's SNC, including trends in fuel energy pricing, recent economic output in non-energy sectors, and stated goals under the Egyptian National Plan through 2017; explain the reasons for such differences. Responsible party TL, National experts.

*Activity 2.1.5:* Assess changes that may be necessary in assumptions and data in the With Measures (WM) scenario due to new economic development policies for various production sectors and for the economy as a whole (drawing upon the findings from Output 2.2) and implement the changes where possible.

Activity 2.1.6: Process the collected data, format them for entry, and enter them as required by the software that will be utilized for the purpose of generating scenarios. Include updated forecasts of energy output using new government projections and modelling software that is well suited to Egypt's status. Responsible party: TL, Information and PA Assistant and, National Experts.

Activity 2.1.7: Cross-check scenario outputs for consistency in sectors and time lines with inventories data from Output 1, and policies and measures data from Output 2.2. Responsible party: TL, TL for Output 1, and National Experts.

**Output 2.2:** Reporting and analysis of policies and measures (PAMs) to mitigate climate change updated, strengthened, and incorporated into scenario development and reporting in the TNC.

Activity 2.2.1: Assess the status of the PAMs reported in the SNC and add any additional relevant PAMs; Incorporate any information and expert comments provided.

*Activity 2.2.2:* Review the status of the relevant policy and legal framework, particularly the Egypt National Plan to 2017, the National Sustainable Development Framework, National Environmental Action Plan and Sustainable Agriculture Strategy 2030. Responsible party: NPM, TL, Legal expert, National Experts.

Activity 2.2.3: Incorporate updated information into PAMs discussion section and into data for scenarios.

**Output 2.3:** Analysis of PAMs completed for the period through 2017 and beyond if possible, incorporating new data and new assumptions that postdate the SNC. Distinguish clearly between technical potential and measures that actually have been or are being realized. Discuss the *relative* importance of supply-side and demand-side measures in the energy sector and provide a summary overview of the relative potential impact (and actual mitigation realized) for all sectors presented in the SNC, Include a discussion of the additional benefits (both economic and social) of the potential and actual PAMs that are presented.

*Activity 2.3.1:* Develop the draft chapter on PAMs, including a summary comparison of PAMs and a concluding sub-section that identifies priorities for action. Responsible party TL.

*Activity 2.3.3:* Circulate the draft chapter on PAMs for peer review and comments. Responsible party NPM.

Activity 2.3.4: Receive comments and incorporate them into the document. Responsible party NPM, TL, National experts.

Activity 2.3.5: Organize a national workshop to highlight findings from modelling and analysis of PAMs and get more comments. Responsible party NPM, TL.

*Activity 2.3.6:* Finalize the PAMs chapter to be submitted as a part of Egypt's TNC. Responsible party NPM, TL, National Experts.

Activity 2.3.7: Archive and document all related studies, model runs, assumptions, and estimates for the PAMs chapter. Responsible party NPM, TL, National Experts.

# Outcome 3: Updated assessment of climate changes, vulnerability to CC, and measures to adapt to CC prepared; capacity to collect this information on an on-going basis for future NCs strengthened

Output 3.1: Current climate changes in Egypt described and analysed

Activity 3.1.1: Confirm and collect all new supporting data needed for updating the climate change scenarios, particularly socioeconomic data. Responsible party TL.

Activity 3.1.2: Compile updated climate information for time period post-dating the SNC, including all factors related to climate change and variability such as temperature and precipitation data, and conduct trend analysis for this data. Responsible party TL, National Experts.

Activity 3.1.3: Update the section in the NC on changes in SLR and extreme weather events .Responsible party National Experts

Activity 3.1.4: Update the long-term climate change scenarios including updated climate data, socioeconomic data, and updated long-term assumptions regarding socio-economic development. Starting in improving modelling capacity through cooperation with the Hadley Centre (Met Office UK) and other collaborators. Responsible party TL, National Experts.

Activity 3.1.5: Incorporate updated information into the discussion section of the TNC chapter on V&A and into recommendations on adaptation.

**Output 3.2:** Vulnerability to climate change in Egypt described and assessed

Activity 3.2.1: Review information on vulnerability and impacts provided in the SNC and re-confirm gaps in data collection and analysis for all areas, with special emphasis on the following four priority areas identified under the SNC and designated by the Government as continuing priority areas for the TNC:

- Agriculture (updating data and analysis on cereal crops production, fibre crops ; and livestock, as well as, study other new areas such as insects, plant disease and fisheries)
- Water resources (particularly new data and resulting analysis from the Regional Circulation Model that developed under Climate Change Risk Management Program)
- Coastal Zones (updating all related information to SLR and its impacts on Costal areas in Egypt and particularly in Delta)
- Studying new areas that were not covered in SNC such as Biodiversity. As well as, give more attention to health, human habitat & settlement and tourism that were not addressed adequately in SNC.

*Activity 3.2.2:* Develop a data collection and analysis plan for hot spot areas could be damaged severely due to SLR such as Al-Burullus village and Mohamed Ali sea Wall in Abu- Qir, Alexandria (identified by the many experts as a priority region). Responsible party: TL, local experts.

Activity 3.2.3: Analyse data, document data sources, models used, and assumptions. Responsible party: TL, local experts.

Activity 3.2.4: Incorporate updated information into discussion section on vulnerability and impacts and into recommendations on adaptation.

**Output 3.3:** Measures and recommendations taken to adapt to the consequences of climate change described and assessed.

Activity 3.3.1: Conduct a review of new policies and research on adaptation to climate change that post-date information provided in the SNC. Re-confirm gaps and priorities for data collection and analysis . Responsible party TL.

Activity 3.3.2: Incorporate updated information into the discussion sections of the V&A chapter and cross-check with findings on climate change (i.e. temperature and precipitation trends) and vulnerability and impacts.

Activity 3.3.3: Provide a listing of potential adaptation measures and actual adaptation measures currently being undertaken in Egypt. Provide a discussion of the relative importance and impact of these measures. Include a discussion of the additional benefits (i.e. economic and social benefits) of actual and potential adaptation measures and discuss their alignment with current government policies and programs. Assess the priority of these measures, and draft recommendations for undertaking the highest-priority measures to adapt to climate change. Incorporate this information into the V&A chapter of the draft TNC.

**Output 3.4**: Chapter on Vulnerability and Adaptation (V&A) completed

Activity 3.4.1: Review time lines and outer bounds for medium-term and long-term scenarios for all sections and research in priority areas of the V&A chapter, check and adjust for comparability where possible; and cross-check and adjust with respect to other long-term forecasts (i.e. in the inventories and PAMs chapters) where possible.

*Activity 3.4.2:* Develop the draft chapter of the V&A incorporating new research and analysis from Outputs 3.1 and 3.2. Responsible party TL.

Activity 3.4.4: Circulate the draft chapter of V&A for peer review and comments. Responsible party NPM.

Activity 3.4.5: Receive comments and incorporate them into the document. Responsible party NPM, TL, National experts.

Activity 3.4.6: Organize a national workshop to highlight findings from the V&A study and get more comments. Responsible party NPM, TL.

Activity 3.4.7: Finalize the V&A chapter to be submitted as a part of Egypt's TNC. Responsible party NPM, TL, National Experts.

Activity 3.4.8: Archive and document all the V&A related studies and estimates. Responsible party NPM, TL, National Experts.

# Outcome 4: Updated information in national circumstances and other areas required under the UNFCCC (education, training, public awareness, and technology transfer) prepared and all project-related information synthesized in the publication of the TNC

**Output 4.1:** Updated account of National Circumstances prepared and capacity to collect this information on an on-going basis for future NCs strengthened

Activity 4.1.1: Include new developments in the National Circumstances section of the NC, such as the current government institutional arrangements for addressing obligations under the UNFCCC, which have become more comprehensive since the SNC, the formulation of recent sectoral development plans, government measures to address solid waste disposal subsequent to the publication of the SNC, and any other developments that post-date the stock-taking analysis. Responsible party: NPM, TLs, Information & PA Assistant.

*Activity 4.1.2:* Establish links to get new data and information, such as the re-formulated Energy Balance and updated demographic and socioeconomic data, such as population growth and sectoral economic growth and employment statistics from statistical yearbooks updating the figures from 2000 and 2001 used in the SNC. Commission and conduct any supplementary research on economic output deemed necessary. Responsible party: NPM, TLs, Information & PA Assistant.

Activity 4.1.3: Collect data and information identified in Activities 4.1.1 and 4.1.2 from different sources in the course of the project implementation, incorporating any comments from the IPCC indepth review team if applicable. Responsible party: NPM, TLs, Information & PA, National Experts.

Activity 4.1.4: Fill the gaps, update and add the new information in accordance to the TORs for National Circumstances section of the Egypt's TNC. Responsible party: NPM, TLs, PA, National Experts.

*Activity 4.1.5*: Ensure that the national circumstances sections cover all areas identified as priorities for mitigation and adaptation (listed in Outomes 2 and 3) and all branches of industry providing information for the GHG inventory; commission any additional data necessary to support those areas. Responsible party: TLs, PA, and National Experts.

Activity 4.1.6: Draft the National Circumstances section under the TNC in compliance with the guidelines set by 17CP/8. Responsible party: NPM, TLs, PA.

Activity 4.1.7: Circulate the National Circumstances section for comments receive comments and incorporate them into the report. Responsible party: NPM, PA.

Activity 4.1.8: Finalize the National Circumstances section under the SNC. Responsible party: NPM, Project Assistant.

**Output 4.2:** The information considered relevant to Article 6 of the UNFCCC (education, training, and public awareness), Article 4 (technology transfer), and Article 5 (climate research and systematic observation) for non-Annex I parties compiled and synthesized.

*Activity 4.2.1:* Commission and conduct a public opinion survey to assess the baseline level of public awareness and knowledge related to climate change. The survey should draw upon existing UNDP experience with climate change public opinion surveys and use a format and sample size that will allow the data to be compared with findings in other countries.

*Activity 4.2.2:* Collect information on steps taken to integrate climate change into socio-economic and environmental policies in Egypt, particularly on the National Strategy for Adaptation and the National Strategy for Sustainable Development, from the team producing the PAMs chapter of the NC. Responsible Party: NPM, TL on PAMs.

*Activity 4.2.3:* Collect, update, synthesize and provide information on how Egypt is addressing activities related to the transfer of, access to environmentally sound technologies and know-how. Responsible Party: NPM, Information and Public awareness assistant, TL for PAMs, National Experts.

*Activity 4.2.4:* Collect, update, synthesize and provide information on the research and systematic observation systems as described in the UNFCCC and subsequent CP decisions. Include a discussion of recent research conducted by relevant Research Institutions and a discussion of priorities for future research, including an assessment of the availability of raw data, such as botanical surveys. Responsible Party: TL of V&A.

*Activity 4.2.5:* Collect, update, synthesize and provide overall information relevant to the Article 6 activities in education and public awareness with an emphasis on recent activities designed to improve sustainable development capacity through the National framework for Sustainable Development. Responsible Party: NPM, Information and Public awareness assistant.

*Activity 4.2.6:* Summarize all the information collected and the findings of the public opinion survey in a draft chapter. Distribute it for review and comments (internally). Responsible Party: NPM, Information and Public awareness assistant, TLs, National Experts.

*Activity 4.2.7:* Incorporate comments to the above draft chapter and finalize it as part of the Egypt's TNC. Responsible Party: NPM, Information and Public awareness assistant, TLs.

#### Output 4.3: TNC compiled, prepared, submitted and disseminated

Activity 4.3.1: Compile a draft of Egypt's TNC with the structure and scope of the report designed as guided by relevant CoP decisions;

Activity 4.3.2: Circulate the draft for comments and review and incorporate them;

Activity 4.3.3: Ensure that all recommendations from IPCC in-depth reviews (where appropriate) of the SNC are incorporated into all aspects of the TNC and that a time-table and plan are established to address any comments that cannot be fully covered. Responsible party: TL, National Experts.

Activity 4.3.4: Endorse the document by the PSC;

Activity 4.3.5: Finalize Egypt's TNC;

Activity 4.3.6: Commission translation and technical editing of the TNC where necessary;

Activity 4.3.7: Publish Egypt's TNC in Arabic and English;

Activity 4.3.8: Prepare e-copies of Egypt's TNC in CD-ROM format;

Activity 4.3.9: Oversee official submission of Egypt's TNC to the CoP of the UNFCCC as necessary

Activity 4.3.10: Organize a national workshop to launch and present the findings of Egypt's TNC;

Activity 4.3.11: Launch the TNC and present major findings in a side event during a CoP /Subsidiary Body session;

#### Output 4.4: Policy papers and briefings for decision-makers prepared and delivered

Activity 4.4.1: Upon the finalization of the draft TNC, identify 2-4 key topics for policy papers (e.g. a review for a given economic sector such as agriculture or a cross-cutting area such as coastal zones and water resources) depending on the findings of the project teams and consultations with stakeholders during the finalization of the TNC and current needs of the government.

