Mapping climate change initiatives in the Middle East and North Africa (MENA) region

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1 Consortium comprises Harewelle International Limited, NR International, Practical Action Consulting, Cranfield University and AEA Energy and Environment
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1. Description of enquiry

Objective
To identify current regional initiatives tackling Climate Change issues in the MENA region.

Purpose
To inform DFID thinking on whether it can add value to regional efforts on climate change in MENA.

Background
DFID’s Middle East and North Africa Department are developing a position on whether DFID can add value through support to efforts tackling climate change issues in the MENA region, including in relation to its bilateral country programmes (Occupied Palestinian Territories, Yemen and Iraq)

Geographical Scope
Concentrating on regional, but including multi-country initiatives (including Occupied Palestinian Territories and Iraq) across the following geographical area (blue shaded countries), but including any work linking to the Arabian Peninsula and the Horn of Africa.

Institution scope
Technical, academic/research and donor organisations in the following categories:
- International institutions. UNDP, EU, EC, WB, Islamic Development Bank, Arab Fund for Economic and Social Development, University networks, think tanks
- Regional networks. Kuwait Fund for development OPEC Fund for Development, Saudi Fund for Development, University networks, think tanks
- Regional institutions.
- National institutions.
- IGOs/Civil society organisations and networks

Subject scope
Climate change work being conducted at all levels, from high-level politics through to ground-level implementation under the categories of
- Research
- Communications and advocacy
- Policy and strategy development
- Capacity development
- Adaptation and DRR programmes
2. Mapping climate change initiatives in the MENA region

This report presents a selection of organisations and programmes operating in the Middle East and North Africa (MENA) in the field of climate change. The reports first provides a short description of, and web links to, initiatives covering the MENA region and makes the distinction between funds, government and inter-government organisations, NGOs and their networks, academic and research initiatives, and programs funded by donors. The report then looks at initiatives in the MENA countries DFID is currently working in: Iraq, the Occupied Palestinian Territories and Yemen. Finally, a few initiatives from specific MENA countries are presented.

The initiatives described below are varied in scale and in scope: they are implemented at the country level, regionally or globally, and cover areas such as research, capacity building, communication, knowledge transfer, policy, climate adaptation and mitigation. These initiatives are supported by a variety of donors, including DFID.

This response is based on an internet search and the search was limited to websites whose pages are available in English. Websites whose content is in Arabic or French only have not been included and therefore this response cannot be seen as a comprehensive list of climate change initiatives in the MENA region.

2.1 MENA REGION

2.1.1 FUNDS

Organization of the Petroleum Exporting Countries (OPEC)
Geographical scope: Multi-country
This fund is fund explicitly focused on climate change in OPEC (including MENA) countries. Four Arab Gulf states have pledged a total of US$750 million to a new fund for tackling climate change. Saudi Arabia will invest US$300 million in the fund, with Kuwait, Qatar and the United Arab Emirates pledging US$150 million each. The fund aims to support cleaner and more efficient petroleum technologies for the protection of the local, regional and global environment, and promote the development of technologies such as carbon capture and storage (CCS). It will also promote the transfer of environmentally friendly technologies from advanced countries to the 12 OPEC member countries, as well as other developing nations.

The OPEC Fund for International Development (OFID)
http://www.ofid.org/
Geographical scope: Global
The OPEC Fund for International Development (OFID), based in Vienna, Austria, is a multilateral development finance institution which seeks to promote cooperation between its member states and developing countries as an expression of the South-South solidarity. It does this mainly by providing financial resources to assist the latter group of countries in their economic and social advancement. The idea was that OFID’s resources are additional to those already made available by OPEC states through a number of bilateral and multilateral channels. OFID has implemented sixteen lending programs since its inception and provided assistance to social and humanitarian development operations through three regular grant programs: Technical Assistance, Research and Similar Activities and Emergency Relief Aid. In addition, OFID channelled US$ 972m to two international institutions: it has channelled OPEC members’ contributions to the initial capital and first
replenishment of IFAD’s resources and made irrevocable transfers in the name of seven OPEC members to the Trust Fund of the International Monetary Fund.

