

**Country: Egypt**

**UNDAF Outcome(s):**

Outcome 1: By 2011, state's performance and accountability in programming, implementing and coordinating actions, especially those that reduce exclusion, vulnerabilities and gender disparities, are improved'

Outcome 3: By 2011, regional human development disparities are reduced, including reducing the gender gap, and environmental sustainability improved'

**Joint Programme Outcome(s) (if different):**

Outcome 1: Mainstreaming GHG Mitigation and CDM into National Policy and Expanding Access to Finance Frameworks (Priority Areas I & III)

Outcome 2: Enhanced capacity to adapt to climate change (Priority Area IV)

<p>Prog Title: <u>Climate Change Risk Management in Egypt</u></p> <p>Programme/project Duration: <u>36 months</u> (Start/end dates): _____</p> <p>Fund Management Option(s): <u>Pass-through</u> (Parallel, pooled, pass-through, combination)</p> <p>Managing or Administrative Agent: <u>UNDP</u> (if/as applicable)</p>	<p>Total estimated prog/project budget: <u>US\$ 4,000,000</u> ____</p> <p>Out of which:</p> <p>1. Planned resources:</p> <ul style="list-style-type: none"><li>• Government _____</li><li>• Regular/Other Resources _____</li><li>• NGO or private _____</li><li>• MDG Fund.... <u>US\$ 4,000,000</u> ____</li><li>• UN Org... _____</li><li>• Donor ... _____</li><li>• Donor ... _____</li></ul> <p>2. Unfunded budget: _____</p>
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**Names and signatures of (sub) national<sup>1</sup> counterparts and participating UN organizations**

UN Organizations	National Partners <sup>2</sup> (including sub national partners.)
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<sup>1</sup> Governmental, and any NGO/civil society, private sector or other partners

<sup>2</sup> For UNDP national signatories must include the national coordinating agency and the relevant national cooperating agency

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## Executive Summary

Egypt's contribution to the world CO<sub>2</sub> emission is currently less than the world's average but much more than Africa's average. Oil is the major source of energy supply. Egypt can move towards a less GHG-intensive path, mainly by becoming a more energy efficient economy and by making greater use of its large renewable energy potential. The Government embraced several measures to promote the rational use of energy, culminating recently by activating SEC to revise national energy policies. CDM proves to be highly relevant to support such sector-wide efforts and promote increased "decarbonisation" of Egypt's economy. While mitigation is necessary, adaptation to current and future climate change is inevitable. Indeed, Egypt proves to be highly vulnerable to climate change impacts according to IPCC reports. Current and future changes in climatic conditions constitute a major environmental risk that may jeopardize Egypt's development gains and efforts for poverty reduction. As identified in the Initial National Communication (INC) Egypt's most vulnerable sectors to climate change are: 1) coastal zones, 2) water resources and 3) agriculture. Climate change risks may jeopardize Egypt's efforts to achieve the MDGs. The country is in need for building and developing capacities of both human resources and institutions to elaborate and implement sustainable energy development strategies on one hand; and adopt effective modalities for managing climate risks in key vulnerable sectors, on the other. Egypt needs support to 1) mainstream initiatives for GHG mitigation and CDM into national policy and expanding access to finance frameworks; and 2) enhance local capacities to adapt to impacts of climate change.

Egypt has taken important steps towards attaining the MDGs. However, the UN Common Country Assessment (CCA) points out that it is essential to protect natural resources from the increased pressures resulting from rapid population growth to ensure reaching the MDGs, poverty reduction, social protection and economic growth. There are a number of significant lessons learned from past experiences, opportunities and risks considered in the design of this JP including: 1) Egyptians are underutilizing alternative sources of energy; 2) an enabling environment and an incentive system are essential to promote financing of renewable energy and energy efficiency initiatives; 3) prior and on-going assistance have built the national capacities and raised the general awareness, however, more effort is still needed to develop capacities for implementation and execution. There is still room for a) inducing institutional transformation since SEC is now active; b) bringing other stakeholders, particularly private sector companies and NGOs, to share the responsibility and play effective role in the areas of mitigation and adaptation; and c) networking between the interested parties for a synergy conducive to support Egypt to meet the MDGs at large.

UNDAF outcomes one and three are the overall arching framework for this JP that aims to ensure achievement of the MDGs in the face of climate change in Egypt through sustainable energy development strategies and effective management of climate risks in key affected sectors. This should help Egypt align its climate risk management and human development efforts in responding to the predicted serious threats to the country. The JP consists of two components: mitigation and adaptation, each component has an outcome that responds to either mitigation or adaptation. This JP will build on the experience and lessons learnt from ongoing and previous initiatives. In the first output, UNDP-UNEP will collaborate with SEC to support the ongoing effort to reform the energy subsidy scheme and promote renewable energy and energy efficiency. Meanwhile, UNIDO, UNEP and UNDP will liaise with the CDM DNA and other interested groups on expanding CDM markets in Egypt through updating and promoting the existing CDM portfolio, capacity building activities and implementation of pilot GHG reduction projects. UNESCO will work with MWRI on implementing of IWRM plans at the local level based on available water resources under different climate change scenarios generated from Regional Circulation Models. FAO and UNDP will cooperate with the ongoing SNC Project to develop in-depth assessments on vulnerability and adaptation gaps and needs for the three targeted sectors. Meanwhile, IFAD and FAO will work jointly in development of stress tolerant crops, identification of optimal cropping pattern, optimization of the use of shrinking water resources and information dissemination in response to the climate change risks.

## 1 Situation Analysis

Egypt's contribution to the world CO<sub>2</sub> emission is currently at about 3.3 tCO<sub>2</sub> eq. per capita that is less than the world's average but much more than Africa's average. Oil is the main source of energy supply,

where its share amounts to 61 per cent, followed by natural gas and electricity estimated at 19 and 18 per cent respectively; while generated electricity from hydropower do not exceed 15.5 per cent, and thermal power plants that use fossil fuels produce the remaining electric power. Electricity generation, despite the move to gas instead of oil in the past decade, is the biggest GHG emitter. According to the International Energy Agency (IEA), Egypt's annual primary energy demand grows by 2.6 per cent. According to plans, by 2030 electricity generation will grow from 92 TWh to 188 TWh, while mostly relying on natural gas. This implies massive investment in new energy capacity. If there is no specific GHG mitigation policy, the national GHG emissions are likely to grow increasing Egypt's share of the global GHG emissions. On the national level, increase in emissions would negatively affect air quality in cities, and increase burden on the Egyptian economy due to the increase in the fuel subsidy bill which will ultimately have a tremendous adverse impact on public health and overall population well-being. This associates with the fact that Egypt is currently a minor oil exporter but will become a net oil importer by around 2015.

Egypt can move towards a less GHG-intensive path, mainly by becoming a more energy efficient economy and by making greater use of its large renewable energy potential. Nevertheless, the onerous energy price subsidy is constraining investment in the energy sector while the potential for GHG reduction is far from being exploited. In recent years, the Government has adopted several measures to increase both rational use of energy, and renewable energy contribution in energy supply.

This measures culminated recently by activating the Supreme Energy Council (SEC), headed by the Prime Minister. Now, SEC aims to revise national energy policies including energy efficiency measures, incentives for renewable energy, private sector investment in energy services and revise energy prices for large industrial facilities and other end-users. Continuing these efforts will help the Government better manage the budget deficit while contributing to modernizing the economy and reducing GHG emissions through implementing energy efficiency and CDM projects. In addition the Government has also established an electricity regulatory body to assist in reviewing electricity prices.

The Clean Development Mechanism (CDM) proves to be highly relevant to support such sector-wide efforts and promote increased "decarbonisation" of Egypt's economy. Egypt is among the leading countries in Arab States region in terms of the number of registered CDM projects and a developed pipeline of prospective projects. Nevertheless, the number of registered projects and the size and scope of the portfolio are far below the country's overall potential for CDM projects in energy and industry sectors. EEAA participated in UNEP's CD4CDM project (2002-2005), receiving support in establishing its DNA, developing a national CDM strategy and a portfolio of potential CDM projects posted on an effective website ([www.cdmegypt.org/](http://www.cdmegypt.org/)). Since then, responsible authorities organized a series of sector specific workshops for different targeted groups including the banking sector, investment and industrial companies and the petroleum sector. Egypt was also a recipient of the World Bank's National Strategy Studies Programme ([www.cdmegypt.org/NSS.htm](http://www.cdmegypt.org/NSS.htm)) and has received bilateral CDM support.

While mitigation measures are necessary, adaptation to current and future climate change is also indispensable. Global warming and its associated effects are likely to aggravate the current environmental challenges. As emphasized in Egypt's Initial National Communication (INC) to the UNFCCC, UNDP Global Human Development Report 2006 and the IPCC Fourth Report, Egypt proves to be highly vulnerable to climate change impacts. Climate projections make it clear that current and future changes in climatic conditions constitute a major environmental risk that may jeopardize Egypt's development gains and poverty reduction. Climate Change threats would inflict serious damage to human settlements. Furthermore, it would also affect access to water and food associated with deterioration in health conditions on the national level. The serious predicted impacts on human activities are likely to affect both men and women alike and would dramatically hamper Egypt's progress towards achieving all eight MDGs and in specific Goal 7, Target 8 on the integration of sustainable development principles into national policies.