Activity 4.4.2: Draft the policy papers to be a succinct presentation of findings and recommendations targeted at a non-technical audience. These papers should prioritize actions and should highlight the additional economic and social benefits of the recommendations.

Activity 4.4.3.: Circulate the draft policy papers for comments and review and incorporate feedback;

Activity 4.4.4: Publish the policy papers in Arabic and English;

Activity 4.4.5: Organize a series of high-level briefings (either small roundtables or individual briefings) with decision-makers to present and discuss findings.

#### **Project Management: Project activities coordinated, on-going communication with all stakeholders** maintained, and quality of project activities monitored and evaluated

#### **Output PM 1: Activities and staff coordinated**

Activity PM 1.1: Identify and hire appropriate international and local experts to manage activities and conduct research.

Activity PM 1.2: Establish regular meetings for Team Leaders and with individual Team Leaders and the experts in their area.

Activity PM 1.3: Hold an inception workshop and finalize the timetable for all project outputs and activities.

Activity PM 1.4: Procure equipment and office facilities for the project as needed.

Activity PM 1.5: Conduct an initial overview of the data and parameters for project scenarios and research in order to ensure that scenarios, estimates, and other project research are internally consistent within the NC.

Activity PM 1.6: Coordinate training to be provided in project areas and oversee sharing of experience gained by individual experts during trainings and workshops in Egypt and abroad.

# Output PM 2: Communication among project experts, project stakeholders, and the general public coordinated

Activity PM 2.1: Include project stakeholders in the Project Steering Committee and convene the committee at least once a year and on an ad hoc basis as necessary.

Activity PM 2.2: Prepare press releases and other information regarding the project status and findings as necessary and respond to press queries regarding the project.

Activity PM 2.3: Design and maintain a project website, updating information on a regular basis.

#### Output PM 3: Project activities, outputs, and outcomes monitored and evaluated

Activity PM 3.1: Compile documentation for the Annual Project Review/Project Implementation Review (APR/PIR) that conforms with UNDP-GEF requirements and CO specifications.

Activity PM 3.2: File other regular reporting documents as required by UNDP-GEF and/or UNDP/ Egypt, including Quarterly Operational Reports (QORs) with corresponding updates in the Atlas Risk Log if necessary.

Activity P 3.3: Conduct an independent financial audit of all project activities on an annual basis.

Activity PM 3.4: Compile a Lessons Learned Note on project implementation and the TNC preparation process to be distributed to government counterparts, to UNDP Egypt, and to other GEF-funded project teams in order to share experience and good practice in the preparation of NCs.

### 4. PROJECT RESULTS FRAMEWORK

#### This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD:.

#### **Country Programme Outcome Indicators:**

Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Mainstreaming environment and energy OR

2. Catalyzing environmental finance OR 3. Promote climate change adaptation OR 4. Expanding access to environmental and energy services for the poor.

Applicable GEF Strategic Objective and Program: Enabling Activities: Climate Change

	Indicator	Baseline	Targets	Source of	Risks and Assumptions
			End of Project	verification	
Project Objective <sup>2</sup> Preparation of the Third National Communication (TNC)	Preparation and submission of the TNC	Egypt has completed its SNC and an initial inventory report.	The TNC will be endorsed and submitted to the UNFCCC.	*UNFCCC documentation.	Assumes that strong political support for the preparation of the TNC will continue.
Outcome 1 <sup>3</sup> GHG Inventory strengthened and data collection system institutionalized	*GHG inventory with Tier 1 data for all key source emissions, where appropriate Tier 2 will be used *Establishment, where appropriate, of continuous national inventory system (NIS) *Complete inventory chapter for the TNC	*Tier 1 data listed for all key sources in SNC *Data collected on an ad hoc basis when NC is compiled.	*GHG inventory uses Tier 1 or Tier 2 data for key source emissions *Fluoric gases are reported *Data collection analysis is institutionalized *Complete inventory chapter is prepared for the TNC	*UNFCCC in-depth review data *Project documentation *Government reports *External expert, review (NCSP), where appropriate *	Assumes that enterprises will be willing and able to share data on their emissions with the project team (based on experience in Egypt to date).
Outcome 2 Mitigation Policies and Measures (PAMs) Analysis	*Robust scenarios for mitigation incorporating the current data and modelling techniques *Complete PAMs chapter that incorporates expert review	*Some new policy developments have occurred since the publication of the SNC affecting scenarios. *Current version of modelling software may not be most suitable.	*Recent policy developments incorporated into new scenarios through 2025 - 2050. *Software used for mitigation scenarios is highly suitable and experts are able to utilize the software fully *Complete PAMs chapter is prepared for the TNC	*Project documentation, including technical reports *Expert review (NCSP)	

<sup>&</sup>lt;sup>2</sup> Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

<sup>&</sup>lt;sup>3</sup> All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes.

		*Need for new scenarios through 2025 - 2050.			
Outcome 3 Vulnerability and Adaptation (V&A) Assessments	*Climate scenarios that reflect current information and modelling techniques *Key focal area and sub-sector components of the NC section on V&A updated and strengthened *Recommended adaptation measures that reflect current best practice thinking *Complete V&A chapter	*V&A experts require upgraded software, newer input data *SNC does not reflect recent developments, such as the National Strategy on Adaptation to CC.	<ul> <li>*Scenarios are prepared that incorporate current data and modelling techniques</li> <li>*Key components of the V&amp;A section are updated</li> <li>*Recommended adaptation measures and entry points reflect (and in turn inform) the National strategy on Adaptation to CC and policy makers decisions</li> <li>*Complete V&amp;A chapter is prepared for the TNC</li> </ul>	*Project documentation, including training records and procurement records *Expert review (NCSP)	
Outcome 4 Updated information in national circumstances and other areas required under the UNFCCC	*Presence of all required chapters in the TNC not covered above *Peer review of all materials *Translation of TNC *Affiliated policy papers and briefings *Additional information on public awareness *Active, current project website	*Chapters on national circumstances, education, training, public awareness, and technology transfer in SNC do not reflect recent developments. *No means of packaging the NC data in a format that is easily accessible to policy-makers *No baseline information on public awareness and opinion on climate change. *SNC website with links to key stakeholders and project documentation not updated.	<ul> <li>*All required chapters for the TNC are prepared, reviewed, amended, and submitted.</li> <li>*TNC is translated and available in Arabic and English.</li> <li>*TNC is published and distributed in hard-copy and CD-ROM format.</li> <li>*Related reports for policy-makers published and high-level policy briefings held.</li> <li>*Public opinion survey results incorporated into TNC and/or TNC launch.</li> <li>*Project website on climate change has current information on most recent developments in CC and all key project reports.</li> </ul>	*Project documentation *Policy reports *Expert Review (NCSP) *TNC *Project website	

# 5. PROJECT BUDGET

	Project													
Award ID:	00059810	)		ID(s):	00074967	,								
Award Title:	PIMS 445	55 CC EA Egypt	"Enabling Ac	tivities for the Preparation	n of Egypt's	s Third National O	Communication to the U	JNFCCC"						
Business Unit:														
Project Title:	PIMS 445	55 CC EA Egypt	"Enabling Ac	tivities for the Preparation	n of Egypt's	s Third National O	Communication to the U	JNFCCC"						
PIMS no.	4455													
Implementing Partner														
(Executing Agency)	Ministry of State for Environmental Affairs, Egyptian Environmental Affairs Agency, Climate Change Central Department													
		Funding	Budget	Item		Year 1	Year 2	Year 3	Total					
		Source	Code											
		GEF	71200	Intl. Cons.		\$7,000	0	0	\$7,000					
		GEF	71300	Local Cons.		\$15,000	\$10,000	0	\$25,000					
Outcome 1: Updated GH	HG	GEF	71405	Service Contracts-Ind	divid.	\$6,000	\$5,000	\$2,000	\$13,000					
inventory prepared		GEF	72100	Contr-Cmpy		\$2,000	\$2,000	\$2,000	\$6,000					
		GEF	71600	Travel		\$4,000 0		0	\$4,000					
		GEF	72800	Equipment		\$11,000	0	0	\$11,000					
Sub-Total for Outcome 1									\$66,000					
		GEF	71200	Intl. Cons.		\$7,000	\$9,500	0	\$16,500					
Outcome 2: Undeted repo	rt on	GEF	71300	Local Cons.		\$17,500	\$15,000	\$8,000	\$40,500					
policies and measures to m	iti gata	GEF	71405	Service Contracts-Ind	divid.	\$8,000	\$7,000	\$6,000	\$21,000					
CC prepared	lligate	GEF	72100	Contr-Cmpy		\$2,000	\$1,000	\$1,000	\$4,000					
ee prepared		GEF	71600	Travel		\$6,000	\$7,000	0	\$13,000					
		GEF	72800	Equipment		\$5,000	0	0	\$5,000					
Sub-Total for Outcome 2									\$100,000					
		GEF	71200	Intl. Cons.		\$7,000	\$10,000	0	\$17,000					
Outcome 3: Updated assessment	ment of	GEF	71300	Local Cons.		\$28,000	\$20,000	\$5,000	\$53,000					
climate changes, vulnerabil	lity to	GEF	71405	Service Contracts-Ind	divid.	\$19,000	\$18,000	\$18,000	\$55,000					
CC, and measures to adapt	to CC	GEF	72100	Contr-Cmpy		\$2,000	\$2,000	\$1,000	\$5,000					
prepared		GEF	71600	Travel		\$8,000	\$4,000	0	\$12,000					
		GEF	72800	Equipment		\$15,000	0	0	\$15,000					
Sub-Total for Outcome	e 3								\$157,000					
Outcome 4: Updated information	ation in	GEF	71300	Local Cons.		\$7,000	\$16,000	\$15,000	\$38,000					

other areas required under the	GEF	71405	Service Contracts-Individ.	\$6,000	\$6,000	\$5,000	\$17,000
UNFCCC prepared and all project-	GEF	72100	Contract-Cmpy	\$1,000	\$1,000	\$1,000	\$3,000
related information synthesized in	GEF	74200	Publication, translation,	\$10,000	\$20,000	\$15,000	\$45,000
the publication of the TNC			disseminate				
	GEF	75700	Seminar	0	0	\$6,000	\$6,000
Sub-Total for Outcome 4							\$109,000
	GEF	71405	Service Contracts-Individ.	\$9,000	\$6,000	\$5,000	\$20,000
Project management: Project	GEF	72400	Communic.	\$2,000	\$2,000	\$1,000	\$5,000
activities managed, coordinated,	GEF	72500	Supplies	\$1,000	\$1,000	\$1,000	\$3,000
monitored	GEF	72800	Equipment	\$8,000	0	0	\$8,000
	GEF	74100	Audit	\$4,000	\$4,000	\$4,000	\$12,000
Sub-Total for Project							\$48,000
Management							
Total GEF Budget							\$480,000
TOTAL BUDGET							\$480,000

# Summary of Funds: <sup>4</sup>

	Amount	Amount	Amount	
	Year 1	Year 2	Year 3	Total
GEF	\$217,500	\$166,500	\$96,000	\$480,000
UNDP (in cash)	\$0,000	\$0,000	\$,000	\$0,000
UNDP (in kind)	\$0,000	\$0,000	\$,000	\$0,000
Government of Egypt (in-kind)	\$30,000	\$30,000	\$40,000	\$100,000
TOTAL	\$247,500	\$196,500	\$136,000	\$580,000

<sup>&</sup>lt;sup>4</sup> Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

# 6. PROJECT WORK PLAN

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Implementation arrangements and project inception:												
1. Contract the project office staff	Х											
2. Establish technical teams	Х											
3. Update the composition of the PSC	Х											
4. Organize a project inception workshop	Х											
5. Organize a scoping meetings	Х											
Output 1: GHG inventory and data collection system	I	1								1		
1.1 GHG inventory team maintained and strengthened	Х	Х										
1.1.1.Identify and mobilize national experts in targeted sectors and related areas of relevance	Х	Х										
1.1.2. Review the existing information on the previous GHG inventory and familiarize with guidelines	Х	X										
1.1.3. Prepare a series of recommendations for institutionalizing data collection	Х	Х										
1.1.4. Submit recommendations for endorsement	Х	Х										
1.1.5. Identify specific training needs of enterprises for inventory preparation	Х	Х										
1.1.6. Implement hands-on training on GHGs inventory using IPCC guidelines	Х	Х										
1.1.7. Review and update the current QA/QC plan		Х										
1.2 GHG inventory data collected and methodologies confirmed and strengthened	Х	Х	Х	X	Х							
1.2.1. Review available activity data already archived (if any)		Х	Х									
1.2.2. Identify all new sources of information for filling data gaps		Х										
1.2.3. Identify new activity data needed			Х	Х								
1.2.4. Identify existing sources of data for direct and indirect GHG gases emissions	Х	Х										
1.2.5. Update the data collection system for all sources		Х	Х									
1.2.6. Utilize national EFs (if any) or use IPCC emission factors		Х	Х									
1.2.7. Confirm emission factors to be utilized		Х	Х									
1.3 National GHG Inventory Completed							l					
1.3.1. Re-estimate inventory				Х								
1.3.2. Assess inventory in SNC												
1.3.3. Prepare draft inventory of sources and sinks for 2005 and for time series 1990-2005				X	X							
1.3.4. Develop key sources analysis and sensitivity analysis for 2005.					X	X						

