**United Nations Development Programme**

**Region: Arab States**

**Project Document (2013-2016)**

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| **Project Title:** | Arab Climate Resilience Initiative (ACRI) |
| **SP Outcome(s):**  | Strengthened capacity of developing countries to mainstream climate change adaptation policies into national development plans |
| **Expected RPD Outcome(s):** *(Those linked to the project and extracted from the RPD)* | Government capacities developed for the development and implementation of national climate change adaptation plans |
| **Expected Output(s):** *(Those that will result from the project)* | 1. Institutional capacity to address climate change adaptation, mitigation and negotiations strengthened
2. Resilience to the negative impacts of climate change strengthened and opportunities to enhance the production and use of sustainable energy created.
3. Knowledge management, advocacy and awareness in countries of the Arab region on climate change adaptation, mitigation and negotiations improved
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| **Implementing Entity:** | UNDP |
| **Responsible Parties:** | UNDP |

**Brief Description**

Current climatic variability within the Arab region indicates a trend towards an increase in surface air temperature and a decrease in rainfall. Hotter and drier conditions will likely exacerbate the frequency of extreme climate events, such as sand and dust storms, droughts and heat waves and will hamper agricultural production, particularly rain-fed agriculture. Resultant accelerated desertification rates will have direct negative effects on food security and income streams. These negative impacts are likely to jeopardise hard-won development progress across multiple sectors in all countries of the Arab region unless timely and integrated adaptation and mitigation interventions are implemented. To date, adaptation interventions have been implemented in the absence of a coordinated strategy/approach. Furthermore, cross-sectoral policies to address climate change impacts within the context of sustainable development strategies need to be developed.

Responding to these challenges and the development needs of the countries of the Arab region, the Regional Bureau for Arab States of the United Nations Development Programme (UNDP-RBAS) conducted extensive consultations in order to develop the Arab Climate Resilience Initiative (ACRI). Through this consultative process the countries of the Arab region agreed on three key programming areas, a) supporting institutional capacity to address the impacts of climate change; b) supporting local approaches to climate change adaptation; and c) enhancing resilience in the three priority areas of water and food security, sea-level rise and coastal erosion, and sustainable energy, which have been translated into outputs with associated activity results and actions. The overall objective of ACRI is to build the foundations of a regional platform to provide support for climate change resilience in countries of the Arab region. It will assist these countries to: i) build knowledge related to climate change priorities; ii) develop capacity to implement strategic programmes and policies in the three identified priority areas; and iii) establish partnerships and other cooperation modalities to undertake joint work to address this local, regional and global challenge. The ACRI will be building on existing national efforts and the establishment of partnerships formed throughout the initiative. Such partnerships will facilitate the sharing of knowledge and best practices, the transfer of technology and the implementation of the ACRI’s actions.

Total resources required: **USD 9,335,000**

Total allocated resources:

* Regular: 2,500,000
* Other:

Unfunded Budget: 6,835,000

In-kind contributions:

Programme Period: 2013 – 2016 (4 years)

Key Result Area (Strategic Plan) Adapting climate change and catalysing environmental finance

Atlas Award ID: 89263

Start date: 01 January 2013

End Date 31 December 2016

PAC Meeting Date 21 February 2012

Management arrangements: UNDP implemented

Management Arrangements \_\_\_\_\_\_\_\_\_\_\_\_

Agreed by (Government)

Agreed by (Implementing Partner):

Agreed by (UNDP):

# Acronyms and Abbreviations

|  |  |
| --- | --- |
| ACRIAFED | Arab Climate Resilience InitiativeArab Forum for Environment and Development |
| ALM | Adaptation Learning Mechanism |
| AWP | Annual Work Plan |
| BCPR | Bureau for Crisis Prevention and Recovery  |
| BDP | Bureau for Development Policy  |
| CBO | Community Based Organization |
| CO | Country Office |
| COP | Conference of the Parties |
| CSR | Corporate Social Responsibility |
| EBA | Ecosystem-Based Adaptation |
| EEG | Environment and Energy Group |
| EU | European Union |
| GCM | Global Circulation Models |
| GEF | Global Environmental Facility |
| GIS | Geographic Information Systems |
| HSE | Health, Safety and Environment |
| INC | Initial National Communication |
| IRENAICARDA | International Renewable Energy AgencyInternational Centre for Agricultural Research in the Dry Areas |
| LAS | League of Arab States |
| LDC | Least Developed Country |
| LEDS | Low Emission Development Strategies  |
| MIC | Middle-Income Country |
| MIE | Multilateral Implementation Entity |
| MDG | Millennium Development Goal |
| MRV | Measuring, Reporting, and Verification  |
| NAMA | National Adaptation Mitigation Actions |
| NIE | National Implementation Entity |
| NGO | Non-Governmental Organisation |
| PES | Payment for Ecosystem Services |
| PPP | Public Private Partnership |
| PPR | Project Progress Reports  |
| PM | Programme Manager |
| RTA | Regional Technical Advisor |
| RBAS | Regional Bureau for Arab States |
| RCS | Regional Service Centre |
| SIDS | Small Island Developing State |
| SLR | Sea Level Rise |
| SNC | Second National Communication |
| TACC | Territorial Approach to Climate Change |
| TSG | Technical Support Group |
| UAE | United Arab Emirates |
| UNDP | United Nations Development Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |
|  |  |

# Situation Analysis

The Arab region is hyper- to semi-arid[[1]](#endnote-1) and characterized by highly variable annual rainfall. It is one of the most water-scarce and dry regions of the world. Fifteen countries within the region fall below the international ‘water poverty line’ of 1,000 m3 per capita per year[[2]](#footnote-1). On average more than half of the region receives less than 100 mm of annual rainfall. Conversely, energy resources (e.g. solar and petroleum) are plentiful[[3]](#endnote-2). The population is largely dependent on climate-sensitive agricultural activities[[4]](#footnote-2) and a significant proportion of the population, as well as the major economic activities within the Arab region are located within flood-prone coastal zones[[5]](#footnote-3).

As a result of its aridity, the Arab region regularly experiences extreme climate events, such as sand and dust storms, droughts and heat waves. Current climatic variability within the Arab region indicates a trend towards an increase in surface air temperature and a decrease in rainfall[[6]](#footnote-4). Hotter and drier conditions will likely exacerbate the frequency and intensity of the events mentioned above. Indeed, this situation has already been documented for the Maghreb[[7]](#footnote-5) where droughts have become more frequent[[8]](#endnote-3). While rainfall levels are low and predicted to decrease, flash flooding is common in response to periods of intense rainfall. These trends are predicted to continue and climate change projections for the Arab region include the following:

* An increase in temperature of up to 2 °C over the next two decades and up to 4 °C by 2100[[9]](#endnote-4).
* A decrease in rainfall by as much as 20 % in parts of the region[[10]](#endnote-5).
* An increase in the frequency and intensity of extreme climate events[[11]](#endnote-6).
* Sea level rise (SLR) of between 18 cm[[12]](#endnote-7) and 59 cm[[13]](#endnote-8) by 2100.