Egypt is highly vulnerable to impacts of climate change that may threaten Egypt's sustainable development. As identified in the Initial National Communication, Egypt's most vulnerable sectors to climate change are: 1) coastal zones, 2) water resources and 3) agriculture. Climate change would inflict serious damage to human settlements, large parts of the productive agricultural land and industrial areas in the North Coast. Estimates show that 0.5 m Sea Level Rise (SLR) would lead to the permanent submersion of 1,800 km<sup>2</sup> of cropland in low land of the Nile Delta, and accelerate trend of desertification in the form of

increased soil salinity in the remaining land. According to MALR estimates, SLR might cause the loss of about 12-15 per cent of the existing agricultural land in the Delta including the loss of 30 per cent of the total land area, and 195 thousand jobs. The expected results include jeopardizing the food security balance, and relocating more than two million people to the already over populated Nile Delta and Valley. SLR would also inflict severe damage on the large investments in summer resorts along the North West Coast. The economic losses induced will exceed US\$35,000 million.

Agriculture is a key sector of the Egyptian economy and the central component of the rural economy. The overall agricultural system is one of the highest intensive and complicated agriculture systems in the world. Moreover, Egypt has a unique irrigated agriculture system, where about 95 per cent of the agricultural area is fully irrigated, and about 90 per cent of the rainfed areas are supplementary irrigated. Temperature rises will be likely to reduce the yield of the major crops and increase their water requirements. The combined effect of temperature increasing, SLR, water shortage and other environmental conditions could be a general reason of agriculture- system failure in many regions in Egypt.

Climate Change could also cause significant variation in annual Nile flood, which provides Egypt with more than 97 per cent of its renewable water resources. Available hydrological and statistical models have predicted an increase of 30 per cent or a decrease that can reach 70 per cent (highest convergence) in the annual Nile flow. These two scenarios can have serious implications in terms of increased flood risks or droughts that could lead to cultivated land shrinking associated with decrease in food production and increase in number of jobs lost and water conflicts. In realizing the serious threats, and the need for more accurate prediction to prepare adaptation plans, the Nile Forecast Center at the Ministry of Water Resources and Irrigation has been employing statistical models to generate water management scenarios responding to increase and/or decrease in the flood. As a full-fledged member of the Nile Basin Initiative ([www.nilebasin.org](http://www.nilebasin.org)), Egypt is currently involved in the development of a regional Nile hydrological model and decision-support-system. However, the spatial resolution of existing climatic Global Circulation Models (GCM) and climate scenarios for the Nile Basin are too broad to generate scenarios useful for assessing impacts of climate change on the Nile water regime, and identifying adaptation measures in the water and agricultural sectors.

The CCA points out that it is essential to protect natural resources from the increased pressures resulting from rapid population growth to ensure reaching the MDGs, poverty reduction, social protection and economic growth to achieve the MDGs. In this respect, it is clear that the above climate change risks can affect Egypt's ability to achieve the MDGs. The country is in need for building and developing capacities of both human resources and institutions to elaborate and implement sustainable energy development strategies, and adopt effective modalities for managing climate risks in key vulnerable sectors. Egypt needs support to 1) mainstream initiative for GHG mitigation and CDM into national policy and expanding access to finance frameworks; and 2) enhance local capacities to adapt to impacts of climate change.

## **2 Strategies including lessons learned and the proposed Joint Programme**

### **2.1 Background/context**

In the past decade, Egypt has taken important steps towards attaining the MDGs. However, the CCA points out that reaching the MDGs and ensuring economic growth, poverty reduction and social protection is not possible without protecting natural resources from the increased pressures resulting from rapid population growth. In response, UNCT has included two UNDAF Outcomes 1 and 3 in Egypt's UNDAF 2007-2011, which address promoting sustainable development concepts including climate change issues. In April 2007, the RC initiated brainstorming meetings with UN Agencies, national experts and relevant government authorities to formulate a UN climate change initiative that includes mitigation and adaptation. Introducing the UNDP-Spain MDG Achievement Fund is another building block to support the already established alliance in responding to the needs of the Government of Egypt in addressing climate change challenges. The consultative approach employed in elaborating and designing this JP assures national ownership, and of course, affirms falling within the national framework. Six UN agencies, namely, UNDP,

UNEP, UNIDO, IFAD, FAO and UNESCO, are engaged in formulating this JP with the central bodies of the Government of Egypt for a coordinated, complementary effort that will establish needed synergies to, first, reduce transaction costs for both the Government and the UN; second, strengthen the UN Agencies programme with the Government; and finally, ensure that the combined resources of the system are put to best use through improved work processes.

UNEP and UNDP will work together to support the Technical Secretariat of the SEC of the Cabinet of Ministers in its ongoing endeavors in reforming the national energy policies. Meanwhile the UN Agencies in addition to UNIDO will work with the EEAA on expanding CDM markets in Egypt and implementation of pilot projects pertaining to the reduction of GHGs. UNEP, UNDP and UNESCO will work with the Ministry of Water Resources and Irrigation on the development of a Regional Circulation Model (RCM) for the River Nile in full coordination with the National Office of the NBI and implementation of IWRM pilot projects using the generated scenarios from the RCM. Meanwhile FAO and IFAD will be supporting the efforts of the Ministry of Agriculture and Land Reclamation on the adaptation of the agricultural sector to climatic changes. In addition, UNDP, FAO and IFAD will also support formulation of adaptation policies in the three targeted vulnerable sectors as well as integration of Climate Risk Management approaches in the UN Programming Frameworks.

## 2.2 Lessons Learned

There are a number of significant lessons learned from past experiences, opportunities and risks considered in the design of this JP. These lessons are:

- ✓ Egyptians are underutilizing alternative sources of energy. For example, according to the second SNC, National Circumstances and 2005 Egypt HDR, the agricultural wastes amounts to about 30 million ton, that can be a renewable source of energy. Today, biogas has a low priority status in energy policy. Also large wind energy potential is available on the western coast of the Gulf of Suez, estimated at a capacity of about 20 thousand MW. Zafarana has been selected for setting up large-scale wind farms of a total capacity of 600 MW and to be 850 MW by 2010.
- ✓ An enabling environment and an incentive system are essential to promote financing of renewable energy and energy efficiency projects, and adaptation measures. Energy Efficiency Improvement & GHG Reduction is a UNDP-GEF assisted project (1999-2007) that aims to promote the adoption of energy conservation policies and activities, and encourage the use of energy efficient equipment and techniques nationwide. The project implementation identified several barriers that constrain energy efficiency activities including unfavorable lending terms, high prices of efficient equipment and heavily subsidized energy prices. Nevertheless, with the activation of the Supreme Energy Council (SEC), several policy measures that the project proposed and require inter-ministerial coordination can find their way to adoption and enforcement. Likewise, in 1999, Egypt has prepared a national climate change strategy that has not been integrated in the national development plans
- ✓ Many donor financed studies for energy efficiency, Clean Development Mechanism (CDM), measures for adaptation and mitigation, however, very few recommendations materialized in reality. These studies provide excellent analysis of the situation and directions for future actions, however, seldom these studies base their recommended actions on a realistic assessment of the capacities of the existing institutions to transform these blueprints into a real, live output of significant positive outcome. Thus, the JP will seek, by all means necessary, to provide practical, realistic solutions that are sustainable and visible. Also, the JP has to depend on local expertise, with extremely limited support of international consultants, who could serve as resource persons invited for backstopping only.
- ✓ Prior and on-going assistance have built national capacities and raised general awareness, however, more effort is needed to develop capacities for implementation and execution. Formulating Egypt's Initial National Communication, establishing a national climate change committee, preparing a National CDM strategy, establishing a climate laboratory at MALR and specialized center for climate change research at MWRI indicate there are efforts for both mitigation and adaptation. In addition, the Minister of Agriculture and Land Reclamation has recently established a committee on climate change and agriculture, which the Minister chairs. However, there is still room for 1) inducing institutional transformation since SEC is activated; 2) bringing other stakeholders, particularly private sector

companies and NGOs, to share the responsibility and play an effective role in the areas of mitigation and adaptation; and 3) networking between interested parties for synergies conducive to support Egypt to meet the MDGs at large.