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1.3.5. Develop key sources inventory for 2005						Х	Х					
1.3.6. Undertake uncertainty assessment							Х					
1.3.7. Circulate inventory for review							Х					
1.3.8. Commission technical peer review and incorporate recommendations								Х				
1.3.9. Organize national workshop to present findings									X			
1.3.10. Incorporate all comments from review process (incl. in-depth review)									Х	Х		
1.3.11. Finalize inventory										Х		
1.4: GHG Inventory Data and Estimates Documented and Archived		1										
1.4.1. Archive emission factors and activity data in existing database in CCCD					X	Х	Х	X	X			
1.4.2. Update the Manual of Procedures					X	X	Х	Х	X	Х	Х	
Output 2: Updated Report on Mitigation Policies and Measures												
2.1. Data collected and scenarios developed												
2.1.1. Consider inventory estimates					X							
2.1.2. Develop comparative analysis and define uncertainty level					X	X						
2.1.3. Collect macroeconomic data and set assumptions		X	X	X	X							
2.1.4. Identify any changes in the BAU scenario from the SNC					X							
2.1.5. Identify any changes in the With Measures (WM) scenario from the SNC						Х						
2.1.6 Process and format data for entry; run scenarios						X						
2.1.7. Cross-check scenarios against PAMs data and inventories data		Х	X	X	X							
2.2: Reporting of PAMs updated and strengthened											1	
2.2.1. Assess status of PAMs and add any necessary new PAMs and entry points to link	ĸ					X						
between policies and national planning												
2.2.2. Review the status of the relevant policy and legal framework						Х	Х					
2.2.3. Update information and incorporate into scenarios and discussion							Х					
2.3. Analysis of PAMs completed												
2.3.1. Develop draft chapter on PAMs							Х	X				
2.3.2. Circulate draft chapter for internal review								Х	X			
2.3.3 Circulate draft chapter for external technical peer review									Х			
2.3.4. Receive and incorporate comments										Х		
2.3.5. Hold a national workshop to highlight and discuss findings from PAMs, modelling										Х		
2.3.6. Finalize chapter on PAMs										Х		

Outputs/Activities Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
2.3.7. Archive and document all studies, model runs, scenarios for PAMs chapter				Х	Х	Х	X	X	Х	Х	
Output 3: Updated assessment of climate change V&A			-	-1						1	
3.1: Current climate change in Egypt described and analyzed											
3.1.1. Confirm and collect all new supporting data for CC scenarios		X									
3.1.2. Compile updated (post-SNC) temp and precip. data, conduct trend analysis		Х									
3.1.3. Update section on SLR and extreme weather events		Х	X								
3.1.4. Update the long-term climate change scenarios		Х	X								
3.1.5. Incorporate new data into V&A chapter			Х								
3.2: Vulnerability to climate change in Egypt described and assessed								-1			
3.2.1. Confirm gaps in vulnerability data, particularly in priority areas		Х									
3.2.2. Develop data collection and analysis for priority areas		X	Х								
3.2.3. Collect existing data for priority areas and supplement with technical reports			X	Х							
3.2.4. Obtain data from different sources			X	X							
3.2.5. Analyze data and document sources				Х	Х						
3.2.6. Incorporate updated information into V&A chapter				Х	Х						
3.3: Adaptation measures and recommendations described and assessed	·						·				
3.3.1. Conduct review of new research and policies on adaptation		X	Х								
3.3.2. Incorporate updated information and cross-check with other chapters			X								
3.3.3. Draft recommendations and discuss alignment with current govt. policy				Х							
3.4: Chapter on V&A Finalized											
3.4.1. Review time lines and outer bounds and cross-check with other chapters					Х						
3.4.2. Develop draft chapter based on other inputs from activities under 3.13.3.						Х					
3.4.3. Circulate the draft chapter for internal review and comments							Х				
3.4.4. Circulate the draft chapter for external peer review and comments							Х				
3.4.5. Incorporate comments into chapter							X	X			
3.4.6. Organize a national workhop to highlight findings from V&A section								X			
3.4.7. Finalize the V&A chapter to be submitted								Х			
3.4.8. Archive and document all of the V&A-related reports and studies						Х	X	X	X		
Output 4: Updated information prepared in other areas and communication produced											
4.1: National circumstances		X									

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
4.1.1 Validate the gaps of information identified under stocktaking				X								
4.1.2 Identify the respective sources of information					Х							
4.1.3 Collect data and information from different sources						X						
4.1.4 Fill the gaps, update and add the new information							Х					
4.1.5 Draft national circumstances sections relevant to each thematic area								Х				
4.1.6 Draft the National Circumstances section under the TNC								Х	Х			
4.1.7 Circulate the National Circumstances section for comment, get comments.										X		
4.1.8 Finalize the National Circumstances section under the TNC										X		
4.2: Updated Information Prepared in Other Areas						1				1		
4.2.1. Commission and conduct a public opinion survey			X									
4.2.2. Collect information on steps to integrate CC into env. and soc-ec. Policies and planning process as well as identify required entry points to ensure mainstreaming				X								
4.2.3. Collect information on technology transfer					Х							-
4.2.4. Collect information on research and systematic observation systems						Х						
4.2.5 Collect information on public education and awareness							X					
4.2.6. Summarize all information collected in draft chapter								Х				
4.2.7. Incorporate comments and finalize chapter								Х				
4.3: National Communication prepared, translated, submitted, and disseminated	I					4	1			4		
4.3.1. Compile a complete draft								Х	Χ			
4.3.2. Circulate the complete draft for comments and incorporate them									Х			
4.3.3. Ensure that all IPCC in-depth review comments are incorporated										X		-
4.3.4. Obtain Project Steering Committee endorsement of complete document											Х	
4.3.5. Finalize Egypt's TNC											Х	
4.3.6. Commission translation of the TNC where necessary												X
4.3.7. Publish the TNC in Arabic and English												X
4.3.8. Prepare e-copies of the TNC in CD-ROM format												X
4.3.9. Oversee official submission of the TNC to the CoP												X
4.3.10. Organize a national workhop to launch and present the findings of the TNC												X
4.3.11. Launch the TNC at a side-event at UNFCCC event											Х	
4.4: Policy paper and briefings for decision-makers prepared and delivered						·		•		·		-
4.4.1. Identify 2-4 key topics for policy papers									X			

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
4.4.2. Draft the policy papers									X	X		
4.4.3. Circulate the draft papers for comments and incorporate feedback											Х	
4.4.4. Translate and publish the papers in Arabic and English												Х
4.4.5. Organize and conduct a series of high-level briefings for policy-makers												Х
Project Management			÷						·	÷		
PM 1: Activities and staff coordinated												
PM 1.1. Develop the TORs for the experts then identify and hire appropriate local experts	X											
PM 1.2. Establish regular team meetings	X	Х	X	X	Х	Х	Х	Х	X	X	Х	Х
PM 1.3. Hold inception workshop and finalize timetable for all outputs	Х											
PM 1.4. Procure equipment and office facilities as needed	Х											
PM 1.5. Conduct an initial overview of data, parameter, time bounds for consistency	Х											
PM 1.6. Coordinate training to be provided and oversee experience sharing	Х											
PM 2: Communication among project experts, stakeholders, and the public coo	rdinate	d										
PM 2.1. Include project stakeholders on PSC and convene it at least 4 times	X			X				Х				X
PM 2.2. Prepare press releases on an as-needed basis and respond to public queries	Х	Х	X	Х	Х	Х	Х	Х	Х	X	X	Х
PM 2.3. Design and maintain a project website	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
PM 3: Project activities, outputs, and outcomes monitored and evaluated												
PM 3.1. Compile documentation for the APR/PIR and terminal report	Х	Х	Х	X	X	X	Х	Х	X	X		
PM 3.2. File regular reporting documents for UNDP and GEF, incl. PIRs, and QORs	Х	Х	X	X	X	Х	Х	Х	X	X	X	Х
PM 3.3. Conduct independent financial audit of the project annually				X				Х				Х
PM 3.4. Compile and distribute a lessons-learned note (LLN) on the TNC process												Х

#### 7. MANAGEMENT ARRANGEMENTS

21. UNDP country office in Cairo will be responsible for monitoring and ensuring proper use of UNDP-GEF funds to assigned activities, and timely reporting of implementation progress. In this context, UNDP will provide necessary support and backstopping to ensure proper implementation progress, convene weekly meetings with project management, provide feedback and revision to products and documents and where necessary filter project results to be in line with overall objectives as well as GEF-UNDP requirements.

22. This project will use National Execution (NEX) implementation modality, and the implementing partner will be the Ministry of State for Environmental Affairs/Egyptian Environmental Affairs Agency. EEAA is the lead agency on climate change in Egypt, and it houses the Operational Focal Point for the GEF and for the UNFCCC and serves as the CDM Designated National Authority (DNA) for Egypt as identified under commitments under the Kyoto Protocol.

23. The National Project Director will be designated by the Minister of Environment to provide strategic guidance and political support on behalf of the Government of Egypt as well as represent the interests of the project within the Ministry and ensure relevance and contribution of the project to the national capacity building work and implementation of national commitments under UNFCCC. The day-to-day implementation and management of the project will be undertaken by a full time project manager selected jointly by EEAA and UNDP Country Office.

24. As part of the project management arrangements, a Project Steering Committee (PSC) to advice and guide project implementation will be set up. The Chief Executive officer of EEAA or a designate will chair the PSC. The composition of the PSC will be representative of all key stakeholders and will ensure the inclusion of various interests, as well as the different Ministries relevant to climate change policy, GHG inventory, V&A and climate change adaptation work. Potential PSC participants will be derived from the Ministry of Electricity and Power, the Ministry of Agriculture and Land Reclamation, the Ministry of Water Resources and Irrigation, the Ministry of State for Environmental Affairs, the Ministry of Economic Development, private Sector, NGOs, UNDP and others. The PSC will monitor the project's implementation, provide guidance and advice, and facilitate communication, cooperation, and coordination among stakeholders and other project partners. At the initial stage of project implementation, the PSC may, if deemed advantageous, wish to meet more frequently to build common understanding and to ensure that the project is initiated properly.

#### 8. INSTITUTIONAL ARRANGEMENTS FOR PROJECT IMPLEMENTATION



#### 9. MONITORING FRAMEWORK AND EVALUATION

25. In accordance with the programming policies and procedures outlined in the UNDP User Guide, the project will be monitored through the following:

#### Project Inception

- A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.
- The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be

included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

- As part of the Inception Report, the project team will also prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent PIR/APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.
- When finalized, the Inception Report and Reports List will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, UNDP Egypt and UNDP-GEF's Regional Coordinating Unit will review the document.
- An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.

#### Within the annual cycle

- On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in the Quality Management table below.
- An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.
- Based on the initial risk analysis submitted (see annex 1), a risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.
- Based on the above information recorded in Atlas, a Project Progress Reports (PPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot.
- A project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project
- A Monitoring Schedule Plan shall be activated in Atlas and updated to track key management actions/events

#### Annually

- Annual Project Review. Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. This report will be submitted in the format designated by the GEF under its Project Implementation Report (PIR) guidelines, as the reports are now fully harmonized. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.
- **Financial Audit**. The Government will provide the Resident Representative with certified periodic financial statements, relating to the status of UNDP-GEF funds according to the established procedures set out in the Programming and Finance manuals. The project will be audited by an independent legally recognized auditor according to UNDP rules and regulations.
- Quarterly Progress Reports

Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team.

### **10. LEGAL CONTEXT**

26. This project document shall be the instrument referred to as such in Article 1 of the SBAA between the Government of the Republic of Egypt and UNDP, signed on 19 January 1987. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the executing agency.