In 2010, for example, OFID has funded:

- The 3rd Annual Conference of the Arab Forum for Environment and Development, which will be held under the theme Water: Sustainable Management of a Scarce Resource, and will take place in Beirut, Lebanon in November.
- The International Conference on Food Security and Climate Change in Dry Areas held in Amman, Jordan.

**GEF Small Grants Programme**


Geographical scope: Global

The Small Grants Programme (SGP) works with communities around the world to combat the most critical environmental problems and has successfully demonstrated that supporting communities in their efforts to achieve more sustainable livelihoods is not only possible, but extremely important in bringing change and achieving global environmental benefits. SGP supports projects of non-governmental and community-based organizations in developing countries demonstrating that community action can maintain the fine balance between human needs and environmental imperatives.

The main focal areas of the programme are climate change abatement and adaptation, conservation of biodiversity, protection of international waters, reduction of the impact of persistent organic pollutants and prevention of land degradation. To date the program funding from the GEF is approximately US$401 million. In addition, the program has raised US$407 million from other partners in cash or in-kind equivalents.

Examples of relevant GEF funded climate change abatement projects include:

- Energy Efficient Manager Programme – aims to train 50 young Jordanian engineers in energy efficient technologies and techniques (Jordan). Implemented by the National Energy Research Center.
- Building Capacity for Energy Micro-Enterprises and NGOs – aims to build the capacity of 30 young entrepreneurs who will run rural energy micro-enterprises (Morocco). This project is being implemented by the Group for Study and Research in Renewable Energy.
- Utilization of Solar Energy for Drying Agricultural Crops and medicinal Herbs – this project has started 17 small women’s cooperatives that use solar dryers to prepare fruits, herbs and other produce for sale in local markets (Palestinian Authority). This project has been implemented by The Union of Agricultural Work Committees.

**European Neighbourhood Partnership Instrument (ENPI) of the European Commission (EC)**

http://www.enpi-info.eu

Geographical scope: Regional

The European Neighbourhood Partnership Instrument (ENPI) has been in place since 2007. It replaces the TACIS and MEDA cooperation programmes which aimed at Eastern European countries (TACIS) and Mediterranean countries (MEDA). Today ENPI is concerned with six Eastern European countries, Russia, and ten Mediterranean/MENA countries, namely: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, the Occupied Palestinian Territories, Syria and Tunisia. Almost € 12bn have been allocated to ENPI for the period 2007-2013, 90% of which goes to bilateral initiatives.

Cooperation with the Mediterranean countries (ENPI South) tends to focus on:

- Political and security dialogue (justice, freedom & security, migration, political dialogue)
- Economic and financial partnership (economy, energy, environment, information society, transport)
- Social, cultural and human partnership (audiovisual and media, culture, education and training, gender issues, youth, civil society and local authorities).

Although not specifically branded as climate change initiatives, several regional projects currently underway are linked to climate change. For example:
- Sustainable Water Management and De-pollution of the Mediterranean, which aims at promoting the enforcement of sustainable water management policies and the dissemination of good practices in the region in a context of desertification and increasing water scarcity and pressure on water resources.
- Support for the Enhanced Integration and the Improved Security of the Euro-Mediterranean Energy Market (MED-EMIP), which aims at enhancing the integration of the energy markets in the region, promoting improved security and sustainability, and promoting the transfer of knowledge on renewable energy related issues.

2.1.2 GOVERNMENT AND INTER-GOVERNMENT ORGANISATIONS

African Ministerial Conference on the Environment (AMCEN)
http://www.unep.org/roa/Amcen
Geographical scope: Regional (pan-African)
The African Ministerial Conference on the Environment (AMCEN) is a permanent forum where the ministers of the environment of the 53 African countries discuss matters of relevance to the environment of the continent. Algeria, Egypt, Libya, Mauritania, Morocco and Tunisia are therefore members of AMCEN.
As an example, the 13th session of AMCEN which took place in Bamako in June 2010 focused on “Enhancing the interrelationship between climate change, biodiversity and desertification for sustainable development”.
Furthermore, during a recent Consultative meeting (August 2010), the AMCEN Climate Change Communication Strategy was finalised. The strategy’s purpose is to “equip African Ministers of Environment and other African climate change actors and decision makers engaged at the technical and policy level with timely and relevant information they can use in making decisions and choices. The second objective is to promote effective communication and outreach on the implementation of the comprehensive framework for climate change programmes at national, sub-regional, regional level to the relevant stakeholders. The communication strategy will therefore serve as an essential tool for AMCEN in focusing countries and regional attention and efforts and in mobilizing policy, political, and financial support as well as enhancing public and civil engagement for the comprehensive response to climate change in Africa.”