### **2.3 The Proposed Joint Programme:**

The aim of the proposed JP is to help Egypt align its climate risk management and human development efforts in pursuing the achievement of MDGs in the face of climate change and the predicted serious threats to the country. In this context, the JP will serve to reduce poverty and mitigate risk by combining mitigation and adaptation under one integrated Climate Risk Management (CRM) banner with a special attention given to the vulnerable poorest populations of Egypt through two complementary approaches: 1) Mainstreaming GHG mitigation into national policy and investment frameworks, including increased CDM financing opportunities; 2) Enhancing the country's capacity to adapt to climate change. The JP will build awareness and capacity of key decision makers and development actors to support the systematic integration of climate change as a new variable in key policy, regulatory, institutional and operational frameworks and implement pilot projects.

This JP will build on the experience and lessons learnt from ongoing and previous initiatives. In the first output, UNDP-UNEP will collaborate with SEC to support the ongoing reform of the energy subsidy scheme and promote renewable energy and energy efficiency. The JP will provide technical assistance to assimilate and convert existing wealth of studies and information into policy papers for SEC as a step towards institutional transformation to an energy efficient economy. The Technical assistance will also ensure coordination among ministries on implementing decisions of SEC and mobilizing additional resources to support longer term studies serving national energy priorities. Meanwhile, UNIDO, UNEP and UNDP will liaise with the CDM DNA at EEAA and other interested groups on the expansion of the CDM markets in Egypt through updating and promoting the existing CDM portfolio, capacity building activities and implementation of pilot projects for GHG reductions. UNIDO will mobilize an additional US\$ 150,000 from its own resources to complement the MDG JP funds in order to address adaptation of the industrial sector to climate change. This component will build on UNEP's CD4CDM project (2002-2005) and will complement the ongoing bilateral CDM support.

In adaptation, IFAD, FAO and UNDP will cooperate with the ongoing UNDP-GEF SNC to the UNFCCC to develop in-depth assessments on vulnerability and adaptation gaps and needs for the agriculture, water and coastal development sectors. These V&A and policy assessments will support establishing an effective Adaptation Policy Framework in the water, agriculture and ICZM sectors. This component will also include implementation of a communication strategy through media, fact sheets, public relations materials, video tapes, radio programming, etc., to increase awareness of climate change risks and promote integration of adaptation principles into national development plans. On the field level, IFAD and FAO will work together with the Ministry of Agriculture and Land Reclamation and its Research Centers on adapting agriculture and fisheries policies and practices to changing climate. IFAD will focus on the development of stress tolerant crop varieties and optimized cropping pattern that cope better with harsh climatic conditions, while FAO will address optimal use of on farm water resources management under climate change. Meanwhile, UNDP will survey available models applied to the River Nile and assess the added value and level of certainty that could be achieved by the adaptation of a Regional Circulation Model (RCM) for River Nile in predicting the impact of climate change on the Nile annual flood. In case the study indicates that the RCM proves feasible and doable, UNEP will bid among international climate modeling centers including UNEP-DHI for the development of a RCM for River Nile that will link with the NBI hydrological modeling activities. UNDP will also work on climate proofing of UN development policies and plans. UNESCO will be working on the implementation of climate resilient Integrated Water Resources Management (IWRM) Plans on the local level, based on the climate scenarios generated by the RCM, with the Ministry of Water Resources and Irrigation (MWRI). Meanwhile the ICZM as part of the JP will be linked with the activities of the GEF-UNDP Project Proposal to the SCCF adaptation funds on ICZM on addressing the risks posed by climate change induced SLR in the Nile Delta.



## **3 Results Framework**

### **3.1 Summary of Results Framework**

UNDAF outcomes one and three constitute the overarching framework for this JP that aims to ensure achievement of the MDGs in the face of climate change in Egypt through sustainable energy development strategies and effective management of climate risks in key affected sectors. The JP consists of two components: mitigation and adaptation. Each component has an outcome that responds to either mitigation or adaptation. Under the first component, the JP intends to assist in elaborating/updating/reforming Egypt's energy policy for a more sustainable energy economy; and expanding CDM market, thus mainstreaming GHG mitigation and CDM into national policy. The JP will be a vehicle to initiate a policy dialogue process; build the capacities of the technical secretariat of SEC; elaborate analytical studies that justify issuing decrees on reducing and phase out of energy subsidies at the sector level. The JP will assist and support the Designated National Authority (DNA) and other interested parties, such as General Authority for Investments (GAFI) in various fields, such as energy efficiency, solid waste management, forestation, etc. and elaborating technical documentation for identified projects. The JP will also implement pilot projects that reduces GHG in areas related to fuel switching for taxis, potteries, carbonizes systems, boiler tuning, etc. Indicators to check on the progress towards attaining the first component include, but not limited to, 1) necessary decrees elaborated to constitute an enabling, conducive environment for energy efficiency for sustainable development; 2) Energy intensity, 3) per capita emission of CO<sub>2</sub>; 4) draft legal documents prepared to reform the energy sector and 5) number of CDM PPD in three sectors registered through this JP. Means of verification include 1) UNFCCC VDM Exec Board website; 2) tracking improvements in terms of energy savings; 3) Reports for follow up, progress, external and internal M&E reports; and 4) reports on training and procurement.

The expected outcome of the second component is to develop the capacities of Egyptian institutions and authorities on adapting to climate change. For this result to become visible; the JP will start by assessing vulnerability and gaps, then assist Egypt in preparing/updating strategies for integrating adaptation practices for climate-sensitive development programmes and projects. The JP, therefore, will support building a Regional Circulation Model (RCM) for River Nile; take stock of MALR efforts to develop stress tolerant crop varieties, and improve on farm water management, which eventually will prepare the agricultural sector for future possibilities of climate change. It is crucial to examine the technical, economic, financial, and environmental and practicalities of building the RCM. The following indicators that will measure progress include, but not limited to, 1) A National Climate Change Adaptation Policy Framework for the three targets sectors endorsed and adopted, 2) General awareness on impact of climate change; 3) Successful adaptation and application of a RCM that is incorporated into the NBI Water Resources Management Programs, Projects as well as Decision Support Systems, 3) Incorporating adapted RCM outputs in formulating national water resources management scenarios, 4) Number of stress tolerant varieties field crops, 5) Successful adoption of stress-tolerant crop varieties and proposed cropping patterns in selected locations; and 6) Crop yield per unit volume of water for selected crops. JP will mainly work at the policy level; while the GEF SGP that will support on-the-ground experiments. These pilot measures also support the efforts of UNESCO.

### **3.2 The Work Plan and Budget**

See Annex A.

### **3.3 Annual reviews**

The annual review of a JP, will be done collectively by national partners and participating UN organization. The JP Manager will produce one single annual narrative progress report based on the inputs from the different agencies. The JP Manager will liaise with the assigned focal points in the UN Participating Organizations to get needed information to prepare quarterly and annual progress reports using a common reporting format and the results based annual programme targets. The AA will produce the consolidated narrative and financial report. On receipt of the consolidated report, the RC will convene at least one annual steering committee meeting to review progress and conduct annual planning for all

activities covered in the results framework, monitoring and evaluation plans covered by this joint programme. Based on the lessons learnt from a review of the risks and assumptions and implementation progress achieved, JP management will prepare a detailed work plan and revised budget with the necessary adjustments made. The SC will approve in writing the new work plan and budget.

**Table 1 Summary of Results framework**

UNDAF Outcome 1: By 2011, state's performance and accountability in programming, implementing and coordinating actions, especially those that reduce exclusion, vulnerabilities and gender disparities, are improved'; Outcome 3: By 2011, regional human development disparities are reduced, including reducing the gender gap, and environmental sustainability improved'								
Outcome of Joint Programme (if different from UNDAF outcome(s), corresponding indicators, baselines, means of verification, resources, risks and assumptions Outcome 1: Mainstreaming GHG Mitigation and CDM into National Policy and Expanding Access to Finance Frameworks								
Indicators: 1) Capacities built for an institutional framework conducive towards energy efficient economy within five years, 2) Financing CDM projects gains momentum by 2010								
JP Outputs (Give corresponding indicators and baselines)	SMART Outputs and Responsible Party	Reference to Agency priority or Country Programme	Implementing Party	Indicative activities for each Output	Resource allocation and indicative time frame			
					Y1	Y2	Y3	TOTAL
1.1 National Policy Reform for a more sustainable energy economy achieved  <i>Indicators:</i> * SEC decrees issued that mainstream GHG mitigation measures through energy efficiency and renewable energy  <i>Baseline:</i> * SEC activated with a mandate to reform national energy policies	SEC Technical Secretariat strengthened	UNDP	Cabinet of Ministers	Recruit Energy Specialists Define capacity needs for the Technical Secretariat	55,000	75,000	57,000	187,000
	Energy policy papers to support energy policy reform prepared	UNDP	Cabinet of Ministers	Compile existing relevant studies and information Initiate short term consultancies to prepare energy policy papers Ensure coordination among Ministries on implementation of SEC decisions Synergize implementation of SEC decisions with ongoing national initiatives	23,000	23,000	23,979	69,979
	Agency Management Support	UNDP			5,460	6,860	5,669	17,989
	Long term draft energy strategies to support energy policy reform formulated	UNEP	Cabinet of Ministers	Initiate long term consultancies to develop draft strategies Mobilize additional resources to expand the scope of work	23,000	23,000	24,049	70,049
	Agency Management Support	UNEP			1,610	1,610	1,683	4,903
<i>1.1 Sub Total</i>					108,070	129,470	112,380	349,920