The executing agency shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

**27**. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <u>http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm</u>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

28. UNDP acts in this Project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended mutatis mutandis to GEF.

**29**. The UNDP Resident Representative is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- a) Revision of, or addition to, any of the annexes to the Project Document;
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

# **11. ANNEXES**

#### List of Annexes

Annex A. Report on Stocktaking Analysis Annex B: Risk Analysis. Annex C: Terms of Reference Annex D. Stakeholder involvement matrix Annex E: Comparison between the total GHG indicators 1990/2000 in Egypt Annex F: Egypt at glance ANNEX G: ENDORSEMENT AND COMMITMENT LETTERS

#### ANNEX A. REPORT ON STOCKTAKING ANALYSIS

#### A.1 Methodological approach

This exercise is considered as a key step in preparing the proposal for the TNC to the UNFCCC. The analysis has been used to determine the current baseline for activities under the TNC and to identify needs and priorities. The stocktaking paid particular attention to areas that might require new information or approaches and on assessing the current system of data collection and NC preparation with a view to regularizing that process for subsequent NCs. The stocktaking exercise focused on all thematic *areas* related to the National Communications for non-Annex I countries as indicated by 17/CP8. The following steps were taken during the stocktaking process

- 1. Assignment of the PMU team and establishment of the PSC by MSEA/EEAA to supervise and guide the PMU in conducting the management process of the project
- 2. The PMU designed the stocktaking process which is revised by PSC; as follows:
  - a. Conducting a desktop review for SNC by using UNFCCC Guidelines as a base line for NC preparation through Matrix Analysis method to identify the baseline, gaps, needs and new areas of work to be done in TNC.
  - b. Holding different focus group meetings with SNC contributors and experts, as well as, different stakeholders such as governmental institutions representatives, experts from academia & research institutions, NGOs and private sector to increase the country ownership for the project.
- 3. The stocktaking done by PMU team through focus group meetings that performed an assessment for each thematic area relevant to the National Communication. Experts were grouped into teams and findings of all teams were integrated in the final stocktaking report. The main focus of assessment was Egypt's SNC performed under the GEF funded project, namely: "Enabling Activities for the Preparation of Egypt's Third National Communication to the UNFCCC". In addition, other projects funded either by GEF or other donors relevant to each thematic area were considered when available.

#### A. 2 Findings

#### General Findings related to the National Communication process

#### Baseline and issues identified

- There is a need for continuity and coherence across the different segments of the communication, both in the sense of consistent data, timeframes, etc.; and in the sense of a coordinated document that sends unified messages and that can inform government policy in many areas.
- Expanding the roster of experts, improve the capacity building will be among the project objectives

#### Priorities and new areas for work under the TNC

- Work to increase the collection of disaggregated data
- Work to systematize and regularize data collection
- Include specific project activities related to reviewing consistency in the TNC, such as the time frames and assumptions used for modelling and analysis in the different segments of the report.
- Design a strategy to ensure that findings are channelled back to the relevant agencies and present the findings of the NC in a format that is accessible to high-level decision-makers in key sectors; e.g., through policy briefings and policy papers based on TNC findings.
- Work to increase engagement of private sector and NGOs in climate change issues and provide opportunities for review of the TNC prior to submission.

#### National Circumstances

#### Baseline and issues identified

- The national circumstances section of the SNC is largely still relevant in terms of geographic and other descriptive data related to land and natural resources.
- The demographic and socioeconomic data should be updated to reflect the most recent available statistics.

#### Priorities and new areas for work under the TNC

• Update relevant sections of the chapter on National Circumstances, and ensure that socioeconomic data used in that chapter are consistent with the data used in other chapters and in modelling related to the TNC.

#### GHG Inventories

#### Baseline and issues identified

- The lead agency responsible for the GHG inventory preparation is the Climate Change Central Department at the Egyptian Environmental Affairs Agency. The CCCD was established in 2009 as a result of scaling up the climate change unit that established in 1997. CCCD is solely responsible for climate change issues in Egypt representing the focal point of the UNFCCC.
- The inventory year in SNC is 2000 and the information presented covered the period 1990-2000. In some instances, comparison between the year 1990 and 2000 was given with presenting information for time series 1990-2000.
- Emissions from international bunkers were reported separately as per recommendations of the IPCC 1996 and 2000 guidelines. Global warming potentials of the Second Assessment report were used in converting emissions of CH4 and N2O to carbon dioxide equivalent emissions. In estimating emissions from the industry sector, generic values were introduced. The estimations did not consider the whole industry sector. Figures were introduced without justifications.
- Agriculture is increasingly becoming an energy consuming sector. Drainage, drip irrigation and sprinkles processes are energy consuming activities. Also, energy is consumed through transportation of agricultural products & fertilizers using tractors and other medium and heavy duty vehicles.
- The GHGs inventory provided in the SNC covered the direct GHGs, namely: CO2, CH4, N2O. HFCs, PFCs and SF6. However, indirect GHGs such as CO, NOx, and NMVOCs were only reported in aviation and marine bunker. Although SNC covered most source categories
- IPCC 1996 guidelines used for estimating the greenhouse gases using tier 1 methodologies for most source categories in SNC. As well as, IPCC good practice guidance issued in the year 2000 was used to reflect country specific situation
- Most of the used methodologies, assumptions and data were not well documented in estimating emissions from many source categories; this raises an issue of concern.
- Although inventory data are available by source category, only two of Key source categories, namely energy and waste were identified, for trending analyses in the SNC.
- All activity data concerning each sector were national. For the energy sector, activity data were taken from aggregate data of sectors as briefed in the annual reports of the Egyptian General Petroleum Corporation (EGPC), and the Egyptian Electricity Authority (EEA). Activity data for the industry sector were obtained from the Ministry of Trade and Industry; Industrial Development Authority. Other data providers/sources have been the Ministry of State for Environmental Affairs (MSEA), Ministry of Agriculture & Land Reclamation, Ministry of Local Development, Ministry of Transport (MTR), Ministry of Economic Development, CAPMAS, IDSC and National Research Center. As for emission factors, in most of the cases default emission factors provided by IPCC 1996 and 2000 were used.

- The major technical constraints that have faced the GHG inventory process was related to the activity data gaps and use of IPCC default emission factors that do not reflect the country situation.
- Inventory sectoral tables and IPCC worksheets were used in preparing the inventory presented in the SNC.
- Most uncertainty analyses were conducted for the inventory presented in the SNC. According to the UNFCCC guidelines, parties are encouraged to conduct uncertainty estimates as given in the IPCC Good Practice Guidance. At least a tier 1 and tier 2 uncertainty analyses will be conducted in the TNC if possible. Also, no Quality control / Quality Assurance activities were done in the course of preparing the inventory presented in the SNC. A QA/QC plan will be developed in the TNC where appropriate.

#### Priorities and new areas for work under the TNC

- Tier 2 analysis could be applied for some key sources
- Uncertainty analysis should be refined for key sources
- The energy sector should continue to receive the highest priority because of the impact of the sector on overall emissions and because of the influence of the sector on the national economy.
- The project should take advantage of work done in other projects, particularly the emission factors and methodologies covered in the Sustainable Transport project under UNDP/GEF.
- Estimates for Egypt's third national GHG inventory shall be made for the inventory year 2005. Recalculations for the year 2000 will be made as well. Given the variability of activity data after '90s the team has agreed to develop time series for a 15-year time frame (1990-2005). A special attention will be given to the key source categories (if needed) to see to what extent the key sources have changed.
- Where appropriate, the TNC will attempt to use tier 2 methodologies to replace tier 1 methodologies that were used in the SNC. More data will be collected and studies/surveys to improve the estimates of activity and emission data will be conducted. Moreover, IPCC Good Practice Guidance will be utilized in deciding on which tier to be used. The use of higher tier methodologies will improve the GHGs inventory estimates. Recalculations will be done for 1990 inventory based on higher tier methodologies and refined activity and emission factor data.
- Where appropriate, country specific emission factors will be used.
- Estimates of the key sources and uncertainty analysis will be provided. The third GHGs inventory will report on estimates of aggregated GHG emissions and removals expressed in CO2 equivalent. In addition, implied emission factors such as CO2/GDP and CO2/Capita would be estimated mainly for comparability purposes. Modified sectoral tables and IPCC worksheets will be used in the TNC.
- Quality Assurance/Quality Control (QA/QC) plan will be formulated and used in preparing the inventory of the TNC. Also, a system for archiving and continuous management of the inventory will be proposed and implemented.
- GHGs hands on training will be provided for CCCD staff as well as experts from Energy, Industry, Transportation, Agriculture and Waste sectors, since, last training for GHGs Inv. Was held in 1996.
- TNC will sign a MOU with CAPMAS and IDSC as data providers, in order to, provide the experts with required data, as well as, to insure the data quality and adequacy.
- TNC will ensure that removal by sinks will be estimated as an important component in the GHGs inventory, since; removal by sinks section was not included in the SNC inventory due to some technical problems in identifying the required methodology.
- TNC will ensure data regarding (CO), (NOx), (SO2) and (NMVOC) to be extended to cover other sectors where the data are available.

#### **Mitigation Policies and Measures**

#### Baseline and issues identified

• Overall: some sectoral policies have been undertaken since the completion of the SNC that will affect emissions in the Energy, Transport and Industry sectors that have been identified as most important for the purposes of reporting.

#### Priorities and new areas for work under the TNC

• Ensure the two-way flow of communication so that the relevant policies and measures of each ministry

are incorporated into the PAMs section of the TNC. Ensure that the report is distributed to stakeholders at the regional and local level in addition to national-level stakeholders.

- Steps taken or envisaged for formulating, implementing, publishing and regularly updating national and, where appropriate, regional programs containing measures to mitigate emissions will be provided in the TNC as per the recommendations of the UNFCCC guidelines. Projects that are being implemented in Egypt which have a direct impact on mitigating GHGs emissions will be assessed and a quantitative estimate for reductions will be provided in the TNC.
- The GHG inventory year 2005 will serve as the starting point of the GHG analysis. The GHG abatement analysis will go up to 2025 2050. There is also a need to update and revise all details and assumptions made in order to have better and more improved GHG inventory due to data improvement, better inputs from more comprehensive national economic development parameters, more accurate assumptions for economic and demographic parameters.
- Models such as Long Range Energy Alternatives Planning (LEAP), Market Allocation Macro-Economic Model (MARKAL-MACRO), Energy and Power Evaluation Program (ENPEP) to conduct abatement analysis for the energy sector will be investigated and the best model where needed data is available will be selected. Training for members of the team to use this model will also be explored since little national capacity exists in the use of such models.
- The feasibility of using the STAIR (Services, Transport, Agriculture, Industry and Residential energy) model to conduct abatement analysis for the industry and transport sectors will be explored in the course of the SNC. Training for members of the team to use this model will also be explored since little national capacity exists in the use of such models. Since no model is recommended to conduct abatement analysis for the waste sector, a spread sheet model will be developed to conduct the abatement analysis for this sector. Decision Support System for Agro technology Transfer (DSSAT) will be used to conduct abatement analysis for the agriculture sector.
- The abatement analysis will focus on the identification of mitigation options relating to the most important future sources and sinks sectors. In addition to mitigation options identified in the SNC.
- The list of abatement options proposed for the abatement scenario for each sector will be reviewed and updated in the light of new developments and needs. Key sources identified and updated under the GHG inventory exercise will be considered while making the selection of technology options. Quantitative estimates for emission reduction will be measured against the baseline scenario. To the extent possible, the economics and socioeconomics of the options will be considered at local scale (scale of governorates and province)
- After selecting the abatement technologies that will be recommended from the abatement analysis that will be conducted in the course of preparation of the TNC, barriers will be assessed along with the policy needs and actions. As a result of the barrier analysis, short and long term mitigation options will be recommended.
- Planned sector specific programs for mitigating GHGs will be investigated and reported in the TNC. Costs of implementation, a description of the mitigation potential, environmental and social benefits will be reported as well. Moreover, a description of the constraints to implementation of these programs will be provided.

#### V&A Assessment

#### Baseline and issues identified:

- General: Additional data analysis will be necessary in all sectors of the V&A assessment. There is also a need for training, as no specialized training in V&A assessment was provided to the experts compiling the information for the SNC.
- Experts whose attend the V&A focus group during the stocktaking, has identified priority areas for research on vulnerability and adaptation as follows: 1) agriculture; 2) health; 3) Biodiversity; 4)Tourism; 5) Human habitat & Settlement 6) Coastal Zones and 7)Water Resources

#### Priorities and new areas for work under the TNC

- The TNC should draw upon data from new sources, such as the National Strategy on Adaptation.
- The TNC should also expand the collection of existing data on vulnerable ecosystems that is available in various institutions.
- Training in methodological techniques related to V&A assessments should be provided to specialists

working on the TNC, including current trends in making economic estimates of impacts and an overview of relevant models (such as crop models) that can strengthen cost estimates of impacts and adaptation measures and allow for the prioritization of various adaptation options by cost and effect.