The above-mentioned climate change projections are likely to have adverse impacts for many important sectors across the Arab region. It is expected, for example, that an additional 80 – 100 million people will experience water stress by 2025 as a result of the drier conditions and consequent reduced river flows and groundwater recharge rates[[14]](#endnote-9). This will increase the pressure on groundwater resources, which are already abstracted at near to unsustainable levels in certain parts of the Arab region[[15]](#endnote-10). Increased water shortages as a result of climate change are also likely to create challenges with regards to effective transboundary water resource management. Furthermore, hotter and drier conditions will hamper agricultural production, particularly rain-fed agriculture. A recent study estimates that for the region as a whole, agricultural output will decrease by 21% by 2080, with peaks of an almost 40% decrease in countries like Algeria and Morocco[[16]](#endnote-11). Accelerated desertification rates and a decrease in agricultural production will have direct consequences for food security and income streams, and place pressure on rural livelihoods.

Anticipated SLR is likely to negatively affect populations, infrastructure, groundwater resources and economic activities along the coastal zone through both direct coastal inundation and saltwater intrusion. Low-lying coastal areas in Tunisia, Qatar, Libya, United Arab Emirates (UAE), Kuwait and particularly Egypt are at risk of being adversely affected by SLR. The Nile Delta is also threatened by saltwater intrusion and soil salinization, with negative impacts on biodiversity, water supplies and socioeconomic systems[[17]](#endnote-12). Of all the countries in the Arab region, Bahrain is arguably one of the most at risk due to SLR. Bahrain is a Small Island Developing State (SIDS) which is predicted to lose 36 km2 of its coastline (which constitutes 10% of its total land area) following a SLR of 1 m by 2100[[18]](#endnote-13).

Climate change impacts also have the potential to create challenges for effective governance within and among the countries of the Arab region unless coordinated resilience strategies are adopted[[19]](#endnote-14). For example, in the absence of effective adaptation and mitigation, climate change is expected to trigger the migration of communities[[20]](#footnote-6) and create competition over scarce resources[[21]](#footnote-7). Local government capacities are likely to become over-burdened by increases in local urban populations following migration. Urbanization is a widespread phenomenon in all developing and developed countries and will exacerbate the issue related to growing urban centres. Such circumstances have the potential to create major localized challenges with regards to service delivery both within the public and private sectors[[22]](#endnote-15).

The impacts of climate change are likely to negatively affect some of the key economic sectors in the region in particular water, agriculture, health, tourism and biodiversity, and the resultant implications for human development are likely to be severe. In North Africa and Western Asia, these impacts are compounded by the existing exploitation of natural resources, accelerating population growth, and rapid urban expansion. In the GCC countries, oil revenues remain the main source of income and fluctuations and core changes in energy markets in the coming decades are leaving these countries vulnerable and in need of sectoral diversification. [[23]](#endnote-16)

Climate change impacts on land-use systems (chiefly on rangelands and rain-fed agriculture) and coastal management are of particular concern within the countries of the Arab region[[24]](#endnote-17). Agriculture remains a significant economic sector across much of the Mashriq and Yemen, contributing an average of 30% to GDP and employing more than 40% of the workforce[[25]](#endnote-18), and thus increased drought, decreased rainfall, and salt water intrusion will have dire outcomes for these populations. Such impacts are not limited to national boundaries, which highlights the need for a regional and coordinated approach. Anticipated population growth[[26]](#footnote-8) will compound climate change impacts as additional strain is placed on agricultural production and limited water resources. Climate change is likely to jeopardise hard-won development goals, including the Millennium Development Goals, and further compromise food and water security within the countries of the Arab region unless timely and effective adaptation and mitigation responses are implemented. At present, the Arab Gulf States[[27]](#footnote-9) are on track to meet all or most of the MDGs. However, it is unlikely that many of the Middle-Income Countries (MICs) and the Least Developed Countries (LDCs) in the region will achieve the MDGs by 2015[[28]](#endnote-19).

To date, resilience interventions within the countries of the Arab region have been implemented without the coordination of an overarching strategy/approach in the region. Furthermore, cross-sectoral policies to tackle climate change impacts[[29]](#footnote-10) have yet to be developed. Initiatives that have been undertaken tend to be fragmented largely because they have not been undertaken within the framework of a comprehensive territorial, national or regional climate change strategy/policy[[30]](#footnote-11).

Responding to the challenges described above and the development needs of the countries of the Arab region, the Regional Bureau for Arab States of the United Nations Development Programme (UNDP-RBAS)[[31]](#footnote-12) conducted a broad process of consultation in order to develop the Arab Climate Resilience Initiative (ACRI)[[32]](#footnote-13),[[33]](#endnote-20).

In order to identify the policy priorities and options for programming that are most relevant to the countries of the Arab region, UNDP-RBAS undertook broad-based research and produced several background papers in preparation for ACRI. Research priorities were identified by national and regional partners. The results of this research provided the framework for three regional consultations, one on each thematic area:

* Water scarcity, drought and desertification (Damascus, Syria, 15-16 September 2010).
* Sea level rise and coastal erosion (Cairo, Egypt, 20-21 September 2010).
* Sustainable energy and energy efficient paths to growth (Manama, Bahrain, 6-7 October 2010).

Over 200 individuals representing research institutions, the media, the private sector, national governments, multilateral institutions, the League of Arab States (LAS) and other regional bodies participated in the above consultations. This resulted in findings that outlined firstly the most pressing policy priorities related to climate change in the countries of the Arab region, and secondly concrete, practical ideas for policy and programming responses. These findings formed the basis for ACRI Regional Forum, organized by UNDP-RBAS and the Government of Morocco. Held on 3-5 November 2010 in Rabat, Morocco, the Forum brought together over 150 stakeholders including experts and policymakers, who together reviewed the evidence and policy options for enhancing climate resilience in countries of the Arab region. At the Forum, a fourth regional analysis and discussion on local and territorial approaches to climate change was held. The Forum provided a platform for ministers and key regional institutions to validate the outcomes and to establish their positions on and action plans for addressing climate change. The outcomes provided the foundation for the drafting of a Framework of Action (see ANNEX IV), which is the basis of this project document.

ACRI will benefit and promote inter-country collaboration in the Arab region. All of the countries of the region are Non-Annex 1 Parties to the United Nations Framework Convention on Climate Change (UNFCCC). However, at present, Qatar, Somalia, Kuwait, Iraq, Libya and Oman have yet to submit their Initial National Communications (INC) to the UNFCCC[[34]](#endnote-21). To date, only Algeria, Morocco, Egypt, Jordan, Lebanon, and UAE have developed their Second National Communications (SNC).

The consultative process and other research studies have highlighted the main constraints hindering mitigation and adaptation processes within the region, including:

* Weak institutional capacity to address climate change[[35]](#endnote-22) and limited integrated approach to climate change policy-making.