<p>1.2 Expanded CDM Market</p> <p><b>Indicators:</b>  Number of CDM projects registered  Energy Intensity  Per capita generation of CO2</p> <p><b>Baselines:</b>  36 PINs, 7 CDM projects, 2 upcoming CDM projects  ü Per capita emissions of CO2 increased from 1.5 ton to 1.8 ton between 1990 and 2003 (IEA 2006)  ü Energy intensity declined from 1,784.2 ton/US\$ to 1,663.1 ton/US\$ between 1990 and 2002.</p>	CDM portfolio is updated and project formulation and implementation supported	UNEP	EEAA	Survey and identify new carbon finance opportunities Update CDM portfolio to include new projects in key sector Provide support for the development of technical documentation for identified projects Hold hands-on training workshops to implement CDM and energy efficiency projects for policy makers, financial institutions, professional institutions and practitioners Provide technical assistance for the execution of some CDM projects that were listed in the investment portfolio, primarily approved by the DNA but in need of technical support	15,000	35,000	26,000	76,000
	CDM Unit strengthened	UNEP	EEAA	Training of CDM unit staff	2,000	5,000	3,000	10,000
	Implementation of pilot GHG reduction projects	UNEP	EEAA	Prepare/update feasibility studies for the areas of fuel switching in vehicles, potteries, carbonization systems and energy efficiency Identify and implement pilot projects	48,300	120,800	72,029	241,129
	Agency Management Support	UNEP			4,571	11,256	7,072	22,899
	CDM portfolio is updated and project formulation supported	UNIDO	EEAA	Survey and identify new carbon finance opportunities Update CDM portfolio to include new projects in key sector Provide support for the development of technical documentation for identified projects Hold hands-on training workshops to implement CDM and energy efficiency projects for policy makers, and financial and professional institutions	15,500	30,000	20,332	65,832
	Build a CDM Industry Association	UNIDO	EEAA	Establish a CDM Industry Association for industries interested in promoting their participation in carbon market and project-based trading of emission reductions	11,200	28,000	18,800	58,000
	Implementation of pilot GHG reduction projects	UNIDO	EEAA	Prepare/update feasibility studies for the areas of fuel switching in vehicles, potteries, carbonization systems and energy efficiency Identify and implement pilot projects	68,800	172,000	103,200	344,000
	Agency Management Support	UNIDO			6,685	16,100	9,963	32,748

	CDM portfolio is updated and project formulation and implementation supported	UNDP	EEAA	Survey and identify new carbon finance opportunities Update CDM portfolio to include new projects in key sector Provide support for the development of technical documentation for identified projects Hold hands-on training workshops to implement CDM and energy efficiency projects for policy makers, financial and professional institutions and practitioners Provide technical assistance for the execution of some CDM projects that were listed in the investment portfolio, primarily approved by the DNA but in need of technical support	18,000	40,250	27,050	85,300
	Implementation of pilot GHG reduction projects	UNDP	EEAA	Prepare/update feasibility studies for the areas of fuel switching and energy efficiency Identify and implement pilot projects	48,300	120,750	72,577	241,627
	Agency Management Support	UNDP			4,641	11,270	6,974	22,885
<i>1.2 Sub Total</i>					<i>242,997</i>	<i>590,426</i>	<i>366,997</i>	<i>1,200,420</i>
<b>1. Subtotal</b>					<b>351,067</b>	<b>719,896</b>	<b>479,377</b>	<b>1,550,340</b>

<b>UNDAF Outcome 1: By 2011, state's performance and accountability in programming, implementing and coordinating actions, especially those that reduce exclusion, vulnerabilities and gender disparities, are improved';</b>								
<b>Outcome 3: By 2011, regional human development disparities are reduced, including reducing the gender gap, and environmental sustainability improved'</b>								
<b>Outcome of Joint Programme (if different from UNDAF outcome(s), corresponding indicators, baselines, means of verification, resources, risks and assumptions</b>								
<b>Outcome 2: Enhanced capacity to adapt to climate change</b>								
<b>Indicators: Capacities built for adaptation and developing a society resilient to climate change impacts by 2010</b>								
JP Outputs (Give corresponding indicators and baselines)	SMART Outputs and Responsible Party	Reference to Agency priority or Country Programme	Implementing Party	Indicative activities for each Output	Resource allocation and indicative time frame			
					Y1	Y2	Y3	TOTAL
2.1 Adaptation strategies and practices integrated into climate sensitive development policies, plans, and programmes  <i>Indicators:</i> <i>ü A National Climate Change Adaptation Policy Framework for the three targets sectors</i>	Adaptation needs and gaps for climate resilient Integrated Coastal Zone Management assessed and identified	UNDP	MWRI	Existing policies assessed (climate screening and proofing), Adaptation capacity needs assessed and gaps using a gender sensitive methodology Macro-economic analysis(mini-Stem reviews) carried out for the cost of climate change on Coastal Zones using a gender sensitive methodology Advocate adoption of developed adaptation policies and strategies	7,000	21,000	7,000	35,000

<p><i>endorsed and adopted</i> <i>General awareness on impact of climate change</i></p> <p><i>Baselines:</i> <i>ü A National Climate Change Committee established, headed by the Minister of Environment</i> <i>ü UNDP-GEF ongoing SNC Project is identifying vulnerabilities and adaptation need for the different Egyptian economic sectors</i></p>	Adaptation needs and gaps for Integrated Water Resources assessed and identified	UNDP	MWRI	Survey available hydrological and statistical models in Nile Forecast Center Survey available RCM e.g. RACMO in cooperation of KNMI and PERCIS in communication with UK Met Office Identify and assess the expected outputs from the adapted RCM Tender for the adaptation of the RCM	6,000	18,000	6,000	30,000
	Climate risk management measures integrated into UN development programmes and operations	UNDP	EEAA	Asses and identify climate risk management measures to UN development programmes and operations Develop guidelines to reduce climate change impact on UN Projects	2,000	6,000	2,000	10,000
	A communication strategy on climate change prepared and implemented	UNDP	EEAA	Identify appropriate media channels of communication Develop a national communication strategy on climate change Increase awareness of policy makers and the public	7,000	21,000	8,028	36,028
	Agency Management Support	UNDP			1,540	4,620	1,612	7,772
	Adaptation needs and gaps for agriculture assessed and identified	FAO	MALR	Assess existing policies (climate screening and proofing), Carry out macro-economic analysis for the cost of climate change on agriculture sector using a gender sensitive methodology Identify and describe uncertainties, cost/benefits, risks, opportunities for potential adaptation measures Select the most vulnerable regional issues (e.g. identifying climatic risks) defined e.g. by various agro-ecosystems and identify related potential problems. Describe of the related agro-ecosystems regarding their main limitations, observed trends, socio-economic conditions. Assess adaptation capacity needs and gaps and practical adaptation measures for the selected regional agro-ecosystems, based on the identified problems using a gender sensitive methodology Advocate adoption of developed adaptation policies and strategies	55,000	80,000	51,729	186,729
	Agency Management Support	FAO			3,850	5,600	3,621	13,071
<i>2.1 Sub-total</i>				<i>82,390</i>	<i>156,220</i>	<i>79,990</i>	<i>318,600</i>	

2.2 Pilot measures implemented and scaled up in support of adaptation mainstreaming and policymaking								
2.2.1 Adaptation of water resources sector								
<p>Indicators:</p> <ul style="list-style-type: none"> <li>ü Successful adaptation and application of a RCM that is incorporated into the the NBI Water Resources Management Programs, Projects as well as Decision Support Systems</li> </ul> <p>Incorporation of adapted RCM outputs in formulation of national water resources management scenarios</p> <p>Baseline:</p> <ul style="list-style-type: none"> <li>ü Nile forecasting center of MWRI and its research institutes include hardware systems, hydrological and hydraulic models, data and high caliber professional staff</li> <li>ü Nile Ministerial Committee has approved the development of a Regional Circulation Model for the River Nile</li> <li>ü NBI is developing a Water Resources Management Model and a Decision Support System for River Nile</li> </ul>	RCM for the River Nile completed	UNEP	MWRI	Contract International climate modeling Center Construct climate scenarios from the most recent GCM experiments according to IPCC (2000)	100,000	273,458		373,458
	Agency Management Support	UNEP			7,000	19,142	0	26,142
	RCM outputs used in formulating national adaptation water management scenarios using IWRM processes and approach	UNESCO	MWRI	In conjunction with the NBI, use the outputs of adapted RCM to national water resources management scenarios using hydraulic and hydrological models such as High Aswan Dam Decision Support System (HADDSS), River Basin Simulation Model (RIBASIM) configured for Nile Basin, and others Train the staff of Ministry of Water Resources and Irrigation on developing water management scenarios Advocate for integration of the climate change impacts generated by the adaptive RCM into the national water resources management plans, policies and IWRM practices	135,000	134,000	133,822	402,822
	Links established with the NBI	UNESCO	NBI	Organize joint workshops and seminars for selected staff from Nilotec countries to discuss and exchange knowledge and information about climate change	22,000	22,000	20,000	64,000
	Agency Management Support	UNESCO			10,990	10,920	10,768	32,678
	Links established with the NBI	UNDP		Incorporate the climate change impacts and scenarios within the NBI water resources management programmes, projects as well as Decision Support System			29,170	29,170
	Agency Management Support	UNDP					2,042	2,042
<b>2.2.1 Sub-total</b>					<b>274,990</b>	<b>459,520</b>	<b>195,801</b>	<b>930,312</b>
2.2.2 Adaptation of Agriculture Sector								