- In vulnerabilities and adaptation assessment, projections of socio-economic situation affected by climate change should be taken into consideration.
- Agricultural adaptation options are developed by taking into account two main objectives identified, as follows: (i) promotion of sustainable development, and (ii) the reduction of vulnerability.
- Adaptive strategies intended to protect public health will be needed whether or not actions are taken to mitigate climate change. Also, building capacity is an essential preparatory step. Adapting to climate change will require more than financial resources, technology, and public health infrastructure.
- The assessment will integrate also other sections in agricultural sectors like water requirements, irrigation systems, pests and diseases, etc.
- The emphasis will be put on the current conditions i.e. current climate risk and vulnerability and on this basis the future vulnerability will be predicted. This part of the assessment also includes an assessment of the scope and effectiveness of adaptation measures that may have been implemented. Three baselines will be developed for the selected area: (i) climate baseline; (ii) environmental baseline and (iii) socio-economic baseline.
- Designing of an Adaptation Strategy Paper based on Adaptation Policy Framework (APF) for the selected areas of the vulnerability and adaptation exercise under the TNC. This will facilitate the process of mainstreaming the climate vulnerability and adaptation response to the national planning and policy.
- Current vulnerability and climate impact to sectors will be assessed through the use of some indicators: For the climate system the indicators will be: Temperature (seasonal), Precipitation (seasonal), Wind, Cloudiness and Sunshine duration. The average change in mean runoff will be selected as a main indicator for water resources. For energy sector the main indicators would be of energy demand and supply. Plant production, irrigation systems, and crop production would be used as indicators for agriculture/livestock. Coastal tourism under the selected sectors will be assessed in terms of the impact of the sea level rise and the rise of temperatures. Settlements will be assessed in terms of impact of droughts and hot waves into inhabitant's wellbeing.
- Among the important work that should be performed is a development of climate change scenario based on the analysis of the climatological data of different terms. Projection of Environmental changes due to impact of Climate Change on the Coastal areas & water resources are another scope of the important work that should be implemented. Further work should be devoted to investigate the Socio-economic situation in vulnerable areas.

#### Other Information Required by the UNFCCC and subsequent CP decisions

#### Baseline and issues identified:

- Public awareness: No baseline on public awareness or knowledge of climate change. Furthermore, neither government institutions nor NGOs are conducting public outreach activities in the area of climate change. The NGO Forum consulted during the stock-taking exercise mentioned a need to conduct awareness-raising activities in various regions of Egypt and not just in Cairo and Alexandria.
- Training: there has not been any type of general training for government officials on climate change issues.
- One need that was identified during consultations was to make the NC findings accessible to high-level decision-makers and to provide training and outreach to this important target group.
- Research, monitoring, and systematic observation: Need to qualitatively prioritize research in climate change

#### Priorities and new areas for work under the TNC:

- A public opinion survey should be conducted that would establish a baseline for public awareness and knowledge of climate change and would also provide new information on how to target messages about climate change to the public and which media to use. Furthermore, a survey would provide tangible information to government decision-makers about public opinion on this issue, including the willingness of people to support various mitigation and adaptation measures.
- Participants in training in the specific components of the TNC should also provide information to

colleagues in order to increase the effect of training in government and research institutions.

- Outreach to policy-makers should be treated as a special subset of public awareness. This includes (1) awareness-raising on mitigation measures, such as the increased use of renewable energy, where awareness is low and where climate benefits may not be understood; and (2) awareness of the potential impacts of climate change on key sectors and an increased understanding of possible adaptation measures, particularly those measures that generate other development benefits.
- This section will provide information on steps that have been taken to mainstreaming climate change into national development agenda, i.e., steps to integrate climate change into socio-economic and environmental policies. Activities related to technology transfer as indicated under Article 4/CP7 will be reported under this section as well, for example how Egypt is addressing activities related to the transfer of, access to environmentally sound technologies and know-how.
- This section will provide information on climate change research and systematic observation systems. The above information will consist of the status of national programs for research and systematic observation, type of observation (meteorological, hydrological, oceanography), level of participation into global research systems, needs and priorities for systematic observations.
- Information on Egypt's participation in the regional / sub-regional or global research networks and programs will be provided.

## A.3 Meetings held for PSC, experts and stakeholders during the stocktaking phase

Meeting	Date	Attendance
Preparatory Meeting for Mitigation with SNC Experts	Sunday 8, Aug. 2010	12 experts
Preparatory Meeting for Adaptation with SNC Experts	Sunday 15, Aug. 2010	16 experts
Project Steering Committee (First Meeting)	Sunday 22, Aug. 2010	15 experts
Project Steering Committee (Second Meeting)	Wednesday, 15 Sep. 2010	14 experts
Inception Workshop for different stakeholders	Wednesday, 22 Sep. 2010	75 participants
Mitigation Focus Group with experts and stakeholders	Thursday 4, Nov. 2010	15 experts
Adaptation Focus Group with experts and stakeholders (First Meeting)	Monday 22, Nov. 2010	13 experts
Adaptation Focus Group with experts and stakeholders (Second Meeting)	Wednesday 24, Nov. 2010	15 experts
Project Steering Committee (Third Meeting)	Thursday 27, Jan. 2011	14 experts
Final Workshop for different stakeholders	Wednesday 30, March 2011	88 participants
Project Steering Committee (Fourth and Final Meeting)	Wednesday 6, April 2011	13 experts

#### A.4 Literature referenced in stock-taking

- Initial National Communication of the Republic of Egypt to the UNFCCC 1999
- Egypt Framework towards Sustainable Development\_Strategy
- Second National Communication of the Republic of Egypt to the UNFCCC 2010
- UNFCCC text 1992
- Kyoto text 1997
- The Impact of Sea Level Rise on Developing Countries: A Comparative Analysis, World Bank Policy Research, Working Paper 4136, February 2007

# ANNEX B: RISK ANALYSIS

Risk	Mitigation Measures
Limited robustness and completeness of GHG emissions and climate data: Possible risks for the proposed Project activities are associated with the robustness and completeness of the data required to carry out the different studies that will be part of the TNC. In addition, much of the data required is dispersed among different public and private institutions and often difficult to gather.	The EEAA/CCCD/PIU as the responsible entity for the technical implementation of the Project will coordinate with the relevant institutions to collect the necessary data. The EEAA/CCCD/PIU maintains good interaction with relevant stakeholders. Regarding scientific capacity, many of the scientists and researchers who worked on the SNC, will provide information and experience.
Institutional and coordination risk: the adaptation and mitigation agendas in Egypt involve a variety of sectors, institutions and provinces distributed throughout the country. There is a risk that studies and Project activities cannot be completed because of limited institutional support, lack of dissemination of results, and insufficient coordination of inputs.	Strong coordination and involvement of concerned institutions right from the beginning will be sought to ensure adequate assessments, continuous access to data and integration of the results into sector planning. The Project has already established a Steering Committee which includes a core group of representatives from the relevant Governmental agencies, academia & research institutions, NGOs and private sector. In addition, the Project will develop a continuous and extensive consultation process throughout Project duration including key stakeholders and sectors. This process was already launched with two workshops in October 2010 and January 2011, in order to ensure early buy-in and involvement by stakeholders in the definition of assessments and in strengthening the strategic value of the Project.
<b>Political risk:</b> Formulation of mitigation and adaptation P&M implies important risks due to conflicting interests between sectors.	The Project has convened a Steering Committee for the TNC in order to strengthen political ownership mitigation and adaptation P&M implies important risks due to conflicting interests between sectors.

### **ANNEX C: TERMS OF REFERENCE**

#### 1. Terms of Reference for National Project Manager

#### Managerial and Technical Skills

- Assume operational management of the project in consistency with the initiation plan;
- Assume overall responsibility for successful execution and implementation of the initiation plan and the achievement of the output: formulation of the project document;
- Ensuring successful completion of the project in accordance with the stated outcomes and performance indicators summarized in the project's logframe matrix and within the planned schedule and budget otherwise
- Serve as the focal point of the project for coordination of the project activities with UNDP, the Government and other partners;
- Liaise with UNDP programme officer on a regular basis to ensure proper monitoring and realizing results;
- Identify the need for national experts and consultancy teams and develop their scopes of work and terms of reference and other procurement documentation required to identify and facilitate recruitment of experts and consultants in consultation with PSC;
- Follow up on the deliverables of the national consultants contributing to the TNC report;
- Monitor all expenditures and ensure the project proceeds in compliance with UNDP-GEF budget, accounting and procurement guidelines;
- Ensuring effective dissemination of and access to information on project activities and results, (including an regularly updated project website);
- Lead the preparation for and organization of seminars, workshops and training activities, as needed.
- Prepare all needed report within the UNDP-GEF project cycle

Qualifications and Experience of the Project Manager:

- A minimum of Ph.D. degree in environment-related studies and other related disciplines;
- Good understanding of the national environment/development issues as well as being aware of national obligation towards the UNFCCC with an institutional development experiences.
- At least five years of experience relevant to the project;
- Excellent communication (Written and Oral) Skills;
- Demonstrated experience in project coordination;
- Demonstrated experience in working with government, donors and the United Nations system;
- Appropriate experience working with government structures at local levels, and working with NGOs and private sector;
- Excellent inter-personal skills as well as working well within a team environment;
- Good command of English

#### 2. Terms of Reference for Project Officer

#### Duties

- Assist the National Coordinator in implementing the operational management of the project in consistency with the initiation plan; and the achievement of the output: formulation of the project document;
- Assist the National Coordinator in identifying the national experts and consultancy teams and develop their scopes of work and terms of reference and other procurement documentation required to identify and facilitate recruitment of experts and consultants in consultation with MESA/EEAA and UNDP;
- Assist the National Coordinator in monitoring all expenditures and ensure the project proceeds in compliance with UNDP-GEF budget, accounting and procurement guidelines;
- Assist in the formulation and design of the project document;
- Assist the National Coordinator in the coordination process within government entities and between government entities and donors during the write up of the project document;
- Assist in the preparation for and organization of seminars, workshops and training activities, as needed.
- Perform other tasks as requested

Qualifications and Experience of the Project Coordinator:

- A minimum of Master's degree in environment-related studies and other related disciplines;
- Good understanding of the national environment/development issues as well as being aware of national obligation towards the UNFCCC with an institutional development experiences.
- At least five years experience relevant to the project;
- Excellent communication (Written and Oral) Skills;
- Demonstrated experience in project coordination;
- Demonstrated experience in working with government, donors and the United Nations system;
- Appropriate experience working with government structures at local levels, and working with NGOs and private sector;
- Excellent inter-personal skills as well as working well within a team environment;
- Good command of English

#### 3. Terms of Reference for Project Technical Assistant

#### **Duties**

- Reporting to Third National Communication Coordinator
- Support the staff members directly on special tasks e.g.: preparing short issue specific reports and briefing notes, drafting letters, speaking notes, reviewing contacts information to find special areas of cooperation;
- Provide research and background materials;
- Maintain project and organization-wide databases;
- Schedule events or meetings;
- Contribute to the preparation, production, and revision of project and meeting documents;
- Provide formatting and filing of documents when necessary;
- Assist with consultation, communication and promotion in respect of the Climate project activities
- Assist with monitoring and reporting on the operational performance of the project, including assisting with the generation of appropriate management information and updating the project website.
- Assist in the preparation for an organization of seminars, workshops and training activities, as needed.
- Perform other tasks as requested

#### Qualifications and Experience of the Project Technical Specialist (Assistant)

- University degree in Science/Engineering or Environment related disciplines; with minimum grade very good
- High efficiency in using computer, Microsoft package
- Good understanding of Climate change phenomena and its impacts;
- Fresh graduates are preferable
- Excellent communication skills (written and Oral) Skills;
- Excellent inter-personal skills as well as working well within a team environment;
- Good command of English

#### 4. TOR for National GHG Inventory Team Leader

The National GHG inventory Team Leader should work in consultation with and under the guidance and supervision of the National Project Manager. Specifically, his\her responsibilities are but not limited to the following:

- Assists the NPM in establishing the team of experts for performing the GHG inventory on the basis of the roster of experts;
- Oversees the training –of –trainers sessions on GHG inventory.
- Assists NPM to organize GHG inventory relevant training and workshops.
- Prepares a detailed work-plan for GHG inventory exercise on the basis of the overall project work plan.
- Provides periodic progress report to the NPM on the GHG inventory thematic area;
- Develops the scope of work and respective terms of reference for the team members;
- Leads the data collection process, including surveys.
- Leads and oversees the team to conduct the GHGs national inventory;
- Ensure the timely and effective management of the activities as scheduled;
- In consultation with NPM select and implement the methodologies for the conducting of GHGs inventory;
- Identifies gaps and key sectors for GHG inventory;
- Incorporates comments received from the review process.
- Drafts the National Inventory Report and respective chapter of Egypt's TNC along with the respective part of executive summary.
- Leads and coordinates the updating the Manual of Procedures in the light of the new findings under the TNC exercise.
- Archives new data and estimates of new inventory.