Institutional structures with a mandate to address climate change concerns are required for the effective coordination of efforts in the region - currently; the climate change mandate is generally limited to one ministry per country. This mandate needs to be integrated across all relevant ministries (i.e. environment, foreign, finance, agriculture, water, energy, etc.), included in fiscal policies, economic strategy, and development plans, and managed by dedicated bodies through a multi-sectoral approach in order to create an enabling environment for effective climate change resilience.

* Limited prioritization of climate change and resilience at a national and regional level resulting in limited integration into policy[[36]](#endnote-23).

The limited prioritisation awarded to climate change-related topics has resulted in the minimal availability of: i) fiscal incentives; and ii) direct financing of resilience options within the countries of the Arab region. The lack of prioritization is linked with the limited data and knowledge regarding climate change and its impacts in the region. This has resulted in the absence of climate change considerations in cross-sectoral and sectoral policies preventing the creation of an enabling environment to encourage large-scale investment in adaptation and mitigation technologies.

* Limited systematic observation and monitoring of climatic variables (including limited regional models)[[37]](#endnote-24) and limited understanding of climate change impacts and effective resilience solutions among national leaders and the public[[38]](#endnote-25), [[39]](#endnote-26).

Insufficient monitoring of climatic variables and limited research on interdisciplinary climate change by scholars, universities and specialized laboratories in the region are currently constraining climate change research, in particular downscaled predictions of climate change. This prevents an assessment of the likely impacts of climate change and leads to ineffective decision-making with regards to implementing adaptation interventions. Additionally, although numerous reports regarding climate change and its impacts have been developed in recent years (including regional reports), critical knowledge gaps still exist (including local climate change projections and a range of suitable adaptation options)[[40]](#endnote-27).

* Limited public awareness and engagement on climate change related topics.

Overall, there is a limited understanding among the broader public, at both local and national levels, of the specific impacts of climate change on livelihoods and across sectors. This also applies to the opportunities and strategies for adaptation, and of both sustainable energy production and use. [[41]](#endnote-28) While a recent poll conducted by the Arab Forum for Environment and Development (AFED) showed that 84% of the Arab public believe that climate change poses a serious challenge to their countries, the poll also indicated that education and awareness are widely considered one of the most important measures for adapting to the effects of climate change.[[42]](#endnote-29) The limited information and research that is currently available within the region has not been widely disseminated or has yet to be promoted among and tailored to the diversity of communities in the countries of the Arab region.

* Limited cooperation and collective action between countries within the region with regards to climate change threats.

Climate change impacts will be experienced across borders and are thus not merely a national concern. Consequently, in order to respond to anticipated climate change impacts on important land-use systems (i.e. rangelands, rain-fed agriculture, and coastal management) and sectors (e.g. water and energy) within the region, collaboration between the countries of the Arab region is critical. This is particularly the case for water resource management for riparian countries (i.e. transboundary water resource management). The present lack of coordinated responses to climate change (at a regional and sub-regional level) significantly hinders effective adaptation[[43]](#endnote-30).

* Limited access to financing options to develop low-carbon and climate-resilient development pathways (e.g. capacity constraints).

Capacity to access available sources of adaptation and mitigation funding is presently low within the region. A greater understanding of the funding options available is consequently necessary, including *inter alia* South-South collaborations and partnering with the private sector[[44]](#endnote-31).

* Lack of enabling environment for the promotion of energy efficiency and renewable energy.

There are numerous barriers that put renewable energy and energy efficiency at an economic, regulatory and/or institutional disadvantage to other forms of energy. These include: i) policy; ii) market; and iii) economic barriers[[45]](#endnote-32).

Although the recent and on-going transformation of governance systems in the region represent a challenge, the potential governance reforms can be seen as a major opportunity for ACRI to advance climate change adaptation and mitigation agendas to address these issues with a comprehensive and integrated approach. UNDP-RBAS will support the process of adopting climate change adaptation and mitigation principles within multi-sectoral ministries and engaging with the private sector as a partner in development. This will be facilitated by ACRI through: i) building capacity related to climate change; and ii) establishing local and regional partnerships to support on-going and implemented activities related to the programme

# Strategy

ACRI has been developed based on the consultative process detailed above in the situation analysis. The benefit of the wide and extensive consultations is that the resultant strategy/approach has been determined fully by the countries of the Arab region. The consultative process revealed a need for a coordinated response to address climate change impacts in the Arab region. ACRI aims to successfully support the countries in the region to adapt to changing climatic conditions in an integrated manner and to promote low carbon technology development. This will be achieved by:

* Building capacity across the region;
* Building on existing national and regional efforts;
* Coordinating with existing actors and establishing new partnerships;
* Addressing climate change impacts through sustainable development, gender-sensitive, pro-poor approach;
* Securing a high level of engagement and ownership by national partners and actors; and
* Developing, linking to and implementing activities which respond to the needs identified through the consultative process.

A key factor will be the establishment of partnerships throughout the programme. Momentum built through partnership formation will facilitate the sharing of knowledge and best practices, the transfer of technology and the implementation of the key actions detailed in the strategy. ACRI will align itself and link up with other RBAS regional programmes and UNDP global initiatives within the Environment and Energy Group[[46]](#footnote-14), as well as national programmes and broader regional undertakings (such as those led by ICARDA, LAS, other UN agencies, the World Bank etc.). ACRI is well-aligned with UNDP’s area of expertise in:

* the provision of technical assistance focused on strengthening institutional capacity at the regional and national levels;
* the provision of technical support for policy formulation and revision;
* proficiency in project design and implementation in relevant areas (such as climate change adaptation and energy);
* the provision of cross-sectoral capacity and expertise with experience and innovation in climate risk management;
* the mobilization of resources for development at the regional and national level; and
* Accessing global information networks, experience and knowledge that can be used to strengthen the implementation of ACRI.

ACRI’s work responds to key regional environmental declarations and frameworks of action, such as the Arab Ministerial Declaration on Climate Change adopted by the Council of Arab Ministries Responsible for the Environment, as well as the Arab Action Plan on Climate Change spearheaded by the LAS. ACRI also responds to Focus Area 4 (Environment and Sustainable Development) of the Regional Programme Document for the Arab States (2010 – 2013), in particular by contributing to developing capacity and enhancing regional dialogue regarding mitigation and adaptation to climate change. It will be implemented in close collaboration with the UNDP Country Offices (COs) to support/complement their national programmes and leverage their close partnership with a wide range of government sectors and other national actors including the UN Country teams.

Through the activities detailed below and in light of the upcoming Rio+20[[47]](#footnote-15), ACRI will enable countries of the Arab region to pave the way for sustainable development and will frame the way in which responses to climate change link with Green Economy as an instrument for sustainable development an poverty reduction. Furthermore, the concept of a Green Economy will come under consideration, broadly addressing the investments, strategies and actions necessary to achieve both short-term green economic growth, while also fostering new development paradigms in order to achieve sustainable development in the long-term. ACRI’s contribution to that process includes providing support to:

* Improving agricultural production without undermining the sector’s natural resource base, as well as strengthening institutions and developing infrastructure in rural areas of developing countries.
* Greening of the energy sector by improving energy efficiency and investing in renewable energy technologies, as well as encouraging government policies that enhance incentives for investment in the sector.
* Promoting sustainable development and poverty reduction including gender equity through mainstreaming climate resilience strategies into local and national development plans.