African Centre of Meteorological Application for Development (ACMAD)
http://www.acmad.ne
Geographical scope: Regional (pan-African)
ACMAD was created in 1987 by the Conference of Ministers of the Unites Nations Economic Commission for Africa (UNECA) and the World Meteorological Organisation (WMO). ACMAD is currently based in Niamey in Niger and its member states are the 53 African countries (these include the North African countries of the MENA region).
ACMAD’s mission is to provide information on climate and weather for the promotion of sustainable development in Africa. The organisation does so by building the capacity of national meteorological services in terms of weather prediction, climate monitoring, transfer of technology and research.
In addition to the National Meteorological Services of the 53 African states, ACMAD’s partners include: Australia, Canada, China, France, Germany, Spain, the UK, the US; sub-
regional economic groupings such as SADC, ECOWAS, etc.; and international institutions such as Météo France, the Met Office, UNEP, UNDP, etc. An example of partnership is the African Early Warning and Advisory Climate Services (AEWACS) project, a €4 million three-year initiative whose objective is the development and provision of vigilance products and services for addressing climate risks.

2.1.3 NGOS AND THEIR NETWORKS

**Arab Forum for Environment and Development (AFED)**
http://www.afedonline.org
Geographical scope: Regional
The Arab Forum for Environment and Development (AFED) is a not-for-profit regional non-governmental organization. Its aim is to gather experts, the civil society, business community and the media in order to promote prudent environmental policies and programmes across the Arab region.
AFED is based in Beirut, Lebanon. Its civil society members are mostly social and environmental non-governmental organisations (NGOs) from Jordan, Kuwait, Lebanon, Syria or Tunisia. The Academic members are universities from Bahrain, Egypt, Israel, Kuwait, Jordan and Lebanon, whilst AFED corporate members include multinationals such General Motors or Philips and MENA-based banks, construction, engineering, environment, management organisations.
AFED’s main work areas are corporate environmental sustainability; environmental education, legislation, communication and awareness-raising; and the production of the report State of the Arab Environment.
In 2009 AFED published the report ‘Impact of climate change on the Arab countries’, which was designed to “provide information to governments, business, academia and the public about the impact of climate change on the Arab countries, and encourage concrete action to face the challenge.” The report can be found at http://afedonline.org/afedreport09/main.asp.

**Christian Aid**
http://www.christianaid.org.uk/
Geographical scope: Global
Christian Aid is the development and campaigning agency of 40 sponsoring churches in the UK and Ireland. Their Secure Livelihoods programme in the Middle East supports partners to analyse and adapt to climate change and build community resilience in conflict and post-conflict contexts. Within the region, they work in partnership with NGOs in Egypt, Lebanon, Iraq, Israel and the Occupied Palestinian Territories with a wide range of partners, allies and donors.

2.1.4 ACADEMIC AND RESEARCH

**Observatoire du Sahara et du Sahel (OSS) – Sahara and Sahel Observatory (OSS)**
http://www.oss-online.org/
Geographical scope: Regional
Observatoire du Sahara et du Sahel, based in Tunis, is an independent international organisation which was founded in 1992 to improve early warning and monitoring systems for agriculture, food security and drought in Saharan and Sahelian Africa, phenomena which are exacerbated by changes in the climate.
OSS’s mission is to provide an adequate framework for North-South-South partnership, in order to mobilize and reinforce the capacity of member countries to tackle some of the environmental issues they face. OSS’s mission is mainly concerned with the mitigation of drought, land degradation and desertification.
The OSS network currently includes 22 members countries (Algeria, Burkina-Faso, Cape-Verde, Chad, Djibouti, Egypt, Eritrea, Ethiopia, The Gambia, Guinea Bissau, Ivory Coast, Kenya, Libya, Mali, Mauritania, Morocco, Niger, Senegal, Somalia, Sudan, Tunisia and Uganda), as well as Canada, France, Germany, Italy and Switzerland, sub-regional, regional and international organizations and civil society.