#### Qualifications and experience

- An advanced degree in energy, environmental management or other field relevant to the project;
- A minimum of 7 years of working experience in the area relevant to the Climate Change;
- Substantial involvement in the preparation of the Second National Communication is highly preferred (GHG inventory and abatement analysis) ;
- Good understanding of GHGs inventory process and demonstrable knowledge of IPCC and GPG;
- Demonstrated ability of analytical and drafting work;
- Familiarity with computers and data processing (EXCEL; ACCESS)
- Fluency in English;

#### 5. TOR for Mitigation Policies and Measures (PAM) Analysis Team Leader

The team leader of scenarios development sector should work in consultation with and under the guidance and supervision of the National Project Manager. Specifically, his\her responsibilities are but not limited to the following:

- Assists the NPM in establishing the team of experts for performing the PAM analysis on the basis of the roster of experts;
- Prepares a detailed work-plan for GHG abatement for the PAM analysis on the basis of the overall project work plan.
- Provides periodic progress report to the NPM on the PAM analysis by thematic area
- Develops the scope of work and respective terms of reference for the team members;
- Leads the data and information collection process.
- In consultation with NPM decide on methodologies for the elaboration of scenarios for sectors than energy;
- Leads and oversees the scenario development and update
- Organize the scheduled consultations/workshops and ensure their success;
- Ensures synergy with other relevant projects;
- Ensure the timely and effective management of the activities as scheduled;
- Incorporates comments received from the review process.
- Drafts the PAMs Report and respective chapter of Egypt's TNC along with the respective part of executive summary.
- Oversees the documentation of the studies made and archiving.

#### Qualifications and experience

- An advanced degree in energy, environmental management or other field relevant to the project;
- A minimum of 7 years of working experience in the area relevant to the Climate Change;
- Substantial involvement in the preparation of the First National Communication is mandatory (inventory and abatement and analysis);
- Good understanding of GHGs inventory process and projection;
- Demonstrable knowledge of IPCC 1996, IPCC GPG, LEAP etc.
- Demonstrated ability of analytical and drafting work;
- Familiarity with computers and word processing;
- Strong proficiency in English;

#### 6. TORs for V&A Team Leader

The Vulnerability and Adaptation sector team leader should work in consultation with and under the guidance and supervision of the National Project Manager. Specifically, his\her responsibilities are but not limited to the following:

- Assists the NPM in establishing the team of experts for performing the V&A on the basis of the roster of experts;
- Prepares a detailed work-plan for V&A on the basis of the overall project work plan.
- Provides periodic progress report to the NPM on the V&A thematic area
- Develops the scope of work and respective terms of reference for the team members;
- Leads the data and information collection process for performing the V&A study.
- In consultation with NPM decide on approaches (not concluded under stocktaking phase) to be used if necessary;
- Leads and oversees the development baseline climate and socio-economic scenario and impact of climate change.
- Organize the scheduled consultations/workshops and ensure their success;
- Ensures synergy with other relevant projects
- Ensure the timely and effective management of the activities as scheduled;
- Incorporates comments received from the review process.
- Drafts the V&A Report and respective chapter of Egypt's TNC along with the respective part of executive summary.
- Oversees the documentation of the studies made and archiving.

#### Qualifications and experience

- An advanced degree in energy, environmental management or other field relevant to the project;
- A minimum of 7 years of working experience in the area relevant to the Climate Change;
- Substantial involvement in the preparation of the initial National Communication is mandatory (V&A);
- Good understanding of climate change and sustainable development issues;
- Demonstrated ability of analytical and drafting work;
- Demonstrable knowledge of IPCC 1994, MAGIC / SCENGEN, MARKAL etc.
- Familiarity with computers and word processing;
- Fluency in English;

#### 7. TOR for Project Steering Committee

The duties, responsibilities and operating rules of the PSC are as follows:

- Provides assistance and political support to the National Project Director, National Project Manager and national experts and counterparts during the implementation process of all project activities.
- Reviews and make necessary comments for the all draft documents prepared by the national clime change team
- Receives information on regular basis on the status of the implementation of the project activities and problems to be faced with. National Project Manager submits the report on the status of the implementation of project activities.

Rules under which PSC operates:

- The National Project Manager (NPM) serves as Moderator of PSC meetings. The NPD chairs the PSC meetings
- PSC meets not less than three times during the project life-time. In special cases the PSC shall meet upon the initiative of the National Project Director.
- When the PSC does not meet, the NPD and NPM may request inputs and support from individual members of the PSC.

### ANNEX D. STAKEHOLDER INVOLVEMENT MATRIX

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
PUBLIC INSTITUTIO	ONS			
MINISTRY OF STATE FOR ENVIRONMENT AFFAIRS (MSEA)	EEAA	<ul> <li>EEAA is the main specialized governmental body responsible for environmental protection in the Arab Republic of Egypt. Responsibilities of EEAA and its directorates and institutions that are under its responsibility and relevant to the climate change are as following:</li> <li>Drafts and implements governmental policies, strategies and action plans for environmental protection;</li> <li>Drafts laws, by-laws and decisions for the protection of the environment;</li> <li>Follows-up the implementation of laws, by-laws and decisions of the Council of Ministers for Environmental Protection;</li> <li>Coordinates the cooperation between relevant Ministries, local government, research institutions, and NGOs;</li> <li>Supervise the monitoring of the state of environment in collaboration with relevant Ministries, local government, research institutions, and NGOs;</li> <li>Proposes measures, activities and standards to protect water, soil, air and biological diversity;</li> <li>Designs and endorse projects for the protection and remediation of environment;</li> <li>Raises awareness on environmental protection and related issues;</li> <li>Issues environmental permission/ licence for all activities that have an impact to environment;</li> <li>Prepares agreements and MoUs, in the framework of bilateral and multilateral co-operation and attends their implementation after their adoption;</li> <li>Oversees the implementation process of all environmental conventions where Egypt is a Party;</li> </ul>	<ul> <li>MSEA/EEAA leads the Project Steering Committee;</li> <li>MSEA through its Climate Change Unit (CCCD) is responsible for the preparation of National Communications to the COP of the UNFCCC stands under the MSEA along with the overall implementation process of the UNFCCC;</li> <li>The responsibly of the GEF Focal Point (Operational/Political) stands under MSEA;</li> <li>The responsibility of the UNFCCC and IPCC Focal Point stands under CCCD;</li> <li>The responsibility of the UNEP and other UN Conventions stands under MSEA;</li> <li>The MSEA is the Executing Agency for UNDP-GEF portfolio for climate change and also for all GEF projects Egypt;</li> </ul>	<ul> <li>The CCCD based under the MSEA led and coordinated the stocktaking exercise at national level being responsible for the preparation of the final stocktaking report and the Project Proposal for Egypt's Third National Communication to the UNFCCC;</li> <li>Directorates, officials and experts of the MSEA are consulted and have provided their inputs and feedback to this process;</li> </ul>
	Climate Change Central Department (CCCD)	<ul> <li>Serves as National Focal Point for the UNFCCC and provides technical support and policy advice to the MSEA for its implementation process and represents GoA into the negotiations;</li> <li>Serves as National Focal Point for the IPCC;</li> <li>Prepares inventories of GHG emissions and removals by sources;</li> <li>Regularly archives data and inventory estimates;</li> <li>Develops scenarios of GHG emissions and proposes mitigation policies and measures;</li> <li>Performs assessment of vulnerability and proposes adaptation measures to the expected climate change;</li> <li>Prepares Technology Needs Assessment;</li> <li>Prepares National Communications and arrange their submission to the COP of UNFCCC as mandated by the COP decisions;</li> <li>Raises general awareness and knowledge on climate change and related issues;</li> <li>Strengthens the dialogue, information exchange and co-operation among all the relevant stockholders including governmental, non-governmental, academic, private sectors on climate change and related issues;</li> <li>Mobilizes resources for implementation of the UNFCCC;</li> </ul>	<ul> <li>Main institution responsible for climate change and related issues in the Republic of Egypt.</li> <li>CCCD is responsible for the coordination of stocktaking and preparation of the final stocktaking report and the Project Proposal for the Egypt's Third National Communication to the UNFCCC;</li> <li>Potential for coordination of TNC project.</li> </ul>	

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
MINISTRY OF AGRICULTURE & LAND RECLAMATION (MALR)	Agricultura 1 Research Center	<ul> <li>MALR is the main specialized governmental body responsible for agriculture and food policy in the Republic of Egypt. Responsibilities of MALR and its directorates and institutions that are relevant to the climate change are as following:</li> <li>Drafts and implements governmental policies, strategies and action plans for development of agriculture and food sector by aiming at: (i) increasing agricultural, livestock, agro-industrial, fishery production; (ii) improvement of market infrastructure; (iii) sustainable management of natural resources;</li> <li>Set standards and propose policies and measures to ensure the improvement of food safety, and protect consumers;</li> <li>Design agro-food policies that will be oriented towards the coordination of agriculture sector development with the regional one, by highlighting integrated rural development;</li> <li>Design national policies for irrigation and drainage;</li> <li>Drafts laws, by-laws and decisions for development of agriculture and food sector and achievement of the above aims;</li> <li>Follows-up the implementation of laws, by-laws and decisions of the Council of Ministers for development of agriculture and food sector;</li> <li>Develop institutional capacities, capable to design and implement agricultural policies oriented towards the regional and European integration of Egypt's agriculture and food sector;</li> <li>Coordinates the cooperation between relevant Ministries, local government, research institutions, and NGOs regarding the development of Agriculture and Food.</li> </ul>	<ul> <li>MALR is represented in the PSC;</li> <li>Provides policy advise regarding the development of the LUCF and agriculture and livestock sector and related GHG mitigation and adaptation strategies;</li> <li>Potential data provider on LUCF and Agriculture and Livestock;</li> </ul>	<ul> <li>The CCCD led and coordinated the stocktaking exercise;</li> <li>The CCCD synthesized thematic area specific reports into the core stocktaking report.</li> <li>The CCCD held consultations with all national climate change relevant stockholders in the country;</li> <li>The CCCD got technical guidance from UNDP-GEF NCSU and exchanged experience with homologue offices/colleagues from East Europe and CIS countries who were to develop stocktaking exercises;</li> </ul>
Ministry of Water Resources and Irrigation	Planning Sector	<ul> <li>In the framework of its policy for providing water in adequate quantity and quality to the country's sectors, the ministry has been keen on formulating a policy based on scientific bases to face the continuously increasing demand in the water sector.</li> <li>The Ministry's Objectives can be summarized as follows : <ul> <li>Formulate the water policies necessary for securing coverage of all the water requirements in agriculture, industry, drinking, navigation and power sectors as well as other consuming requirements.</li> <li>Maintain all the available water resources, rationalize its use, maximize its revenues and increase its efficiency by using state-of-the-art technologies in managing water of the Nile River, the underground reservoir, rainfall, torrents and drainage water that is usable according to specific standards.</li> <li>Control distribution of irrigation water; establish, operate and maintain grand barrages and reservoirs and industrial works along the Nile River along with its branches, rayahat, canals, and irrigation and drainage networks.</li> <li>Improve and develop irrigation methods for the optimization of the available water resources</li> <li>Maintain water quality and protect water from pollution.</li> </ul> </li> </ul>	<ul> <li>MWRI is represented in the PSC;</li> <li>Provides policy advise regarding the water resources and coastal zones vulnerability assessment and adaptation strategies;</li> <li>Potential data provider on water resources, shoreline erosions and sea level rise</li> </ul>	<ul> <li>Consulted by CCCD regarding the data provision for LUCF and Agriculture and Livestock.</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> <li>Feedback on stocktaking report provided;</li> </ul>

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
	Egyptian Public Authority for Shore Protection Coastal	<ul> <li>Preparing the general planning for shore protection activities and projects;</li> <li>Develop master plans &amp; prepare the technical designs for new development projects on the seashores;</li> <li>Develop pilot projects which serve the Authority's activities in cooperation with the different authorities and Egyptian universities and foreign universities</li> <li>Future Plans</li> <li>Establish an overall plan for an integrated shoreline management plan to protect the Egyptian coast;</li> <li>Expand the usage of arial wave photos for the Egyptian shores;</li> <li>Expand the international cooperation between the SPA and the countries advanced in this field;</li> <li>Expand in establishing and using the meteomarine current recording and wave measurements;</li> <li>Establish net system for information and data at SPA and its branches to link all Egyptian shorelines to facilitate the follow-up process.</li> </ul>		<ul> <li>Consulted by CCCD regarding the data provision for water resources and coastal zones vulnerability assessment and adaptation strategies;</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> <li>Feedback on stocktaking report provided;</li> </ul>
	Research Institute (CoRI)	<ul> <li>protecting the Egyptian coasts. CoRI is one of the twelve institutes of the National Water Research Center (NWRC).</li> <li>Vision As the coastal zones of Egypt hosts many natural resources, CoRI emphasizes on Integrated Management Plans (IMP) for sustainable protection and development of the coastal zones.</li> <li>Mission CoRI is concerned with research and investigation activities to protect and to develop the coastal zones of Egypt through the following objectives:</li> <li>Monitoring the evolution of the Mediterranean coast in order to determine the near shore zone changes of the Nile delta and its neighbourhood.</li> <li>Collecting and analyzing Dynamical, coastal and marine data for the determination of the erosion and accretion pattern and their driving forces.</li> <li>Conducting numerical models to predict future changes in the coastal zone, and select the most economical and effective protective measures and to find out their best alignment.</li> <li>Studying and design the most efficient, low cost and high effective control works to protect the heavily populated areas with its valuable agricultural land, industrial establishments and infrastructure from the sea attacks and carrying out their EIA.</li> <li>Providing expert advice to the Egyptian Government on problems associated with coastal instability.</li> <li>Integrated coastal zone management studies considering current and future changes.</li> <li>Carrying out studies concerning following up the existing and future coastal problems and the required protection system along the Egyptian coastal zone</li> </ul>		