The consultative process resulted in a Framework of Action (See Annex IV). The identified programming areas were translated into the following outputs with associated activity results and actions as detailed in the Results and Resources Framework in Section III:

* Output 1: Institutional capacity to address climate change adaptation, mitigation and negotiations strengthened
* Output 2: Resilience to the negative impacts of climate change strengthened and opportunities to enhance the production and use of sustainable energy created
* Output 3: Knowledge management, advocacy and awareness in countries of the Arab region on climate change adaptation, mitigation and negotiations improved

A Technical Support Group (TSG) will be formed and will provide support in technical matters to the countries depending on the specific needs to prepare and implement their resilience plans. The TSG will be supported by existing national level networks of climate change experts and academics and will act in an advisory capacity. Additionally, the TSG will facilitate discussions between national level networks to share lessons learned and best practices. ACRI’s website will constitute a key platform for the virtual dissemination of information, and outreach to key government stakeholders, academics, and centres of scientific excellence as well as the international scientific community. This platform will be also linked to other knowledge hubs such as the GEF/ Adaptation Learning Mechanism (ALM).

The TSG will be responsible for:

* The overall technical guidance for the implementation of ACRI including support in the analysis and design of national adaptation and mitigation projects and facilitating access to the available data and information on climate variability and impacts.
* Providing technical support at a national and regional level to key ministries and stakeholders involved in the implementation of ACRI activities.
* Providing technical support for the: i) regional workshops and development of guidelines and toolkits; ii) assessments and vulnerability analyses in the three priority areas described in Output 2[[48]](#footnote-16); and iii) development of knowledge products described in Activity Result 3.1[[49]](#footnote-17).
* Facilitating the inter-country discussions among the national level networks of climate change experts and academics in support to advising the countries of the region.
* Support the Project’s raising awareness efforts at different levels

**OUTPUT 1: INSTITUTIONAL CAPACITY TO ADDRESS CLIMATE CHANGE ADAPTATION, MITIGATION AND NEGOTIATIONS STRENGHTENED**

Output 1 will target: i) Government ministries; ii) local and national level policy- and decision-makers from all countries of the Arab region; iii) national climate change key personnel/champions who can undertake training at a regional level and pass on the knowledge to the local level; iv) national and decentralized level development planners; v) public and private stakeholders; vi) institutional monitoring and assessment systems; vii) regional and national NGOs and CBOs; and viii) academics at research institutes.

This output will focus on the strengthening of institutional capacity in the countries through regional capacity building activities aimed specifically at enabling the implementation of adaptation and mitigation activities. Importantly the private sector will be engaged in order to establish partnerships to advance the implementation of the climate resilience agenda in the countries of the region. Training materials and toolkits will be produced and training will address among other issues i) accessing international and regional funding mechanisms[[50]](#footnote-18); ii) engaging in multilateral negotiations; iii) catalysing public-private partnerships; and iv) capitalizing on existing and starting new initiatives to integrate climate change considerations, including the variability of gendered impacts, into development and poverty reduction plans.

*Activity Result 1.1: Capacity to access international funding mechanisms in the areas of climate change adaptation and mitigation strengthened*

* + 1. Conduct an assessment of the potential global, regional and local funding mechanisms for climate change including the ones related to renewable energy and energy efficiency. The latter may include:
			- * Investigation of the creation of national renewable energy funds to support early market development
				* Investigation of potential for carbon financing in the region
				* Investigation of potential of local manufacturing of renewable energy systems at the national and regional level
		2. Liaise with partners and donors, bilateral and multilateral agencies for the consideration of renewable energy for development assistance projects
		3. Organize a series of regional training events with relevant stakeholders, including the private sector, from countries of the Arab region to discuss potential funding mechanisms (multilateral and bilateral) for climate change adaptation and mitigation projects and their requirements. The training will include strengthening capacities in the design and development of funding proposals and project documents
		4. Strengthen the capacity of the countries in the region to integrate adaptation and mitigation into economic and fiscal planning processes
		5. Organise training for the countries on NIE and MIE accreditation process to facilitate access to funds such as the Adaptation Fund
		6. Organise training workshops on methodologies for developing Public Private Partnerships around adaptation and mitigation interventions, with an emphasis on technology transfer

*Activity Result 1.2: Undertake assessments of financial mechanisms to promote sustainable energy options, including energy diversification*

* + 1. Investigate the creation of national renewable energy funds to support early market development
		2. Compile and disseminate best practice management of renewable energy funds from other regions
		3. Liaise with partners and donors, bilateral and multilateral agencies for the consideration of renewable energy for development assistance projects through e.g. organizing regional partner’s meeting
		4. Organize training workshop with financial institutions on green investments
		5. Encourage dedicated loan facilities to provide micro-finance for renewable technology development and energy efficient schemes, through e.g. convening a roundtable with loan facilities

*Activity Result 1.3: Capacity of the countries of the Arab region with respect to multi-lateral negotiations on climate change enhanced*

1.3.1 Design and implement a Capacity Development Plan to strengthen the capacity of the countries in multi-lateral negotiations. Key partners, national delegates and policy-makers of the Arab region will be targeted

1.3.2 Organize workshops to support key partners, national delegates and policy makers in effective positioning at multilateral negotiations on climate change. In 2012, a negotiators workshop will be held in the region in preparation for the Climate Change Conference COP18 that will be held in Qatar.

1.3.3 Follow-up capacity building customized for selected countries for a more engaged dialogue on negotiations issues (mechanisms, outcomes, challenges, etc.)

*Activity Result 1.4: Public-private partnerships (PPPs) catalysed in the three priority areas of water and food security, sea level rise and coastal erosion and sustainable energy*

1.4.1 Design and implement an action plan to engage the private sector as a planning and implementation partner in adaptation and mitigation interventions in: i) water and food security; ii) SLR and coastal erosion; and iii) sustainable energy. This would entail lessons learned from successful PPPs related to adaptation and mitigation and from South-South Cooperation knowledge sharing

1.4.2 Monitor and evaluate the implementation of the action plan with the countries in the region

1.4.3 Develop and disseminate methodologies and approaches for technology needs assessment at the national level. The private sector could play a key role in this process

1.4.4 Establish linkages with existing initiatives such as MASDAR [[51]](#footnote-19) to foster partnerships with the private sector in adaptation and mitigation interventions. This will facilitate the transfer of technology between the private sector and government, NGOs and research institutions

*Activity Result 1.5: Climate change resilience mainstreaming into gender responsive local and national level development, poverty reduction and economic growth plans strengthened*