OSS works in Africa’s arid, semi-arid and dry sub-humid regions, in line with key international agreements on the environment and sustainable development including Agenda 21, the United Nations Convention on Biodiversity (UNCBD), the United Nations Convention to Combat Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC) and the Millennium Development Goals (MDGs).

They have recently produced their Strategy 2010, linking to international initiatives that contribute to sustainable development in Africa, especially the Millennium Development Goals and the New Partnership for Africa’s Development (NEPAD).

OSS regularly produces publications, with among them:


**Mediterranean Renewable Energies Centre (MEDREC)**

http://www.medrec.org/

Geographical scope: Regional

The Mediterranean Renewable Energy Centre is committed to training and dissemination in addition to the development of pilot projects. The MEDREC, based in Tunis, was launched by the Italian Ministry of the Environment and Territory. It involves international and governmental institutions of Algeria, Egypt, Libya, Morocco and Tunisia. The Centre is the focal point of the Mediterranean Renewable Energy Programme (MEDREP).

One of the two principal objectives of this programme is to contribute to climate change mitigation by increasing the share of renewable energy in the energy mix of the North Africa region.

### 2.1.5 PROGRAMMES

Research programme on climate change and migration in the MENA region, funded by the Agence Française de Développement (AFD) and the World Bank.


Geographical scope: Regional

The Agence Française de Développement (AFD) and the World Bank organised in June 2010 a workshop on ‘Climate-induced migration and displacement in the MENA region’, which actually launched the research programme. The workshop looked at:

- Framing the debate on climate change and migration in the MENA region
- Methodologies to further research the climate and mobility interactions and strengthen the general framework of analysis
- Regional analysis about climate change and its mobility implications in the MENA region
- National analysis about climate change and its mobility implications in the MENA region.

Further details on the workshop, as well as all the presentations, can be found online at:
Global Change and the Hydrological Cycle (GLOWA)
http://www.glowa.org/eng/glowa_eng/glowa_eng.php
Geographic Scope: Multi-country
This inter-disciplinary and international research project is supported by the German Federal Ministry of Education and Research (BMBF). GLOWA is embedded in the BMBF research framework program on research for sustainability and has the objective of revealing to politics, industry and society the causes of the global weather pattern changes observed and the interactions involved, the extent to which the natural variability of global environmental phenomena is influenced by humankind, the extent to which changes can be forecast, and the implications of these changes for social systems, in particular with regard to the aim of sustainable development.
Sub-programmes include GLOWA Jordan River (GLOWA JR), an interdisciplinary and international research project providing scientific support for sustainable water management in the Jordan River region. See also the GLOWA JR Flyer. This project involves a research consortium comprising institutions from Israel, the Palestinian Autonomy, Jordan, and Germany (a full list of which can be found here). The project is coordinated from University of Tübingen, Germany. The research findings are used to support water managers in the Jordan River basin, and explicitly address the problems associated with climate and global change in a transboundary context.

Water Security in the Middle East
http://www.strategicforesight.com/
Geographical scope: Regional
This recent initiative of the Strategic Foresight Group, supported by the Governments of Switzerland and Sweden, aims to find sustainable and collaborative solutions to one of the region's most important issues. The initiative aims to undertake an independent assessment of water resources in Turkey, Syria, Iraq, Lebanon and Jordan, to examine emerging trends with regards to availability, needs, and environmental implications of alternative water scenarios. As part of this, the initiative aims to enable projects of a regional nature, which by their very characteristic cannot be undertaken at the national level, including the development of a regional climate change model.