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
MINISTRY OF FOREIGN TRADE AND INDUSTRY (MFTI) Cabinet of Ministries	Ministry in general Supreme Council Of Energy (SCE)	<ul> <li>MFTI is the highest governmental authority responsible for energy and industry policy-making in the republic of Egypt. Responsibilities of MFTI and its directorates and institutions that are under its responsibility and relevant to the climate change are as following:</li> <li>Designs, revises and regularly updates national strategies for sustainable development of energy and industry sectors;</li> <li>Drafts the respective legal framework for the development of the energy and industry sectors;</li> <li>Forecasts the continuous demand for different energy sources;</li> <li>Promotes private investments, domestic or foreign ones, in both energy and industry sector by creating an attractive environment climate for these investments;</li> <li>Boosts market reforms in the energy and industry sector to achieve the national objectives for their integration under EU structures;</li> <li>Supervises and facilitates the merging of energy and industry public companies towards privatization process.</li> <li>SCE advises the Government, Minister of Energy and other ministries and public institutions on energy issues.</li> <li>Designs National Policy and Strategies for the Development of the Energy Sector and propose Actions for their implementation;</li> <li>Designs Laws and by-Laws for development of Energy sector;</li> <li>Prepares different development scenarios and carries out analyses in energy field (including energy efficiency) with the goal of orienting the Egypt's economy towards a sustainable development of energy sector.</li> <li>Supervises the implementation process of the National Energy Strategy.</li> <li>Gathers, assembles and analyzes data on production, supply and consumption of energy sources in all economic sectors by creating a database according to International Agency of Energy (IAE) and EUROSTAT standards.</li> <li>Develops annual energy balance of the country according to IAE and EUROSTAT formats.</li> <li>Forecasts and proposes action plans for rational and efficient use of energetic fuels i</li></ul>	<ul> <li>MFTI is represented in the PSC</li> <li>Provides policy advise regarding the development of the Energy and Industry sector and related GHG mitigation and adaptation strategies for these sectors;</li> <li>Significant data provider for Energy and Industry category;</li> <li>The Team Leader role of GHG inventory and technical expertise on GHG mitigation analysis are provided by the SCE;</li> <li>The NAE is the main data provider for energy balance</li> <li>SCE is represented in PSC;</li> </ul>	<ul> <li>Consulted by CCCD regarding the data provision for Energy and Industry</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> <li>Feedback on stocktaking report provided;</li> <li>The SCE has drafted the report on GHG inventories – as significant part of the core stocktaking report;</li> <li>The SCE has drafted the sections of the V&amp;A report related to the impact of CC into the energy sector and response adaptation measures;</li> <li>The SCE is consulted on issues related to GHG inventories, GHG mitigation analysis; related activity data for GHG inventory (energy);</li> </ul>
		<ul> <li>Carries out studies for promotion of using of renewable energy sources.</li> <li>Prepares in cooperation with other institutions, the environment standards related to exploitation of energy sources.</li> </ul>		<ul> <li>The SCE has provided information of the stock of activities / studies related to the TNC;</li> <li>Feedback and validation of the stocktaking report is provided by SCE.</li> </ul>
MINISTRY OF TRANSPORT (MT)	Ministry in general	<ul> <li>Designs national policies for sustainable development of the transport and telecommunication sector through expanding and enhancing the transport infrastructure;</li> <li>Designs transport master plans for each mode of transport (road, maritime, air);</li> <li>Designs and implements measures for commercialization of services into the overall infrastructure network;</li> <li>Designs and implements measures for rehabilitation of road network;</li> <li>Designs the legal and institutional framework that would help the implementation of the polices and measures to the transport and telecommunication;</li> </ul>	<ul> <li>Potential member of PSC;</li> <li>Potential data provider for transport category;</li> <li>Provides policy advice for the development of transport and for integrated assessment of impact of expected climate changes into these sector;</li> </ul>	<ul> <li>MOTT is consulted by CCCD regarding to the transport sector;</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> </ul>

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
MINISTRY OF HEALTH	Ministry in general	<ul> <li>MOHP is the highest governmental authority responsible for health policy-making in the republic of Egypt. Responsibilities of MOHP and its institutions that are under its responsibility and relevant to the climate change are as following:</li> <li>Designs national polices for the protection of the public health and improvement of public health services</li> <li>Designs the respective legal framework and build institutional</li> <li>Implements policies, laws and regulations for the protection of the public health and health service;</li> </ul>	<ul> <li>MOHP is represented in the PSC;</li> <li>Provides policy advise regarding the development of Health sector and related impact of climate change and adaptation strategy for this sectors;</li> <li>Potential data provider for health sector</li> </ul>	<ul> <li>MOHP is consulted by CCCD regarding the health sector;</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> <li>Feedback on stocktaking report provided;</li> </ul>
MINISTRY OF PETROLEUM	Ministry in general	Increasing Egypt's reserves of crude oil and natural gas Creating constant sufficiency in Egypt's consumption of crude oil and natural gas in their varied forms. To make the petroleum sector a major contributor to Egypt's national economy and a principal source of employment for Egypt's large and skilled work force. Protect Egypt's resplendent environment and its varied ecological systems through the enactment and implementation of stringent national and international environmental protection laws to govern petroleum operations. Curb Pollution through the increased use of environmentally friendly fuels such as natural gas and low-sulpher petroleum products that are produced in accordance with international specifications.	<ul> <li>Provides the main source of anthropogenic fuel, which is the source for GHG emissions.</li> <li>Contributes in the process of fuel switching from fluid fuel to natural gas fuel.</li> </ul>	<ul> <li>It is consulted by CCCD regarding the health sector;</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> <li>Feedback on stocktaking report provided;</li> </ul>
MINISTRY OF ELECTRICITY AND ENERGY		Optimize use of available energy sources and minimize environment pollution in the field of electricity generation and supply Expand utilization of new and renewable energy resources Provide electricity with minimum price and best quality Set and Implement general policies in the fields of electricity generation, transmission and distribution to use the most technical and scientific proven developments and technologies. Follow up and monitor different activities to provide electrical power for the social and economic development to support the government's framework and plans. Suggest tariff of electrical power to the cabinet Supervise study and implementation of important electrical projects Set data structure and technical statistics of electric activities	<ul> <li>One of the main contributors to GHG emissions in Egypt.</li> <li>Implements important projects for climate change mitigation in the fields of renewable energies &amp; energy efficiency.</li> </ul>	<ul> <li>It is consulted by CCCD regarding the health sector;</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> <li>Feedback on stocktaking report provided;</li> </ul>
<ul> <li>PUBLIC ACADE</li> </ul>	MIA & RESEA	RCH INSTITUTES		
CAIRO UNIVERSITY	Faculty of Science (FSc) , Meteorolog y & Astronomy Department	<ul> <li>Provides education at all levels on Meteorology &amp; Climatology, Chemistry, Physics, Biology, Computing Science and Mathematics.</li> <li>Conducts scientific research and implements projects on Meteorology &amp; Climatology, Chemistry, Physics, Biology, Computing Science, and Mathematics.</li> </ul>	<ul> <li>FSc is represented in PSC</li> <li>FSc is a potential provider of the technical expertise for Meteorological forecasts, climatological researches</li> </ul>	<ul> <li>FSc is consulted by CCCD on genera technical issues;</li> </ul>

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
ALAZHAR UNIVERSITY	Faculty of Science , Meteorolog y & Astronomy Department	<ul> <li>Provides education at all levels on Meteorology &amp; Climatology, Chemistry, Physics, Biology, Computing Science and Mathematics.</li> <li>Conducts scientific research and implements projects on Meteorology &amp; Climatology, Chemistry, Physics, Biology, Computing Science, and Mathematics.</li> </ul>	<ul> <li>Physics department provides technical expertise on uncertainty assessment for GHG inventory.</li> </ul>	<ul> <li>Physics department is consulted by CCCD related to the issue of uncertainty assessment;</li> <li>Feedback and validation of the stocktaking report is provided by IHM;</li> </ul>
AIN SHAMS UNIVERSITY	Institute of Environme nt (IE)	<ul> <li>Provides Education at all levels on topics related to Environmental sciences, Media, Agro- Climatology.</li> <li>Conducts scientific research &amp; implements projects on Agro-Climatology, Public Awareness, Environmental protection &amp; mass media.</li> </ul>	<ul> <li>Provides advice regarding the development of Public Awareness &amp; impacts of Climate Change on different sectors.</li> </ul>	<ul> <li>IE is consulted by CCCD regarding the public awareness</li> <li>Information of the stock of activities related to the TNC provided.</li> </ul>
National Research Center (NRC)	- Environme ntal & OCCCDpat ional Medicine Department	<ul> <li>Conducts scientific research &amp; implements projects related to Climate change and its health Impact among the different sectors of the population.</li> <li>Conducts scientific research &amp; implements projects on Public Awareness, Environmental protection &amp; mass media.</li> <li>Design and Implement activities that raise awareness of public on environmental issues.</li> </ul>	<ul> <li>Assess the impacts of Climate Change on the heath of the different sectors</li> <li>Provides advice regarding the development of Public Awareness</li> </ul>	<ul> <li>NRC is consulted by CCCD regarding information of the stock of activities related to the TNC provided and the public awareness.</li> </ul>
Egyptian Meteorological Authority (EMA)	Climatolog y	<ul> <li>Systematically observes and monitors meteorological parameters from all national stations;</li> <li>Process the data and information received from the observations;</li> <li>Develop data base and information system on the metrological indicators of the country;</li> <li>Develops weather forecast and provide it to the interested parties;</li> <li>Report data to the World Metrological Organization and to other regional / sub-regional networks established;</li> </ul>	<ul> <li>The Team Leader role of V&amp;A and significant technical expertise on V&amp;A are supported by the EMA</li> <li>The EMA is the main Metrological data provider;</li> </ul>	<ul> <li>The EMA is consulted on issues related to V&amp;A and related data</li> <li>EMA has provided information of the stock of activities / studies related to the TNC;</li> <li>Feedback and validation of the stocktaking report is provided by EMA</li> </ul>
Agricultural Research Center (ARC)	* Institute of Soil, Water , & Environme nt * Central Laboratory for Agricultura l Climate (CLAC)	<ul> <li>Conducts scientific research &amp; implements projects related to Climatology , Agro- Climatology &amp; Agro- meteorology</li> <li>Researches in Climate Change impacts , vulnerability &amp; Adaptation in Agriculture.</li> </ul>	<ul> <li>Provides technical expertise for GHG inventory &amp; GHG mitigation analysis</li> <li>Technical expertise on uncertainty assessment for GHG inventory</li> </ul>	<ul> <li>ARC is consulted by CCCD on general issues related to Agro- meteorology.</li> </ul>

Institution Depa	partment	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
Tebbin Institute for Metallurgical Studies (TIMS)		<ul> <li>Tebbin Institute for Metallurgical Studies started its activities in November 1968 as a scientific establishment for continuous engineering education, training, research and industrial consultation Under the Presidential Decree no. 1330/1975, issued on 31 December 1975. Currently it accomplishes these activities for the Ministry of Foreign Trade and Industry.</li> </ul>	<ul> <li>Center of energy efficiency in Industry, 1983 to 1987, 400 thousands US\$, UNDP.</li> <li>Project of energy efficiency in metallurgical and glass industries, 1985 to 1988, 900 thousands US\$, UNDP</li> <li>Energy efficiency and environment protection project (ECEP), 1989 to 1998, 67.5 Million US\$, USAID and 70 Million LE Egypt's Government contribution.</li> <li>National Strategy Study for CDM, 160 thousands US\$, World Bank, 2000 to 2002.</li> <li>Capacity Development for Clean development Mechanism (CD for CDM) project 300 thousands US\$, UNEP, 2003 to present.</li> </ul>	•
Non-Governmental Organizati	ations (NGO	)s)		
Arab       Office for         Youth       and         Environment       (AOYE)         Partners       in         Development       for         Research,       Consulting         Training (PID)       And		<ul> <li>Arab Office for Youth and Environment (AOYE) seeks to be one of the best NGOs working in the field of Environment and Sustainable Developmental on the National, Arab and International levels through comprehensive environmental action plan that has economical sustainable approach; That offer an integrated services and activities towards the environment protection and conservation, capable to provide full enabling to its beneficiaries.</li> <li>Partners in Development for Research, Consulting and Training PID are an Egyptian think tank that specializes in development studies, broadly defined. It was established as a private company under the Law of Companies No. 159 of 1981 and the Investment Law No. 8 of 1997.</li> <li>PID was founded by a number of Egyptian experts, university professors, international civil servants, and businessmen known for their concern with issues of development. They build on the experience of successfully running a research center at Cairo University, which had acquired an international reputation under their leadership</li> <li>They find in this new think tank an opportunity to put their knowledge and expertise to the service of economic, social, and cultural development in Egypt and other Arab countries.</li> <li>In carrying out its work, PID engages a large number of multi-disciplinary experts working in universities and research centers in the Middle East and North Africa region. Although priority is given to those with expertise in the field of economic and social developments, specialists in areas such as Political Science, Public Administration, Law, Information Technology, Nutrition Sciences, and in Science and Engineering will be called upon whenever the need arises.</li> </ul>		•