* + 1. Develop toolkits and guidelines pertaining to:
		- Comprehensive reviews and prioritisation of relevant sectoral and cross-sectoral development plans to identify gaps related to climate change mainstreaming and identification of relevant intervention entry point. This review will include aspects related to gender equity
	+ Mainstreaming of climate change into existing development and poverty reduction plans.
	+ Scenario planning (at local, sub-national and national levels) to enable decision-makers to assess a range of possible climate change scenarios, and the implications of such scenarios for key development plans (including poverty reduction, combating desertification and with a focus on the priority areas)[[52]](#footnote-20)
	+ Country-specific data needs for the socio-economic cost-benefit analyses and biophysical assessments of climate change impacts (particularly extreme weather events such as floods, dust and sand storms, and heat waves), taking into account specific gender disaggregated statistics
		1. Provide training at the regional level on the use of the toolkits in order to strengthen capacity in integrating climate change into gender-sensitive development plans and poverty reduction plans at a national level
		2. Provide training at the regional level, with the support of the TSG, on developing national CC policies targeting areas and groups identified as being particularly vulnerable to the negative impacts of climate change, with a particular focus on gender
		3. Organise workshops on the development of Initial National Communications (INCs) and Second National Communications (SNCs) where relevant[[53]](#footnote-21)as one of the key elements for national development planning processes
		4. Develop guidelines and model TACC plan using lessons learned from countries in the region that are currently developing Territorial Climate Change Plans (i.e. Morocco). Include lessons learned on best resilience practices from other regions
		5. Organize training on TACC for key national stakeholders
		6. Provide training on Climate Fiscal Framework and Climate Public Expenditure & Institutional Review (CPEIR)

*Activity Result 1.6: Capacity in the field of scientific research on climate change in the countries of the Arab region supported*

* + 1. With the support of the TSG, identify academicians from research institutes, universities and centres of excellence in countries of the Arab region to participate in a knowledge sharing workshop on climate change research between academics and initiate dialogue, foster collaboration and opportunities for partnerships and joint publications
		2. Facilitate flow of information and networking with exchange programmes regionally and internationally with research institutes, international universities, centres of scientific excellence[[54]](#footnote-22), agencies and other partners.
* Assist and provide incentives for researchers to publish scientific findings in local and international journals. Assistance could be in the form of exchange programmes, venues for joint authorship, participation in related events and conferences as well as promoting and advocating for select research projects
	+ 1. Develop a cross-sectoral climate risk management research agenda for the countries of the Arab region in support of national risk management strategies. This is to be aligned with region and country-specific climate change risk management objectives.
	+ Identify and prioritise research needs to support strategy development and revision
	+ Engage key ministries to support the research agenda

*Activity Result 1.7: Capacity of countries of the Arab region to acquire resilience to negative impacts of climate change developed*

1.7.1 Provide catalytic funding to several countries for the implementation of climate resilience projects aligned with the respective countries’ national climate change plans and priorities. Criteria for proposal development will be set and funding awarded based on validity and relevance of proposals received. The funded projects will also serve a model for scale-up in the countries of the region as well as a good reference for climate resilience planning

1.7.2 Document lessons learned and best practices and establish requirements for adaptation and utilise lessons learned from the resilience projects to provide training at a regional level on undertaking similar studies for all countries of the Arab region

1.7.3 Organize a series of regional workshops to discuss and share information and best practices related to the resilience projects with key stakeholders

**OUTPUT 2: RESILIENCE TO THE NEGATIVE IMPACTS OF CLIMATE CHANGE STRENGHTENED AND OPPORTUNITIES TO ENHANCE THE PRODUCTION AND USE OF SUSTAINABLE ENERGY CREATED**

Output 2 will target: i) national level actors; ii) national decision- and policy-makers from all countries of the Arab region; iii) regional institutions; iv) NGOs and CBOs; and v) a range of regional and national technical experts including the private sector. Equitable gender participation will be emphasised throughout this process and women champions will be sought.

Three key focus areas, as identified by extensive ACRI stakeholder consultations will be addressed: i) water and food security; ii) SLR and coastal erosion; and iii) sustainable energy. This output will focus on building capacity in these three focus areas through training and development of toolkits. Climate change vulnerabilities will be assessed to identify priority focus areas. Downscaling of global and regional climate models for the identification of areas most vulnerable to climate change will be supported in collaboration with stakeholders in other sectors and related international agencies. Research will be undertaken to bolster baseline information in these three focus areas. Capacity will be strengthened for improving agricultural and SLR monitoring systems and for improving decision- and policy-making. In addition, capacity will also be built to develop renewable energy in countries of the Arab region and to create enabling policy environments for the uptakes of such technologies. Several available and relevant tools/literature should be used as appropriate[[55]](#footnote-23). Increased knowledge, capacity and up-to-date baseline data and information will enable improved and informed decision-making at a regional and national level to take place.

**PRIORITY AREA WATER AND FOOD SECURITY**

*Activity Result 2.1: Capacity to assess and address priority areas vulnerable to CC strengthened*

* + 1. TSG to advice on identifying vulnerable areas to climate change. This could be achieved through a regional assessment on water resources, land use, food security, and drought; through the development of climate profiles, ‘plausible climate scenarios’[[56]](#footnote-24) or downscaled models.

 Provide assistance on customising available information at a national level i.e. how to access the information, what information is available and the costs involved

2.1.2. Based on the regional assessment, further undertake regional social impact analysis on the impacts of climate change on water resources, land use and food security as well as other social impacts on vulnerable groups ( such as migration and public health impacts)

* + 1. Provide regional training, in collaboration with related regional initiatives and institutes and develop toolkits and material for national level technicians to: i) undertake vulnerability and drought impact assessments; ii) develop robust agricultural monitoring systems; and iii) upgrade networks of hydro-meteorological monitoring stations iv) develop more efficient and climate-resilient agricultural systems, including: i) drought-resistant crop technology; ii) more efficient irrigation techniques, crop insurance; and iii) potential relocation of crop growing

*Activity Result 2.2: Cooperative scientific research and knowledge building on increasing the resilience of the agriculture and water sectors to climate change impacts strengthened*

2.2.1 Compile and disseminate available information on increasing resilience of the agriculture sector to climate change impacts, as relevant to the region to: i) the ACRI website; and ii) ministries of agriculture and extension services within each country of the Arab region

2.2.2 Provide support to practical research on climate change impacts on agriculture. For example, for mixed crop-livestock systems that are widespread in dry areas, further research is required on: i) drought resistant crops and value chains; ii) drought-adapted livestock, iii) rangeland management, and iv) rehabilitation strategies

2.2.3 Develop best practice guidelines on how to improve agricultural practices aimed at using the most appropriate crops (particularly drought-resilient cultivars)[[57]](#footnote-25)

2.2.4 Develop guidelines on how to minimize agricultural losses due to extreme weather events

2.2.5 Compile and disseminate available information on best practices and indigenous knowledge for groundwater recharge and rainwater harvesting appropriate for the region

2.2.6 Develop guidelines on researching properties of water basins with remote sensing and ground truthing

2.2.7 Develop best practice guidelines on desalination, its integration with other needs such as space cooling and drying crops and how to mitigate and address associated environmental impacts

2.2.8 Identify the most vulnerable regions and communities affected by water scarcity and present the results in Geographic Information Systems (GIS) map-based formats

2.2.9 Initiate regional research programme on data on adverse effects of climate change and impacts of response measures taken by developed countries