Water Governance Programme for Arab States
http://www.undp.org/water/about_us.html
Geographical scope: Regional
The goal of the Water Governance Programme for Arab States is to improve the effective use and management of scarce water resources in Arab countries. It aims to support the achievements of the MDG 7 particularly with respect to improved water supply and sanitation, by promoting an integrated approach to water resources management in the Arab Region. This UNDP initiative is currently providing assistance on different levels through the following priority areas: integrated water resource management, transboundary waters, water supply and sanitation, as well as through four 'cross-cutting' areas: gender and water, human rights based approaches, climate change adaptation and water, capacity development and knowledge management.
Climate for Development in Africa (ClimDev Africa)
Geographical scope: Regional (pan-African)
Climate for Development in Africa (ClimDev Africa) is a joint initiative of the African Development Bank (AfDB), the African Union Commission (AUC) and the United Nations Economic Commission for Africa (UNECA). The initiative, which started in 2009, is due to run over an eleven-year period. The budget for the first four-year period is estimated at approx. $140 million (with £10 million coming from DFID).
There are three components to ClimDev Africa:
- Building the capacity of African climate institutions to generate and widely disseminate climate information necessary for planning. The aim is to ensure that reliable, useful and useable climate-related data are generated and made widely available to policy-makers, policy support organizations and the general population on the continent.
- Enhancing the capacity of end-users, particularly national development policy-makers, to be able to mainstream climate change into development plans on the continent.
- Implementing adaptation programs and projects that incorporate climate-related information so that lessons can be learned and good climate change adaptation practices defined.

United Nations Environment Programme’s Mediterranean Action Plan (UNEP/MAP)
http://www.unepmap.org
Geographical scope: Regional (Mediterranean countries)
The Mediterranean Action Plan (MAP) was set up in 1975, under the United Nations Environment Programme (UNEP)’s umbrella. UNEP/MAP involves 21 countries bordering the Mediterranean as well as the European Community. UNEP/MAP is based in Athens, Greece.
UNEP/MAP is concerned with assisting Mediterranean countries to meet the challenges of environmental degradation in the sea, coastal areas and inland, and to link sustainable resource management with development, in order to protect the Mediterranean region.
Amongst UNEP/MAP’s stakeholders is the Blue Plan (Plan Bleu). The mission of this regional activity centre based in France is to produce information and knowledge in order to alert stakeholders and decision-makers to environmental risks and sustainable development issues (including climate change) in the Mediterranean area, and to shape future scenarios in order to guide decision-making processes. Recent publications of interest include:
Plan Bleu (2010), Evaluation of the economic impacts of extreme events in Mediterranean countries, Blue Plan Papers 5. Available at:
Plan Bleu (2010), The foreseeable impacts of climate change on the water resources of four major Mediterranean catchment basins. Available at:

The Climate Change Adaptation in Africa Research and Capacity Development Program (CCAA)
http://www.idrc.ca/ccaa/
Geographical scope: Regional
This research and capacity development program managed by IRDC and with significant DFID funding (£30 million according to the R4D website) supports African countries in their efforts to adapt to the impacts of climate change. It is a program run and executed in Africa by Africans and, to the extent possible, involving the whole of Africa.
Projects in the MENA region currently include:
- Adaptation to the Impacts of Sea Level Rise in the Nile Delta Coastal Zone (Egypt)
- Synthesizing Learning on Adaptation to Climate Change (regional project involving ESARO and MENA countries)
- Using Demand Side Management to Adapt to Water Scarcity and Climate Change in the Saiss Basin (Morocco)
- Climate Change Adaptation in Africa: North African Proposal Development Support Fund (Morocco and Egypt)
- Community Based Adaptation to Climate Change in Africa (involved in implementing climate change adaptation pilot projects in communities in eight African countries, including Sudan)
- Adapting to Water Scarcity and Climate Change in North Africa: Exploring the potential for Demand Side Management (Morocco)
- Engaging Action Research in Adaptation to Climate Change at the Community Level in Morocco
- Moroccan Coastal Management: Building Capacity to Adapt to Climate Change
- Managing Risk, Reducing Vulnerability and Enhancing Productivity under a Changing Climate (involving a number of countries including Sudan)
- Adaptation to Climate Change in two Rural Communities on the Plains and in the Mountains of Morocco.