<p>The agricultural sector is better prepared to facing up to expected climate change circumstances</p> <p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li>ü Number of stress tolerant varieties field crops</li> <li>ü Successful adoption of stress-tolerant crop varieties and proposed cropping patterns in selected locations</li> <li>ü Crop yield per unit volume of water for selected crops</li> </ul> <p><b>Baseline:</b></p> <ul style="list-style-type: none"> <li>ü A National Committee on climate change and agriculture has been established</li> <li>ü The Agricultural Research Center, Ministry of Agriculture constitute a research laboratory for agricultural climate</li> </ul>	Field crops stress- tolerant varieties developed	IFAD	MALR	<p>Identify three pilot locations in Nile Delta, Middle Egypt and Upper Egypt to represent different agriculture regions/systems in Egypt</p> <p>Conduct two seasons' field studies to evaluate the selected varieties under the three locations conditions, with different treatments of heat, water and salinity stresses</p> <p>Analyze the results of field studies and evaluate it using the DSSAT simulation</p>	123,000	70,000	44,327	237,327
	Knowledge on crop-stress varieties disseminated	IFAD	MALR	<p>Develop a communication strategy including identification of a suitable channel, means of communication and information dissemination (workshops- training programs and field days- extension publications- media applications- web applications)</p> <p>Implement the communication strategy including holding workshops, training programs and field days in order to increase the knowledge level and coping capacity of the stakeholders groups at different levels</p>	40,000	30,000	20,000	90,000
	Optimal cropping pattern formulated under climate change conditions	IFAD	MALR	<p>Prepare the data sets of future climate conditions based on the outputs of adapted RCM model.</p> <p>Prepare the data sets required to crop simulation model.</p> <p>Conduct simulation experiments to investigate the suitability of cultivating different crops under different combinations of temperature changes, water requirements and soil conditions.</p> <p>Propose and evaluate a number of crop patterns by using numerical and analytical analysis methods.</p>	50,000	50,000	40,000	140,000
	Agency Management Support	IFAD			14,910	10,500	7,303	32,713



	Optimal use of on-farm water resources	FAO	MALR	Identify three pilot locations in Nile Delta, Middle Egypt and Upper Egypt to represent different agriculture regions/systems in Egypt Analyze the collected data and information, and prepare the data sets required for simulation experiments. Conduct crop- simulations by using DSSAT crop model, in order to produce Deficit Irrigation (DI) management recommendations. Evaluate the simulated Deficit Irrigation (DI) management recommendations (study team work and expertise). Conducting a two seasons field studies to investigate the impact of Deficit Irrigation (DI) treatments on Water Use Efficiency, crop yield, energy requirement, socioeconomics, and other related parameters. Analyze the results of crop field-studies. Evaluate crop field-studies by using DSSAT simulation. Develop guidelines book of the application of Deficit Irrigation (DI) for producing major field crops under Egyptian conditions	108,000	90,000	82,598	280,598
	Agency Management Support	FAO			7,560	6,300	5,782	19,642
	<i>2.2.2 sub-total</i>				343,470	256,800	200,010	800,280
	<b>2. Subtotal</b>				700,850	872,540	475,801	2,049,191
	<i>JP Management</i>				70,000	57,000	63,270	190,270
	<i>Mid Term and Final Evaluations</i>					82,000	82,000	164,000
	<i>Support to NSC</i>				8,000	6,000	6,000	20,000
	Agency Management Support	UNDP			5,460	10,150	10,589	26,199
	<b>Sub/Total</b>				83,460	155,150	161,859	400,469
	<b>Grand Total</b>				1,135,377	1,747,586	1,117,037	4,000,000

## 4 Management and Coordination Arrangements

### 4.1 Coordination

The Steering Committee (SC) for the JP will consist of the RC (chair), a representative from the embassy of Spain, representatives from MOIC and MOFA as non-implementing parties. The Committee shall be responsible for providing oversight of the fund-supported activities, overall coordination of the JP and be responsible for making arrangements for assurance function. The responsibilities of SC shall include, but not limited to, 1) review, approve and amend this JP document; 2) discuss progress and identify solutions to problems facing any of the programme's partners; 3) review and approve consolidated financial and progress reports; 4) review and approve annual workplan; and budget revisions; and 5) review evaluation findings related to impact, effectiveness and the sustainability of the JP.

The SC will normally meet twice a year to review accomplishments and future activities, investigate bottle necks and barriers in order to reach a decision on expected actions. The SC will also serve as a channel for inter-partner exchange of communication and decision making is done by consensus.

Beside the SC, the JP will have a Programme Management Committee (PMC), which will be the main mechanism for formulating and performing the function of operational coordination to the JP planning and implementation activities. PMC will include representatives of UN agencies and their Egyptian counterparts including Secretary General of the Cabinet of Ministers on behalf of the SEC, President of Agricultural Research Center on behalf of MALR, President National Water Research Center on behalf of MWRI and Director of International Relations Department, EEAA. The PMC will provide technical and substantive leadership regarding the activities envisaged in the Annual Work Plan and provide technical advice to the NSC. The PMC will also be responsible for managing the JP resources to achieve the outcomes and output defined in the programme and address emerging management and implementation problems.

The RC or his/her representative will chair the PMC while JP Managers and experts can be invited to the meetings as needed. The PMC will normally meet quarterly but may have to meet more often depending on the need to address issues related directly to management and implementation of the programme.

Within the first quarter, a national full-time JP Programme Manager will be recruited and agency task managers will be designated. The JP Programme Manager will be responsible for daily programme management and will coordinate with designated task managers in the relevant agencies who will be collaborating with the host national counterpart for each programme component. The JP Programme Manager will be accountable and reporting to the PMC(s). An Advisory Board for the Programme could be established comprising renowned national experts.

Upon signing this JPD, all participating UN agencies and their Egyptian partners will engage in an exercise to prepare an inception report detailing activities, outputs, inputs, indicators and means of verification within the overall logframe of this JP. The report has to be approved by the PMC before it is submitted to the SC for approval and it will be a pre-requisite for dispersing the funds for implementation and execution of planned activities.

Each participating UN organization shall assume full programmatic and financial accountability for the funds disbursed to it by the UNDP MDTF as the Administrative Agent. As decided by the MDG Fund Management Board, participating UN Organizations shall be entitled to deduct their indirect costs on contributions received according to their own regulations and rules which will not exceed 7 per cent of the budget in addition to a onetime fee of 1 per cent for fund administration and fiduciary responsibilities for the Administrative Agent.

As for external communications that falls outside the working process of the JP given to the press or the beneficiaries of a programme will only be coordinated by UNDP as a shared statement and always acknowledge the Egyptian Government, the Spanish Government, and/or any other donor, and each UN agency involved in the JP in an equal manner. Beyond message and brand harmonization, joint external

communication will focus on the benefits of the JP including, but not limited to, lower transaction costs, effective programme delivery and efficient operation.

## 4.2 Cash transfer modalities

The allocated funds from MDG-F for executing activities will be transferred through UNDP as the AA to the participating UN Organizations in line with provisions of the JP Guidance Note Annex 4. The MDFT Office will transfer funds to HQs of the Participating UN Organizations which will in turn use their normal procedures to make the funds available at country level. Each participating UN Organization shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by UNDP MDFT. Each organization assumes complete programmatic and financial responsibility of the funds disbursed to it by the Administrative Agent and can decide on the execution process with its partners and counterparts following the organization's own regulations.-CO, which will then transfer the received cash among the other UN agencies participating in this JP. The programme will be subject to an annual audit – each agency alone.