*Activity Result 2.3: Training**programmes to support capacities for addressing potential climate change impacts including prevention conducted*

* + 1. Provide capacity building and technical support for the countries of the region to be able to :
* assess potential for alternative agricultural approaches e.g. agro-forestry and Ecosystem-Based Adaptation (EBA) measures such as maintenance and buffering of wetlands/rivers, restoration of rangelands/forest where applicable;
* develop improved water management approaches based on studies undertaken in Action 2.1.2 (to assess impacts of climate change on water resources, land use and food security at a regional level); and
* develop methodologies for protection against flash floods and collection of flash floods water resources

*Activity Result 2.4: Regional association for the arid areas and the oases in the countries of the Arab region supported*

2.4.1 Provide training on safeguarding oases using lesson learned from the programmes launched in Morocco for oasis territorial development to build capacity at a regional level

2.4.2 With the support of the TSG, create a special task force on arid areas and oases to facilitate information flow and sharing of best practice aimed at safeguarding oases

**PRIORITY AREA: SLR AND COASTAL EROSION**

*Activity Result 2.5: Capacity to identify and assess priority population groups, infrastructure and facilities vulnerable to coastal erosion and SLR strengthened*

2.5.1 Identify the most vulnerable regions and communities to SLR and coastal erosion and present results in GIS map-based formats (TSG to provide guidance)

* + 1. Compile and analyse available information on increasing resilience to SLR impacts, as relevant to the region, including:
		- projected extent of SLR and erosion from climate change regionally; and geographic and demographic vulnerability to such impacts (TSG to provide guidance

2.5.3 Provide support to research initiatives to assess SLR projections and methods of scaling up monitoring of SLR and assessment of potential impacts at the regional level

2.5.4 Disseminate information generated (using diagrams and policy briefs including socio-economic impacts) to decision- and policy-makers

*Activity Result 2.6: Capacity to establish monitoring systems for SLR and land subsidence strengthened*

* + 1. Develop SLR guidelines and advisory materials on how to: i) improve data availability, observation capacity in the region; ii) establish a monitoring system utilising existing equipment; and iii) mobilise funding for interferometric radar imagery analysis of urbanisation in the coastal zone and additional equipment (including: tide gauges, soil salinity monitors).

2.6.2 Build capacity to undertake national monitoring of SLR through a series of training events on: i) building databases; ii), analysing and interpreting data; and iii) utilising tools such as remote sensing, GIS, time series analysis and signal processing

2.6.3 Undertake an analysis to determine where additional equipment would be geographically best placed

*Activity Result 2.7: Programmes to address SLR and coastal erosion, including planning for disaster risk reduction, developed*

* + 1. Provide training on how to develop planning frameworks and strategies at the national and regional levels for addressing SLR and coastal erosion, including worst-case scenarios. Training will include:
		- integrating disaster risk reduction planning in line with the Hyogo Framework;
		- planning for movements of communities;
		- adapting shoreline building techniques and materials;
		- modelling, assessing and building marine defences; and investing in alternative tourism options
		- integrating salt and drought tolerant plants for coastal regions as part of integrated coastal zone management policies

**PRIORITY AREA SUSTAINABLE ENERGY**

*Activity Result 2.8: Capacity on improving energy efficiency and the production and use of renewable energy strengthened*

2.8.1 Develop a web portal consolidating existing information on alternative energy and energy efficiency at national and regional level as well as information for policy-makers on the potential of employment creation in the sustainable energy sector (e.g. ‘green’ skill development; educational programmes and support for clean energy entrepreneurs)

2.8.2 Undertake an assessment of the potential of alternative energy sources in countries of the Arab region e.g. methane harvesting from landfills, biogas, solar[[58]](#footnote-26) and wind-driven energy production; as well as the potential of reducing fuel demand

2.8.3 Create a think tank engaging with energy research and academic centres in the region, to establish strategic alignments and linkages with

 1) The private sector to:

* + - attract private sector investment and develop new technologies in renewable energy and energy efficiency (PPPs, private financing schemes);
		- facilitate technology transfer through the established partnerships;
		- scale-up investments to achieve economies of scale and reduce manufacturing costs;
		- promote the development of energy supply technologies (e.g. smart grids, hybrid plants and optimised storage and use systems

 2) Other regional and national key actors for the advocacy for employment opportunities in the sustainable energy sector (e.g. ‘green’ skill development; educational programmes and support for clean energy entrepreneurs).

* Produce information packages to disseminate to national and local decision- and policy-makers.
* Assess potential of local manufacturing of renewable energy systems at the national and regional level

*Activity Result 2.9: Policies, strategies and programmes for sustainable energy, particularly to the poorest communities, supported*

* + 1. Develop and implement capacity plan (through trainings, toolkits, TSG advice) with relevant stakeholders to develop comprehensive national energy efficiency and renewable energy strategies within national sustainable development planning processes, focusing on:
* integrating into energy sector, economic and environmental plans;
* establishing national targets and benchmarks for renewable energy usage and efficiency uptake;
* improving the overall investment climate, principally through encouraging PPPs;
* proposing measures to remove policy, market and economic barriers to more widespread use of clean energy;
* promoting energy efficiency through financial incentives such as price reform and tax rebates;
* developing energy efficient codes and standards for new buildings and establishing benchmarks;
* conducting mandatory energy audits for selected buildings and industrial facilities; and
* adopting a common policy for efficiency standards for selected household appliances and developing a labelling system for these appliances

2.9.3 Develop a roster for institutions specialized on advancing the field of clean energy i.e. those identified through Activity Result 1.6[[59]](#footnote-27) to provide advice on policy, strategy and programme development for the region

**OUTPUT 3: KNOWLEDGE MANAGEMENT, ADVOCACY AND AWARENESS IN COUNTRIES OF THE ARAB REGION ON CLIMATE CHANGE ADAPTATION, MITIGATION AND NEGOTIATIONS IMPROVED**

Output 3 will target: i) national level actors; ii) the regional and international community, through web-based information services; and iii) specialized media bodies who will publicize, raise awareness of, and engage the public in climate change issues. Links with other information sharing networks (in addition to the ACRI website) will be sought. Organisations and bodies involved in dealing with climate change resilience will be targeted through this output, as it aims to bring knowledge, information and data onto one easily accessible platform.

Regional climate change knowledge products will be produced and disseminated widely. Products will include among others: i) a regional report on climate change in the countries of the Arab region; ii) scientific articles; iii) bi-annual bulletins. This will be based on the programme results and key lessons learned. All publications and knowledge products will be published both online and in hard copy and in Arabic, French and English to enable national, regional and global access to the documents to ensure a wider outreach and sharing of lessons learned on with focus on addressing climate change in national development processes. Relevant climate change documents produced in English will be translated into Arabic and French for local use in the countries of the Arab region.

To date, limited awareness of the impacts of climate change has been a barrier preventing adequate climate management response across the countries of the Arab region. Additionally, a lack of easily accessible information has hampered efforts to understand the complexity of climate change impacts and adaptation in the countries of the Arab region. This output will enable numerous stakeholders to gain access to critical information and data, and will promote climate change resilience across the countries of the Arab region.