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process			
INTERNATIONAL ORGANIZATIONS BASED IN EGYPT							
UNDP EGYPT		UNDP Egypt is uniquely placed to advise the government on policies and institutions to meet development challenges, to work with partners to mobilize talent and resources, and to play the advocacy role through the Human Development Report and the Millennium Development Goals (MDGs). UNDP is helping Egypt integrate the Millennium Development Goals into national development frameworks. The Environment portfolio in Egypt's country office covers a wide range of projects that include conservation of biodiversity in at least seven protectorates promoting the sustainable use of natural resources and protecting indigenous knowledge thus linking biodiversity conservation to fighting poverty and improvement of livelihoods. UNDP Egypt is also tackling climate change issues through a number of projects focusing on developing innovative mechanism for improving energy efficiency and establishing marketing support for cleaner and renewable energy technologies targeting the upstream policy level and downstream consumer and grass root level. In addition, the CO office is engaged in pollution abetment through the introduction of low cost technologies for waste water treatment technologies such as engineered wetlands.	<ul> <li>UNDP holds the capacity of the Implementing Agency of all GEF funded Projects;</li> <li>UNDP is represented in PSC;</li> <li>UNDP provides technical support to the implementation process of the project;</li> </ul>	<ul> <li>UNDP is systematically consulted by CCCD in all steps of the stocktaking exercise;</li> <li>Feedback and validation of the stocktaking report is provided by UNDP Egypt</li> </ul>			
WORLD BANK (WB)		The WB is helping Egypt achieve social and economic development by providing the country with loans and grants to finance development projects. In addition, the WB is supporting the country's growth through the provision of technical assistance, as well as analytical and policy advice. In partnership with the EU, the WB has facilitated donor coordination efforts and helped to catalyze additional resources to support Egypt's development. The WB's Country Assistance Strategy for Egypt for the period 2002-2005 focuses on reducing poverty and supports the Egyptian Government's The WB is working closely with the Egypt's Government to achieve the priorities set in their strategy. The main priorities envisaged in the WB's strategy are to improve governance and strengthen institutions, promote sustainable private sector growth, and foster human development.	<ul> <li>WB has implemented and implements projects related to the management of natural resources including forests which are a significant source of data and information to be considered under the TNC;</li> <li>WB is a potential innovative financing mechanism for carbon sequestration through its Prototype Carbon Fund (PCF) and other similar funds;</li> <li>WB has recently approached the CCCD to participate into the Natural Resources Management Project, under PCF component.</li> </ul>	<ul> <li>WB is consulted by CCCD regarding stocktaking</li> </ul>			
PROJECTS							
GEF Small Grants Program (SGP)		<ul> <li>The GEF Small Grants Program is a corporate Program of the GEF, implemented by UNDP and executed by UNOPS.</li> <li>The GEF's Small Grants Program aims to deliver global environmental benefits in the GEF Focal Areas of biodiversity conservation, climate change mitigation, protection of international waters, prevention of land degradation (primarily desertification and deforestation), and elimination of persistent organic pollutants through community-based approaches;</li> </ul>	<ul> <li>Collaborator regarding the projects on energy and climate change;</li> <li>Potential data provider from relevant projects as this program has funded some projects (finalized / ongoing) in energy efficiency and renewable energy sources.</li> </ul>	<ul> <li>GEF SGP is consulted by CCCD regarding stocktaking;</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> <li>Feedback on stocktaking report provided;</li> </ul>			

Institution	Department	Responsibility / Field of Activities	Relevance to Climate Change/ reasons for inclusion	Role in the self-assessment process
Nile Basin Initiative (NBI)		<ul> <li><i>The GEF's mission is</i> the protection of the global environment. The Global Environment Facility forges international cooperation and finances actions to address six critical threats to the global environment: biodiversity loss, climate change, degradation of international waters, ozone depletion, land degradation, and persistent organic pollutants (POPs).</li> <li><i>The Nile Basin Initiative is</i> supported by contributions from the NBI countries themselves and through the generous support of several multilateral and bilateral donors.</li> <li><i>A World Bank-managed</i>, multi-donor trust fund was established as proposed by the Nile Council of Ministers as the preferred initial funding mechanism</li> </ul>	<ul> <li>The project has developed some work on the vulnerability of the arid land selected areas to the climate change and hereby a potential data provider.</li> </ul>	<ul> <li>NBI Project is consulted by CCCD regarding stocktaking;</li> <li>Information of the stock of activities / studies related to the TNC provided.</li> </ul>

# ANNEX E: COMPARISON BETWEEN THE TOTAL GHG INDICATORS 1990/2000 IN EGYPT

Year	population, million	GDP Market price, Billion US\$	emissions, Million ton CO2e	Emission ton CO2e per Capita	Emissions per capita Ratio (2000/1990), %	Emission ton CO2e per thousand US\$	Specific Emission Ratio (2000/1990), %
1990	52.6	35.16	116.6	2.2		3.3	
2000	63.3	99.74	193.3	3.1	137%	1.9	58

Source: Egypt Second National Communication, p28

#### **ANNEX F: COUNTRY AT A GLANCE**

# Egypt, Arab Rep. at a glance

12/9/09

M. East Lower POVERTY and SOCIAL & North middle-Development diamond<sup>a</sup> Egypt Africa income 2008 3,702 Population, mid-year (millions) 81.5 325 Life expectancy GNI per capita (Atlas method, US\$) 1,800 3,242 2,078 GNI (Atlas method, US\$ billions) 146.8 1,053 7,692 Average annual growth, 2002-08 Population (%) 19 19 1.2 GNI Gross Labor force (%) 3.0 3.0 1.6 primary per Most recent estimate (latest year available, 2002-08) capita enrollment Poverty (% of population below national poverty line) Urban population (% of total population) 43 57 41 Life expectancy at birth (years) 70 70 68 Infant mortality (per 1,000 live births) 20 32 46 Child malnutrition (% of children under 5) 7 26 Access to improved water source Access to an improved water source (% of population) 98 88 86 Literacy (% of population age 15+) 66 73 83 Gross primary enrollment (% of school-age population) 100 106 109 Egypt, Arab Rep. Male 102 109 112 Lower-middle-income aroup 97 Female 104 106 KEY ECONOMIC RATIOS and LONG-TERM TRENDS 1998 2007 1988 2008 Economic ratios<sup>1</sup> GDP (US\$ billions) 35.0 84.8 130.5 162.3 Gross capital formation/GDP 34.9 21.5 20.9 22.5 Trade 17.3 16.2 30.3 33.2 Exports of goods and services/GDP Gross domestic savings/GDP 17.1 12.0 16.3 16.9 Gross national savings/GDP 28.1 18.6 22.6 23.4 -2.9 Current account balance/GDP -1.6 1.7 0.5 Domestic Capital Interest payments/GDP 3.5 1.1 0.7 0.6 savings Total debt/GDP 131.6 38.1 25.220.1 Total debt service/exports 22.1 9,9 56 4.3 Present value of debt/GDP 20.9 16.7 Present value of debt/exports 56.0 37.0 Indebtedness 1988-98 1998-08 2007 2008 2008-12 (average annual growth) GDP 7.2 Egypt, Arab Rep 4.6 7.1 5.3 4.1 GDP per capita 2.0 2.7 5.1 5.2 3.1 Lower-middle-income group Exports of goods and services 4.8 14.9 23.3 28.8 2.9 STRUCTURE of the ECONOMY 1988 1998 2007 2008 Growth of capital and GDP (%) (% of GDP) 30 19.0 17.1 14.1 Agriculture 13.2 37.5 20 Industry 28.8 30.9 36.3 Manufacturing 17.7 18.3 15.7 15.7 10 Ó Services 52.2 52.0 49.6 49.2 0 -10 0.3 04 05 06 07 69.0 08 Household final consumption expenditure 76.7 72.4 72.2 General gov't final consumption expenditure 13.9 11.3 11.3 10.9 GDP GCF Imports of goods and services 35.2 25.7 34.8 38.8 1988-98 1998-08 2007 2008 Growth of exports and imports (%) (average annual growth) 40 Agriculture 29 3.4 3.7 3.3 Industry Manufacturing 30 6.0 4.9 7.9 10.3 4.8 7.6 7.9 5.5 20 3.0 7.4 Services 5.1 8.6 10 Household final consumption expenditure 31 5.1 25 44 0 General gov't final consumption expenditure 3.2 2.8 0.2 1.1 **n** 2 ~ 08 15.5 Gross capital formation 0.9 5.3 23.8 Exports Imports Imports of goods and services 2.8 11.4 28.8 26.3

Note: 2008 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

\* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

PRICES and GOVERNMENT FINANCE					_
	1988	1998	2007	2008	
Domestic prices					
(% change) Consumer prices	18.6	57	11.0	117	
Implicit GDP deflator	13.7	3.9	12.6	11.8	
Covernment finance					
(% of GDP_includes current grants)					
Current revenue	20.1	22.2	23.2	23.4	
Current budget balance	-5.5	2.9	-3.2	-4.4	
Overall surplus/deficit	-17.6	-1.0	-7.3	-6.8	
TRADE					_
	1988	1998	2007	2008	
(US\$ millions)	0.074	5 400	00.040	00.050	
l otal exports (fob)	3,274	5,128	22,018	29,356	•
Other agriculture	400	1,720	10 223	14 628	1
Manufactures	961	1 685	7 519	10,932	4
Total imports (cif)	8.858	16,899	38,308	52,771	1
Food	1,254	3,193	2,671	3,927	1
Fuel and energy	2,148	2,188	4,336	10,001	1
Capital goods	2,188	4,801	9,845	11,871	
Export price index (2000=100)	98	96	157	183	
Import price index (2000=100)	11	104	140	170	
Terms of trade (2000=100)	928	92	112	107	
BALANCE of PAYMENTS					_
	1988	1998	2007	2008	
(US\$ millions)	7 005	40.500	20.400	50.077	
Exports of goods and services	1,225	13,502	39,428	53,277	1
Resource balance	4 465	21,795	45,590	9 809	4
	-1,100	-0,202	-0,000	-0,000	
Net income	-161	1,213	1,177	1,360	1
Net current transfers	4,081	4,600	7,061	9,338	1
Current account balance	-545	-2,479	2,269	888	1
Financing items (net)	1,001	2,344	3,013	4,532	
Changes in net reserves	-456	135	-5,282	-5,420	
Memo:					
Reserves including gold (US\$ millions)			30,320	39,516	
Conversion rate (DEC, local/US\$)	1.8	3.4	5.7	5.5	
EXTERNAL DEBT and RESOURCE FLOWS					
(100	1988	1998	2007	2008	
(US\$ millions) Total debt outstanding and disburged	46 100	22,200	22,020	22,646	
IBRD	40,122	32,209	1 181	1 255	
IDA	900	1.268	1,490	1,444	
	0.407	4 0 0 7	0.740	0.404	
I OTAL DEDT SERVICE	2,487	1,897	2,740	3,131	
IDA	10	26	58	62	
Composition of net resource flows		4 074	4.940	4 000	
Official grants	444	1,374	1,240	1,303	
Drivate creditors	676	-243	572	-000	
Foreign direct investment (net inflows)	1,190	1.076	11.578	9,495	
Portfolio equity (net inflows)	0	-160	-3,199	-674	
World Bank program			-		
Commitments	70	285	0	1 075	
Disbursements	131	104	737	154	
Principal repayments	142	132	144	127	
Net flows	-11	-28	593	26	Ļ
Interest payments	159	65	58	70	
Net transfers	-170	-92	535	-44	









Note: This table was produced from the Development Economics LDB database.

12/9/09

ANNEX G: ENDORSEMENT AND COMMITMENT LETTERS