## 5 Fund Management Arrangements

The MDG fund Management Board has decided to have a Pass-Through Fund Management arrangement and that UNDP MDFT will serve as the Administrative Agent (AA) for all country level activities. The Administrative Agent will release funds to the participating UN Organizations to finance its activities in annual allocations with second year advances (and beyond), subject to meeting performance and delivery benchmarks. Periodic reviews of programme management and finances will be undertaken by the country level steering committee. UNDP will disburse funds based on instructions from the Steering committee according to agreed annual work plans and budgets. Participating organizations are accountable for supporting the implementing partner in managing and executing activities of the JP. The participating agency is responsible for timely disbursement of funds, supplies and technical assistance to implementing partners. The programmatic and financial accountability for the JP components rests with the participating organizations and national partners managing those respective components of the JP. .

## 6 Feasibility, Risk Management and Sustainability of Results

- ✓ **Avoid any conflict with other envisaged reforms (social, industrial, fiscal, etc.):** As mentioned earlier, transportation and manufacturing are the major users of energy, followed by residential use. A country with a significant poverty problem, such as Egypt, cut down subsidies will cause the producers to pass a rise in energy prices to the consumers, which means that the vast majority of the population will witness rise in consumer price index, and their livelihood could easily be shocked.
- ✓ **Another risk associated with this JP is availability and reliability of data:** Building the RCM or examining the economic and financial feasibility of an intervention, are all actions that require valid, reliable data for proper prediction, projection and forecasting. Lacking valid, continuous time series, reliable data might not support proper analysis, and thus the validity of the results might be doubted. Lack of valid and reliable data constitute limitations on developing and calibrating the model. The JP design includes review and feasibility assessment of the RCM, and review before initiating such a major activity. For example, if the RCM is not doable, then JP management will explore alternative regional modeling methods and reallocate any excess funds to ICZM activities.
- ✓ **Need to assure government strong commitment to JP activities and to ensure sustainability after it is completed:** This programme is about building and developing capacities, and thus the willingness to transform and reform is central to the overall success of this programme. A requisite to finance efforts for capacity building and development in the form of procurement, training, study tours, etc. is to issue necessary decrees and reform executive regulations for an institutional setup that is conducive for sustainable development at large, where the principles of good governance are clear. Another assurance for government commitment is to avail in-kind contributions. These two requisites are essential for initiating the activities of the programme; otherwise the JP will not deliver its promised outcome, and

contribute to the achievement of the UNDAF outcomes. This might require the search for a national champion to give the JP the necessary political influence to assure its success.

- ✓ **Start from where CD4CDM ended, not to replicate the activities executed in the past:** Reviewing the final report of CD4CDM show resemblance between activities of this JP and that of CD4CDM. It is of utmost importance, at the outset of the execution, to draw the similarities and differences between the two initiatives to avoid replication, and express efficient use of available resources. There is a need for a prescription for marketing the updated list of project for CDM.
- ✓ **Executing mitigation and adaptation measures is economic and financial burden with no returns.** Not all interested parties have the scientific background to understand the importance of adaptation measures. They do not seem to give the issues associated with climate change the necessary attention. Without increasing awareness of key decision makers and civil society, including private sector companies, on the negative impacts of climate change, the success and sustainability of this JP is at risk. Through targeted and tailored macro-economic analysis (mini-Stern reviews), the JP will attempt to show those in doubts, the benefits of an energy efficient economy, as well as the payback of an economy resilient to the impacts of climate changes to convince them to allocate funds of their budgets for adaptation measures.
- ✓ **This JP is central to the sustainable development of Egypt:** The components of this JP support the sustainable development of Egypt, and the stage is ready for a major success, since EEAA is the lead institution in sustainable development initiatives and Climate Change. Furthermore, the donor community in Egypt is interested and willing to participate in the formulation and execution of a national strategy for energy efficiency, because energy is among the national priorities. Donors, such as USAID, EU and World Bank, are interested in the capacity and institutional development of DNA, and might be encouraged to earmark funds for the development of this new public body
- ✓ **Necessary media coverage secured:** One of the means to give the activities of JP momentum is to assure media coverage through information kits to support decision makers, and build consensus on issues and future actions.
- ✓ **The coordination among UN Participating Agencies is an essential element for the success of this JP:** Given that the JP includes six agencies and four ministries, the programme management coordination will be a real challenge unless the agencies and the government bodies will express great interest and support for the success of this joint initiative.

## 7 Accountability, Monitoring, Evaluation and Reporting

Participating UN Organizations in receipt of the MDG-F resources will provide the Administrative Agent with certified financial reports and will consolidate the financial report with the narrative reporting. Participating UN Organizations and their partners are responsible for the following statements and reports:

- Narrative progress reports for each twelve-month period ending 31 December, to be provided no later than two months after the end of the applicable reporting period;
- Annual financial reports on 31 December each year with respect to the funds disbursed to it from the JP Account, to be provided no later than three months after the end of the applicable reporting period;
- A final narrative report and financial report, after the completion of all JP activities financed from the Fund, to be provided no later than 30 April of the year following the financial closing of Joint Programme Activities;
- A final certified financial statement, to be provided no later than 30 June of the year following the financial closing of project activities.

In addition, participating agencies will be required to provide short quarterly progress reports to the JP Programme Coordinator. Based on the results framework summary table (early) and Programme Monitoring Framework (PMF) (below), each UN agency will prepare its own quarterly progress report

using a standard forms that will be agreed on during the programme inception phase. The monitoring form will focus on:

- ✓ Reporting on the number, size, kind, and quality of activities and tasks executed when the course of action started and completed.
- ✓ Reporting on the outputs both in quantitative and/or qualitative terms.
- ✓ Describing the kind and level of capacities development achieved
- ✓ Reviewing and reporting on the achievement of the immediate objective.
- ✓ Examining the impact of the capacity development efforts

The JP will be subject to a final evaluation and if necessary to a mid-term evaluation to ensure to assess the relevance, effectiveness of the intervention, and measure the development of the results achieved, on basis of the initial analysis and indicators in the PMF. Nevertheless, activities carried by the UN Agencies shall be subject to internal and external audit as articulated in their applicable Financial Regulations and Rules.

A variety of means for monitoring are available for use by programme and other stakeholders in monitoring JP including: 1) **Work Plans:** Programme or project managers must prepare annual work plans that translate this JPD into operational terms. The work plans should describe in detail the delivery of inputs, the activities to be conducted (which ones and how), and the expected results. They should clearly indicate schedules and the persons and/or institutions responsible for providing the inputs and producing results. Preparing the inception report is a sine qua non for initiating fund transfer. The work plans should be used as the basis for monitoring the progress of programme implementation. To keep representatives of the Government and UN agencies informed of the progress of programmes, managers should also provide them with work plans that do not need to be very detailed. These work plans could simply indicate critical milestones in implementation with the corresponding time table and responsible actors. 2) **Field Visits:** Programme managers must make field visits at regular intervals and adequate budgetary resources should be allocated for this purpose. In addition to inspecting the sites, physical outputs and services of the programme, the visits must focus on interaction with target groups to obtain their views on how the programme is affecting them (directly or indirectly, positively or negatively) and their proposed solutions to perceived problems. The RC or his/her staff must visit each project as often as necessary but no less than once a year. In some cases, it would be useful to organize joint field visits by UNDP and other development partners involved in the same types of programme. This may be more practical in terms of logistics than visits by one agency, but, more important, it will allow a more transparent approach to the discussion of similar issues with target groups and other stakeholders. Persons undertaking the field visits must prepare their reports either at the site or immediately after the visits, focusing on relevance and performance, including early signs of potential problem or success areas