*Activity Result 3.1: Climate Change knowledge products developed*

* + 1. Develop a regional report on climate change in the countries of the Arab region. This will involve academics at the relevant centres of scientific excellence within the countries of the Arab region and will focus on the priority areas identified in Output 2[[60]](#footnote-28).
* The report will be a key tool to trigger policy advancements related to Activity Result 1.5[[61]](#footnote-29) and create regional and national dialogues. The report will be produced mid-term during ACRI’s lifetime, with outcomes directing the second half of the initiative.
* The report will make use of the toolkits developed in the production of the Arab Human Development Report[[62]](#footnote-30) to guide the participatory process

3.1.2 Publish a series of ‘popular science’ articles on climate change challenges and implications for the Arab region. These will be published in local newspapers and on the ACRI website. The articles ill address the three priority areas in Output 2[[63]](#footnote-31) in addition to other thematic areas

3.1.3 Establish a bi-annual bulletin on climate change resilience to be hosted within a relevant host organisation in the region, with the aim of setting a systemic stocktaking and knowledge/information dissemination mechanism

3.1.4 Regular update of ACRI website with learning materials from all regional training events; meeting summaries and other links to facilitate the sharing of knowledge and raise public awareness of the initiative

3.1.5 Investigate the use of social media (Facebook, Twitter and others) to facilitate knowledge transfer and stimulate debate and action around climate change issues

3.1.6 Translate relevant international climate change-related documents into Arabic and French (where applicable) on an annual basis

3.1.7 Publish periodic ‘Climate Change Alerts’ summarizing the outcomes of the climate change negotiation process and highlighting crucial issues pertaining to the Arab region

*Activity Result 3.2: Public awareness about climate change resilience, energy efficiency and renewable energy raised*

3.2.1 Develop and implement action plan for public awareness campaigns using the tools and products mentioned in the previous activity

3.2.2 Develop and publish material and stories on CC themes via different media channels (print, radio, TV, online), with special emphasis on reaching women and other vulnerable members of society

# Results and Resources Framework

|  |
| --- |
| **Intended Outcome as stated in the Regional Programme Document and Resource Framework:**Government capacities developed for the development and implementation of national climate change adaptation plans. |
| **Outcome indicators as stated in the Regional Cooperation Framework and Resources Framework, including baseline and targets:**Indicator: Number of countries developing and implementing a national climate change adaptation plans.Baseline: Few countries in the region are at initial stages of developing and implementing their national climate change adaptation planTarget: Four countries develop and implement national climate change adaptation plans |
| **Applicable Key Result Area (from 2008-2011 Strategic Plan):**Strengthened capacity of developing countries to mainstream climate change adaptation policies into national development plans |
| **Partnership Strategy:** The project-initially developed in consultation with the countries of the region, will aim at building partnership and alliances with the respective Government entities as well as key actors and research institutions at the national, regional and global levels |
| **Project title and ID (ATLAS Award ID):**Arab Climate Resilience Initiative  |
| **INTENDED OUTPUTS** | **OUTPUT TARGETS FOR (YEARS)** | **INDICATIVE ACTIVITIES** | **RESPONSIBLE PARTIES** | INPUTS |
| **Output 1: Institutional capacity to address climate change adaptation, mitigation and negotiations strengthened*****Output Baseline****:*1.Institutional capacity to address the impacts of CC in the countries of the Arab region exists in a limited number of countries.2.There are 19 countries that have signed and ratified the climate change convention but very few have developed climate change resilience plans, mainstreamed climate change into national development planning, and had experienced limited access to financing.3. There are no countries in the region acting as NIEs.4.The CC research outlook in the region is weak and not geared towards the priority issues, with limited inter-country collaboration***Output Indicator****:*1. Number of countries are NIE accredited and have access to international funding for climate change

2. Number of partnerships between governments and private sector addressing CC established3. Number of research initiatives on CC launched in the Arab region4.CC resilience measures integrated into number of development and poverty reduction plans including gender equality at a national and local level | Targets (year 1)A minimum of 4 countries are NIE accredited and have access to international funding for CCTargets (year 2)At least 3 partnerships between the private sector and governments established that address CCTargets (year 3)At least 3 research initiatives launched in the Arab regionTargets (year 4)CC resilience measures integrated into at least 3 development & poverty reduction plans (incl. gender equality at the national and local level) | *Activity Result 1.1: Capacity to access international funding mechanisms in the areas of climate change adaptation and mitigation strengthened** Conduct an assessment of global, regional and local funding mechanisms for climate change
* Liaise with partners and donors for the consideration of renewable energy for development assistance project
* Organize regional trainings on CC funding mechanisms & CC related project development processes
* Organize a regional training on integrating adaptation and mitigation into economic and fiscal planning processes
* Organize training for the countries on NIE and MIE accreditation process to facilitate access to funds such as the Adaptation Fund
* Organize training workshops on methodologies for developing Public Private Partnerships around adaptation and mitigation interventions

*Activity Result 1.2: Undertake assessments of financial mechanisms to promote sustainable energy options, including energy diversification** Investigate the creation of national renewable energy funds to support early market development
* Compile and disseminate best practice management of renewable energy funds from other regions
* Liaise with partners and donors, bilateral and multilateral agencies for the consideration of renewable energy for development assistance projects through e.g. organizing regional partner’s meeting
* Organize training workshop with financial institutions on green investments
* Organizing roundtable with loan facilities on micro-finance for renewable technology development and energy efficient schemes

*Activity Result 1.3: Capacity of the countries of the Arab region with respect to multi-lateral negotiations on climate change enhanced** Develop and implement Capacity development plan on multi-lateral negotiations on CC
* Organize 1 workshop per year to on effective positioning at multilateral negotiations on CC in preparation for the Climate Change Conference COP18 that will be held in Qatar
* Follow-up on customized capacity building for selected countries

*Activity Result 1.4: Public-private partnerships (PPPs) catalysed in the three priority areas of water and food security, sea level rise and coastal erosion and sustainable energy** Design and implement action plan to engage private sector actors as a planning and implementation partner in adaptation and mitigation interventions
* Monitor and evaluate the implementation of the action plan with the countries in the region
* Develop and disseminate methodologies and approaches for technology needs assessment at the national level
* Establish a knowledge network/community of practice around PPPs in adaptation and mitigation intervention

*Activity Result 1.5: Climate change resilience mainstreaming into gender responsive local and national level development, poverty reduction and economic growth plans strengthened** Produce toolkits and guidelines on mainstreaming CC into existing national (local & subnational) development and poverty reduction plans
* Organize regional training workshops on the use of the toolkits
* Provide training on developing national CC policies targeting areas and groups identified as being particularly vulnerable to the negative impacts of climate change
* Organise workshops on the development of Initial National Communications (INCs) and Second National Communications (SNCs)
* Develop guidelines and model plan on TACC planning
* Organize Training on TACC planning for key national stakeholders
* Provide training on Climate Fiscal Framework and Climate Public Expenditure & Institutional Review (CPEIR)