**Nile Basin Initiative**  
Geographical scope: Regional  
The Nile Basin Initiative (NBI) is a partnership initiated and led by the riparian states of the Nile River through the Council of Ministers of Water Affairs of the Nile Basin states (Nile Council of Ministers, or Nile-Com). The NBI seeks to develop the river in a cooperative manner, share substantial socioeconomic benefits, and promote regional peace and security. Cooperative water resources management is complex in any international river basin. In the Nile Basin, which is characterized by water scarcity, poverty, a long history of dispute and insecurity, and rapidly growing populations and demand for water, it is particularly difficult. The NBI started with a participatory process of dialogue among the riparians that resulted in their agreeing on a shared vision—to “achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources.”

**SysTem for Analysis, Research and Training (START)**  
[http://start.org/](http://start.org/)  
Geographical scope: Global  
START is a non-governmental research organization. It works to assist developing countries in building the expertise and knowledge needed to explore the drivers of and solutions to global and regional environmental change. The goal is to reduce vulnerability through informed decision-making. **Vulnerability Assessment and Risk Levels of Ecosystem Services for Climate Change Impacts and Adaptation in Moroccan Oases** is one of the 2010 START Grants for Global Environmental Change Research in Africa.

**Global Facility for Disaster Reduction and Recovery (GFDRR)**  
[http://gfdrr.org](http://gfdrr.org)  
Geographical scope: Multi-country
This program supports institutional capacity and consensus building for Disaster Risk Reduction (includes advocacy and training). The expected outcome is an established DRR unit in the organization.

**FAO Global Forestry Resources Assessments**
Geographical scope: Global
FAO Forestry Resources Assessments are conducted every 5 to 10 years and aim at having an overview of the management and uses of forest resources. Issues addressed in the assessments include: the extent of forest resources and their contribution to the global carbon cycle; health and vitality of forests; the biological diversity of forests; the productive, protective and socio-economic functions of forests; the legal, policy and institutional frameworks relating to forests.
The latest assessment is the Global Forest Resources Assessment 2010 (FRA 2010), which will be released in October 2010. Whilst the main report is yet to be published, a document highlighting its key findings is already available. Furthermore, individual country reports (on which the main report is based) are available for download on the [FAO website](http://www.fao.org/forestry/fra/en/). There is a country report for each one of the countries constituting the MENA region.

**UNDP regional programme for the Arab states (2010-2013)**
Geographical scope: Regional
Environment and sustainable development constitute one of the key focus areas of the UNDP regional programme. Indeed the programme document states that “it is of the utmost importance that governments in the region mainstream environment into national and regional development policy, and adapt to climate change.” The focus will therefore be on:
- Capacity development and encouragement of a regional debate in favour of adaptation to climate change and climate change mitigation
- Capacity building of governments and national and regional partners in order to develop an integrated approach to the management of water resources in the region.

In addition to this regional programme, individual UNDP country programmes have been developed for Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Saudi Arabia, Syria, Tunisia, the United Arab Emirates and Yemen. They can be accessed at [http://arabstates.undp.org/subpage.php?spid=18&sscid=98](http://arabstates.undp.org/subpage.php?spid=18&sscid=98).

**2.2 OCCUPIED PALESTINIAN TERRITORIES**

**The Palestinian Energy and Environment Research Center (PEC)**
Geographical scope: National
PEC was established in 1993 and is a national R&D institution responsible for research and implementation of renewable energies and energy efficiency in Palestine. Its mission includes abatement of GHG emissions and clean energy for the environment. PEC is linked with national, regional, and international partners through a very strong network based on partnerships. PEC has independent financial management audited by both the Palestinian Energy Authority and Ministry of Finance.

**Friends of the Earth Middle East**
Geographical scope: National
This NGO has a special consultative status with the Economic and Social Council (ECOSOC) of the United Nations. They were commissioned to produce a Palestinian Climate Change Policy (link above) with funding from the United Nations Development Programme’s (UNDP) and Programme of Assistance to the Palestinian People (PAPP).