**Table 2 Programme Monitoring Framework (PMF)**

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
<p><b>Outcome 1: Mainstreaming GHG Mitigation and CDM into National Policy and Expanding Access to Finance Frameworks</b></p> <p><b>Output 1.1: National policy reform for a more sustainable energy economy achieved</b></p> <p><b>Output 1.2: Expanded CDM Market</b></p>	<p>Indicators</p> <ul style="list-style-type: none"> <li>✓ SEC decrees issued that mainstream GHG mitigation measures through energy efficiency and renewable energy</li> <li>✓ Number of CDM projects registered</li> <li>✓ Energy Intensity</li> <li>✓ Per capita generation of CO<sub>2</sub></li> </ul> <p><b>Baseline:</b></p> <ul style="list-style-type: none"> <li>✓ SEC activated with a mandate to reform national energy policies</li> <li>✓ 36 PINs, 7 CDM projects, 2 upcoming CDM projects</li> <li>✓ Per capita emissions of CO<sub>2</sub> increased from 1.5 ton to 1.8 ton between 1990 and 2003 (IEA 2006)</li> <li>✓ Energy intensity declined from 1,784.2 ton/US\$ to 1,663.1 ton/US\$ between 1990 and 2002.</li> </ul> <p><b>Indicative time frame:</b> 2008-2010</p>	<ul style="list-style-type: none"> <li>✓ Official and external audits to assess amount of GHG reduction and energy savings</li> <li>✓ Expanded list of updated projects r</li> <li>✓ least 3 CDM PDD in 3 sectors are registered through the programme</li> <li>✓ an action plan for capacity building of DNA, with complete scheme for resources</li> <li>✓ Evaluation reports</li> </ul>	<p>Official reports Annual, bi-annual and quarterly Progress reports</p> <p>Annual, bi-annual and quarterly, mid term and final M&amp;E reports</p>	<p>UN agencies and Governmental partners</p>	<ul style="list-style-type: none"> <li>✓ National policy priorities, where energy is one of them</li> <li>✓ Avoid any conflict with other envisaged reforms (social, industrial)</li> </ul>
<p><b>Outcome 2: Enhanced capacity to adapt to climate change</b></p> <p><b>Output 2.1: Adaptation strategies and practices integrated into climate-sensitive development policies, plans and programmes</b></p> <p><b>Output 2.2: Pilot measures implemented and scaled up in support of adaptation mainstreaming and policymaking</b></p>	<p>Indicators:</p> <ul style="list-style-type: none"> <li>✓ A National Climate Change Adaptation Plan for the three targets sectors endorsed and adopted</li> <li>✓ Successful adaptation and application of a RCM that is incorporated into the NBI Water Resources Management Programs, Projects as well as Decision Support Systems</li> <li>✓ Number of stress tolerant varieties field crops</li> <li>✓ Successful adoption of stress-tolerant crop varieties and proposed cropping patterns in selected locations</li> <li>✓ Crop yield per unit volume of water for selected crops</li> </ul> <p>Baseline:</p>	<ul style="list-style-type: none"> <li>✓ Progress reports</li> <li>✓ RCM generated scenarios</li> <li>✓ Supervision missions</li> <li>✓ Evaluation reports</li> </ul>	<p>Official reports Annual, bi-annual and quarterly Progress reports</p> <p>Annual, bi-annual and quarterly, mid term and final M&amp;E reports</p>	<p>UN agencies and Governmental partners</p>	<ul style="list-style-type: none"> <li>✓ Risk associated with this outcome is: availability and reliability of data</li> <li>✓ Limitations on available data to develop and calibrate the models</li> <li>✓ Need to assure government strong commitment to the project activities and to ensure sustainability after the project is completed.</li> </ul>

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
	<ul style="list-style-type: none"> <li>✓ A National Climate Change Committee established</li> <li>✓ UNDP-GEF ongoing SNC Project is identifying vulnerabilities and adaptation need for the different Egyptian economic sectors</li> <li>✓ Nile forecasting center of MWRI and its research institutes include hardware systems, hydrological and hydraulic models, data and high caliber professional staff</li> <li>✓ Nile Ministerial Committee has approved the development of a Regional Circulation Model for the River Nile</li> <li>✓ NBI is developing a Water Resources Management Model and a Decision Support System for River Nile</li> <li>✓ A National Committee on climate change and agriculture has been established</li> <li>✓ The Agricultural Research Center, Ministry of Agriculture constitute a research laboratory</li> </ul> <p><b>Indicative time frame:</b> 2008-2010</p>				

## 8 Ex Ante Assessment of Cross-cutting Issues

With the aim of improving UN coordination, effectiveness and efficiency in supporting the realization of national goals and outcomes, this JP comes to support Egypt endeavor for sustainable development through meeting the country's responsibilities to minimize GHG emissions and prepare the nation to adapt to the risks of climate change.

This JP evolved from a consultative process where all partners (both UN agencies and Egyptian public bodies participating in the programme) have expressed their interests and shared their views since the inception of the programme. National Government agencies have been active participants in programme design, and promised in-kind contributions in the form of logistical support and staff time. This JP is, to a large extent, nationally 'owned'.

Sustainable development outcomes require greater attention to capacity enhancement. Central to this JP is institutional transformations for sustainable development through capacity development, building and enhancement. As the Results Framework attempts to show, this programme attempts to seek to build understanding and awareness among government agencies, ministries and implementing partners on the ground. This programme will serve as a platform for knowledge exchange. It could decrease duplicative activities. The features of this JP include joint needs-assessment, joint-monitoring and evaluation, collaborative decision-making, streamlined government dialogue and/or enhanced government participation in key multi-agency decision making bodies, in which will facilitate reducing duplicative activities across UN agencies as well as between UN agencies and their development partners. This programme will also serve as a vehicle for knowledge management and exchange within UN country team, and amongst the UN and government agencies. .

By building and developing the capacities of Egypt to address issues pertaining to climate change, the programme indirectly tackles pressing issues, such as poverty and gender equity. The programme, through its pilots, can generate job opportunities for the youth and women. The programme seeks to induce institutional transformation for sustainable development, which in itself is following the recommendations of Chapter 8 of the Agenda 21. The pilots in the sphere of agriculture will assist Egypt to assure food security, and protect the vulnerable peasant from the negative impacts of climate change, thus sustaining their livelihoods.

This programme symbolizes a collective UN position that can better assist sensitive development reforms. Data gathering and dissemination exercises present an excellent platform to introduce and benefit from a well coordinated JP. A collective UN voice can better advocate for and build consensus around contentious development issues. Furthermore, pass-through funding arrangement employed in this programme reduces transactions costs for government and donors.

The programme is an opportunity to address a set of gender issues in relation to climate change, such as:

- 1) Gender differences in the perception of, and the response to, climate change
- 2) Conduct gender sensitive climate change impact assessments
- 3) Identify the gender specific impacts of climate change and its resulting environmental damages
- 3) Analyze gender different preferences to recommended policies and measures and, what are the reasons for these differences
- 4) Assess if there are any gender differences in negotiations and decisions on climate change policies. Evaluate how and to what extent women are participating when it comes to working out and deciding about climate protection programmes and measures and how the results do and programmes impact gender relations, for example, climate policy guidelines and directives at the national.
- 5) Verify is awareness material and training packages on climate change has to be gender sensitive

## 9 Legal Context or Basis of Relationship



1. Given that UNDP is the Administrative Agent for the Joint Programme, this Project Document shall be the instrument referred to as such in Articles I and IX of the Standard Basic Assistance Agreement (SBAA) between the Government of EGYPT and the United Nations Development Program. The host country-implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.
2. The UNDP Resident Representative is authorized to affect in writing the following types of revision to this Project Document, provided that he/she 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.

## Annex A - Workplan

Work Plan for: Climate Change Risk Management in Egypt

Period: (Covered by the AWP) 2008

Annual targets	Key Activities	TIME FRAME				UN AGENCY	Responsib le. Party	PLANNED BUDGET		
		2008						Source of Funds	Budget Description	TOTAL
		Q 1	Q 2	Q 3	Q 4					
<b>Detailed work plan and budget for the JP within this JPD</b>	Prepare inception report					All UN agencies	Egyptian partners	MDG-F Fund	Recruit consultants Hold workshops	
<b>Output 1.1</b> National Policy Reform for a more sustainable energy economy achieved	Recruit an Energy Specialist to support the Technical Secretariat of the SEC Define Capacity Needs for Technical Secretariat					UNDP	Cabinet of Ministers	MDG-F Fund	National Consultant Equipment Agency Management Support	52,000 3,000 3850
<b>Target:</b> ✓ <u>Perform a thorough economic and environmental analysis of the impact of the reduction and progressive phase out of energy subsidies by sector</u>	Prepare policy paper to support energy policy reform					UNDP	Cabinet of Ministers	MDG-F Fund	National Consultant International Consultant Agency Management Support	18,000 5,000 1610
✓ <u>Draft a policy agenda and draft legal text for a national reform on both an energy subsidies reform and promoting of sustainable energy resources (energy efficiency and renewable energy</u>	Initiate preparation of long term national energy strategies/policies					UNEP	Cabinet of Ministers	MDG-F Fund	National Consultant International Consultant Agency Management Support	18,000 5,000 1610
<b>Output 1.2</b> Expand CDM Markets	Survey and identify new carbon finance opportunities and update CDM portfolio to include new projects in key sectors:					UNEP	EEAA	MDG-F Fund	National Consultant Agency Management Support	2,000 140
<b>Target:</b> • <u>Identify new PINs and update CDM portfolio</u>	Survey and identify new carbon finance opportunities and update CDM portfolio to include new projects in key sectors:					UNIDO	EEAA	MDG-F Fund	National Consultant Agency Management Support	2,500 175
• <u>Increase number of registered CDM projects</u>	Survey and identify new carbon finance opportunities and update CDM portfolio to include new projects in key sectors					UNDP	EEAA	MDG-F Fund	National Consultant Agency Management Support	3,000 210
	Support is provided for the development of technical					UNEP	EEAA	MDG-F Fund	National Consultant Agency Management Support	7,000 490

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Annual targets	Key Activities	TIME FRAME				UN AGENCY	Responsib le. Party	PLANNED BUDGET		
		2008						Source of Funds	Budget Description	TOTAL
		Q 1	Q 2	Q 3	Q 4					
	documentation (i.e. PINs and PDDs) for identified projects									
	Support is provided for the development of technical documentation (i.e. PINs and PDDs) for identified projects				UNIDO	EEAA	MDG-F Fund	National Consultant International Consultant	3,000 4,000 490	
	Support is provided for the development of technical documentation (i.e. PINs and PDDs) for identified projects				UNDP	EEAA	MDG-F Fund	National Consultant Agency Management Support	7,000 490	
	Strengthen CDM Unit				UNEP	EEAA	MDG-F Fund	Training Agency Management Support	2,000 140	
	Provide hands-on training workshops to implement CDM and energy efficiency projects for policy makers, financial institutions, professional institutions and practitioners				UNEP	EEAA	MDG-F Fund	Training Workshops Agency Management Support	3,000 210	
	Provide hands-on training workshops to implement CDM and energy efficiency projects for policy makers, financial institutions, professional institutions and practitioners				UNIDO	EEAA	MDG-F Fund	Training Workshops Agency Management Support	6,000 420	
	Provide hands-on training workshops to implement CDM and energy efficiency projects for policy makers, financial institutions, professional institutions and practitioners				UNDP	EEAA	MDG-F Fund	Training Workshops Agency Management Support	3,000 210	
	Provide technical assistance to execute some CDM projects that were listed in the investment portfolio and approved by the DNA but in need of technical support				UNEP	EEAA	MDG-F Fund	National Consultant Agency Management Support	3,000 210	

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Annual targets	Key Activities	TIME FRAME				UN AGENCY	Responsib le. Party	PLANNED BUDGET		
		2008						Source of Funds	Budget Description	TOTAL
		Q 1	Q 2	Q 3	Q 4					
	Provide technical assistance to execute some CDM projects that were listed in the investment portfolio and approved by the DNA but in need of technical support				UNDP	EEAA	MDG-F Fund	National Consultant Agency Management Support	5,000 350	
	Establish a CDM Industry Association				UNIDO	EEAA	MDG-F Fund	National Consultants International Consultants Training Workshop Equipment Agency Management Support	1,200 5,000 3,000 2,000 784	
	Implementation of pilot GHG reduction projects				UNEP	EEAA	MDG-F Fund	Sub-Contracts Agency Management Support	48,300 3,381	
	Implementation of pilot GHG reduction projects				UNIDO	EEAA	MDG-F Fund	Sub-Contracts Agency Management Support	68,800 4816	
	Implementation of pilot GHG reduction projects				UNDP	EEAA	MDG-F Fund	Sub-Contracts Agency Management Support	48,300 3,381	
<b>Output 2.1:</b> Adaptation strategies and practices integrated into climate-sensitive development policies, plans and programmes	Adaptation needs and gaps for Integrated Coastal Zone Management assessed and identified				UNDP	MWRI	MDG-F Fund	National Consultants International Consultants Agency Management Support	3,500 3,500 490	
<b>Target:</b> A National Climate Change Adaptation Plan for the	Adaptation needs and gaps for water resources assessed and identified				UNDP	MWRI	MDG-F Fund	National Consultants International Consultants Agency Management Support	2,000 4,000 420	

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Annual targets	Key Activities	TIME FRAME				UN AGENCY	Responsib le. Party	PLANNED BUDGET		
		2008						Source of Funds	Budget Description	TOTAL
		Q 1	Q 2	Q 3	Q 4					
three targets sectors is developed	Integrate climate risk management measures into UN development programmes and operations					UNDP	EEAA	MDG-F Fund	National Consultants Agency Management Support	2,000 140
Communication plan for increasing awareness on climate change is prepared	Prepare a communication strategy for raising awareness via various media channels					UNDP	EEAA	MDG-F Fund	National Consultants Agency Management Support	7,000 490
Feasibility study and tendering documents for RCM	Adaptation needs and gaps for agriculture assessed and identified					FAO	MALR	MDG-F Fund	National Consultants International Consultants Training Transport Travel Equipment Supplies Misc Agency Management Support	6,000 4,000 12,000 10,000 8,000 10,000 3,000 2,000 3,850
<b>Output 2.2:</b> Pilot measures implemented and scaled up in support of adaptation mainstreaming and policymaking	International tender for adaptation of RCM to River Nile					UNEP	MWRI	MDG-F Fund	Sub-Contract Agency Management Support	100,000 7,000
<b>Target:</b> Contract an international modeling center to adapt a RCM to River Nile Identify pilot locations and 3 field crop varieties to be tested and initiate cultivation Prepare a communication strategy for raising awareness on stress tolerant crops Identify pilot locations for testing optimal on farm water use	Establish and train a core group of specialist from MWRI and its relevant research institutes to use the models in assessing climate change impacts on water resources of Egypt Organize awareness workshops on climate change impacts and adaptation measures Collect data and information from different sources and establish a database for River Nile					UNESCO	MWRI	MDG-F Fund	National Consultants International Consultants Equipment Travel Training Supplies Misc. Agency Management Support	70,000 30,000 10,000 3,000 17,000 3,000 2,000 9,450
	Organize joint workshops and seminars with Nilotec countries					UNESCO	MWRI	MDG-F Fund	Training Workshops Agency Management Support	22,000 1,540
	Identify three pilot locations for developing stress tolerant crops Collect historical data on weather conditions, soil and water resources of the locations of the study Identify varieties of selected crops tolerant to heat, water, salinity stresses Identify crop varieties to be tested Initiate cultivation of selected crops					IFAD	MALR	MDG-F Fund	National Consultants International Consultants Transport Travel Equipment Supplies Misc Agency Management Support	6,000 4,000 5,000 20,000 50,000 28,000 10,000 8,610
	Identify the stakeholders groups. Establish contacts with targeted					IFAD	MALR	MDG-F Fund	National Consultants International Consultants	4,000 2,000

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Annual targets	Key Activities	TIME FRAME				UN AGENCY	Responsib le. Party	PLANNED BUDGET		
		2008						Source of Funds	Budget Description	TOTAL
		Q 1	Q 2	Q 3	Q 4					
	stakeholders groups. Prepare targeted oriented information packages to different stakeholders groups Initiate preparation of a communication strategy							Travel Equipment Supplies Misc Agency Management Support	5,000 22,000 5,000 2,000 2,800	
	Study the trend of crop pattern changes through the last 25 years, and identify the key parameters and forces driving the annual changes in crop pattern Identify the current major crop pattern based on historical agricultural statistics. Study the trend of change in cultivated area by using remote sensing techniques Explore cropping pattern alternatives				IFAD	MALR	MDG-F Fund	National Consultants International Consultants Transport Travel Equipment Supplies Misc Agency Management Support	6,000 4,000 1,000 10,000 22,000 3,000 4,000 3,500	
	Collect historical data on weather conditions, soil and water resources of the locations of the study. Identify major field crops that will be studied under this investigation Identify 3 pilot locations for testing optimal use of on-farm water resources				FAO	MALR	MDG-F Fund	National Consultants International Consultants Training Transport Travel Equipment Supplies Misc Agency Management Support	5,000 5,000 4,000 5,000 16,000 27,000 40,000 6,000 7,560	
	JP Management				UNDP	EEAA	MDG-F Fund	National Consultants Equipment Travel Misc Agency Management Support	52,000 7,000 3,000 8,000 4,900	
	Support to NCS				UNDP	EEAA	MDG-F Fund	Misc Agency Management Support	8,000 560	

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## Annex B - List of Abbreviations

AA	Administrative Agent
CCA	Common Country Assessment
CD4CDM	Capacity Development for Clean Development Mechanism
CDM	Clean Development Mechanism
CRM	Climate Risk Management
CSOs	Civil Society Organization
DNA	Designated National Authority
EEAA	Egyptian Environmental Affairs Agency
EU	European Union
FAO	Food and Agriculture Organization
FEI	Federation of Egyptian Industries
GAFI	General Authority for Investment
GEF SGP	Global Environment Facility Small Grants Programme
GHG	Greenhouse Gases
ICZM	Integrated Coastal Zone Management
IWRM	Integrated Water Resources Management
IFAD	International Fund for Agricultural Development
JP	Joint Programme
JPD	Joint Programme Document
M&E	Monitoring and Evaluation
MALR	Ministry of Agriculture and Land Reclamation
MDGs	Millennium Development Goals
MDTF	Multi-Donor Trust Fund
MOFA	Ministry of Foreign Affairs
MOIC	Ministry of International Cooperation
MOIT	Ministry of Industry and Trade
MW	Mega Watt
MWRI	Ministry of Water Resources and Irrigation
NBI	Nile Basin Initiative
NGOs	Non-Government Organizations
PDD	Project Design Document
PIN	Project Identification Note
PMC	Programme Management Committee
PMF	Programme Monitoring Framework
RC	Resident Coordinator
RCM	Regional Circulation Model
SC	Steering Committee
SCCF	Special Climate Change Funds
SEC	Supreme Energy Council
SLR	Sea Level Rise
SMART	Specific – Measurable – Achievable – Relevant – Timely
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Programme
UNDAF	United Nations Development Assistance Framework
V & A	Vulnerability and Adaptation