### 2.3 YEMEN

**Agriculture and Adaptation to a Changing Climate in Yemen**


Geographical scope: National

The World Bank is currently supporting, with a combination of IBRD and GEF resources, the identification and implementation of coping strategies for adaptation to climate change for highland farmers who rely on rainfed agriculture. These strategies include the conservation and utilization of biodiversity important to agriculture (particularly the local land races and their wild relatives) and associated local traditional knowledge. The project will emphasize the conservation of agrobiodiversity and developing a range of coping mechanisms using predictive climate modelling.

**Pilot Programme for Climate Resilience, Yemen**

http://www.climateinvestmentfunds.org/cif/ppcr

Geographical scope: Country level

The Pilot Program for Climate Resilience (PPCR), approved in November 2008, was the first program developed and operational under the Strategic Climate Fund (SCF). The PPCR aims to pilot and demonstrate ways in which climate risk and resilience may be integrated into core development planning and implementation. In this way, the PPCR provides incentives for scaled-up action and initiates transformational change. The pilot programs and projects implemented under the PPCR are country-led, build on National Adaptation Programs of Action (NAPA) and other relevant country studies and strategies. They are strategically aligned with other donor funded activities to provide financing for projects that will produce experience and knowledge useful to designing scaled-up adaptation measures. Yemen is the only MENA country to be a pilot country for PPCRs.

### 2.4 IRAQ

**UNDP Baghdad**


Geographical scope: Country level

UNDP has been working with Middle Eastern governments to implement nationwide projects that help these countries adapt to an ongoing drought that is causing food insecurity, social unrest and cross-boundary tensions over water.

At the forefront of UNDP’s efforts is a drought response project, which is examining the adequacy of drought responses in the past and pinpointing Iraq’s most vulnerable areas and populations. UNDP is also supporting the development of appropriate technical capacities and institutional responses to mitigate future water shortages. Together with UN’s Office for Humanitarian Affairs (OCHA), UNDP is supporting the development of an effective emergency response capability at both the national and local levels, which includes short-term solutions to disasters related to water supplies.
EU Joint Strategy for Iraq
Geographical scope: Country level
Under this joint strategy, the EC’s and Italy’s interventions in this sector will be carried out in a complementary and integrated manner. This includes:

The Italian Government: Water supply management
Complementing the effort provided in drawing the Master Plan for water resources in the southern region the activities will focus in supporting public water resources capacity. For the period 2010-2014, the Italian Ministry of Environment will continue and strengthen its support extending water and environmental resources management to other priority areas of Iraq including the training of the Iraqi institutional structure which will be in charge of managing the UN Convention on Climate Change (UNFCCC) and the Kyoto Protocol (KP).

The EC: Water management and efficiency
Even though Iraq has been endowed with an abundance of water from two major rivers, the Tigris and Euphrates, years of conflicts (man-made disasters), devastation and mismanagement have led to critical water level decline and extensive pollution. As a result, according to the UN and other international organisations, Iraq’s water sector has “faced a major deterioration in recent years”. Since this sector is directly connected to human health and life-quality, the EC response will focus on: i) technical assistance to the Iraqi institutions (on the central and local levels) to strengthen the national capacity for water management including support to health institutions to prevent and control waterborne diseases; ii) water education in a large sense, addressing identified educational gaps of the greater public and including sector specifics requirements. Water management requires a holistic and inclusive program design including environmental aspects to secure the biodiversity of Iraq. An extensive package of solutions, including policies, incentives, technologies, infrastructure, operations management and organisational improvements is needed.

2.5 OTHER MENA COUNTRY-SPECIFIC INITIATIVES

Water Management and Adaptation to Climate Change in Morocco
Geographical scope: Country level
The Oum Er Rbia River basin contains half of Morocco’s public irrigated agriculture and produces 60 percent of its sugar beet, 40 percent of its olives, and 40 percent of its milk. For the past decade, lower-than-predicted rainfall patterns have reduced available irrigation water to about half the designed volume. As a result, farmers are supplementing surface water by pumping groundwater, and aquifers are falling by up to 5 meters per year. Uncertainty about irrigation water supplies is a major factor deterring farmers from switching to higher-value crops, and tensions over access to water resources are rising. The Moroccan government is working with the World Bank to design ways to make irrigation in the basin more sustainable, more profitable, and more resilient to climate change.