*Activity Result 1.6: Capacity in the field of scientific research on climate change in the countries of the Arab region supported** Organize knowledge sharing workshop on CC research to foster collaboration and opportunities for partnerships and publications
* Provide incentives for researchers to publish their work on CC in national, regional and international journals through supporting exchange programmes, joint authorship opportunities, participation in related events)
* Design a cross-sectoral climate risk management research agenda

Activity Result 1.7: Capacity of countries of the Arab region to acquire resilience to negative impacts of climate change developed* + - Provide catalytic funding for the implementation of climate resilience projects
		- Document lessons learned and best practices on climate resilience projects
		- Organize a series of regional workshops to discuss best practices related to resilience projects in the Arab region and disseminate lessons learned
 | UNDP | Expertise:600,000Meetings/Trainings/Travel: 1,570,000Staff: 760,000Contracts & Grants: 1,095,000Run cost: 50,000M&E: 30,000Audit: 20,000Misc.: 30,000**Output I Total: 4,155,000** |

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| **INTENDED OUTPUTS** | **OUTPUT TARGETS FOR (YEARS)** | **INDICATIVE ACTIVITIES** | **RESPONSIBLE PARTIES** | INPUTS |
| **Output 2: Resilience to the negative impacts of CC strengthened and opportunities to enhance the production and use of sustainable energy created*****Output Baseline****:*1. Capacity and knowledge on how to increase resilience in the priority areas is currently limited***Output Indicator****:*1. Number of evidence based CC responses integrated into development planning, policies, strategies and programmes
 | Targets (year 1)CC baseline assessments, informal gathering and analysis undertaken in at least 3 countriesTargets (year 2)Priority areas addressed in CC responses in at least 2 countriesTargets (year 3)At least 10 senior country representatives are trained on CC responses developmentTargets (year 4)At least 10 senior country representatives are trained on CC policy development | ***Priority Area Water and Food Security****Activity Result 2.1: Capacity to assess and address priority areas vulnerable to CC strengthened** Conduct regional assessment on water resources, land use, food security, drought
* Undertake social impact analysis of climate change based on the conducted assessment mentioned in 2.1.1
* Provide training at the regional level on how to address exacerbation of drought

*Activity Result 2.2: Cooperative scientific research and knowledge building on increasing the resilience of the agriculture and water sectors to climate change impacts strengthened** Compile and disseminate available information on increasing resilience of the agriculture sector to CC impacts
* Provide seed funds to practical research on CC impacts on agriculture
* Develop best practices guidelines on how to improve agricultural practices aimed at using the most appropriate crops
* Develop guidelines on how to minimize agricultural losses due to extreme weather events
* Compile and disseminate best practices for groundwater recharge and rainwater harvesting
* Develop guidelines on researching properties of water basins with remote sensing and ground trothing
* Develop best practice guidelines on desalination and how to mitigate and address associated environmental impacts
* Identify the most vulnerable regions and communities affected by water scarcity and present the results in GIS map-based formats
* Initiate regional research programme on data on adverse effects of climate change and impacts of response measures taken by developed countries

*Activity Result 2.3: Training**programmes to support capacities for addressing potential climate change impacts including prevention conducted** Provide capacity building and technical support for the countries of the region to assess potential for alternative agricultural approaches, develop improved water management approaches and develop methodologies for protection against flash floods and collection of flash floods water resources

*Activity Result 2.4: Regional association for the arid areas and the oases in the countries of the Arab region supported** Organize trainings on safeguarding oases, building on Morocco’s experience
* Create a knowledge network on arid areas and oases

***Priority Area SLR and Coastal Erosion****Activity Result 2.5: Capacity to identify and assess priority population groups, infrastructure and facilities vulnerable to coastal erosion and SLR strengthened** Conduct assessment on most vulnerable regions and communities to SLR and coastal erosion using GIS map based formats
* Compile and analyse information on increasing resilience to SLR impacts
* Provide support to research initiatives to assess SLR projections and methods of scaling up monitoring of SLR and assessment of potential impacts at the regional level
* Present generated information/research/data/maps on SLR in policy related forums

*Activity Result 2.6: Capacity to establish monitoring systems for SLR and land subsidence strengthened** Develop SLR guidelines on improving data availability and observation capacity in the Arab region
* Organize trainings on national SLR monitoring systems
* Undertake an analysis to determine where additional equipment would be geographically best placed

*Activity Result 2.7: Programmes to address SLR and coastal erosion, including planning for disaster risk reduction, developed** Organize training workshops on developing planning frameworks and strategies at the regional and national levels for addressing SLR and coastal erosion

***Priority area Sustainable Energy****Activity Result 2.8: Capacity on improving energy efficiency and the production and use of renewable energy strengthened** Develop a web portal on sustainable energy (with a potential focus on green economy
* Conduct an assessment of the potential of alternative energy sources in the Arab region
* Create a think tank on sustainable energy

*Activity Result 2.9: Policies, strategies and programmes for sustainable energy, particularly to the poorest communities, supported** Develop and implement capacity plan (through trainings, toolkits, TSG advice) with relevant stakeholders to develop comprehensive national energy efficiency and renewable energy strategies
* Develop a roster for institutions specialized on advancing the field of clean energy i.e. those identified through Activity Result 1.6[[64]](#footnote-32) to provide advice on policy, strategy and programme development for the region
 | UNDP | Expertise:500,000Meetings/Trainings/Travel: 800,000Staff: 760,000Contracts & Grants: 600,000Run cost: 50,000M&E: 30,000Audit: 20,000Misc.: 30,000**Output II Total: 2,790,000** |

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| **INTENDED OUTPUTS** | **OUTPUT TARGETS FOR (YEARS)** | **INDICATIVE ACTIVITIES** | **RESPONSIBLE PARTIES** | INPUTS |
| **Output 3: Knowledge management, advocacy and awareness in countries of the Arab region on climate change adaptation, mitigation and negotiations improved*****Output Baseline****:*1. Regional awareness and knowledge of CC impacts and resilience measures is limited

***Output Indicator****:*1. Number of CC knowledge products produced and discussed
2. Number of CC knowledge products downloaded from ACRI website
3. Number of CC-related knowledge products translated into Arabic and French
 | Targets (year 1)ACRI Website launched and at least 4 knowledge products on CC made available on the websiteTargets (year 2)At least 10 knowledge products on CC produced and discussedTargets (year 3)The regional report on CC in the Arab region is launched, disseminated and discussedTargets (year 4)At least 10 knowledge products on CC produced and discussed including bi-annual bulletins | *Activity Result 3.1: Climate Change knowledge products produced** Develop a regional report on climate change in the Arab region
* Publish a series of popular science articles on CC challenges and implications for the Arab region
* Develop bi-annual bulletin on CC resilience
* Regularly update ACRI website with learning materials and latest information
* Use social media applications to facilitate knowledge transfer and stimulate debate and action around CC issues in the region
* Translate relevant international CC-related documents into Arabic and French
* Publish periodic ‘CC Alerts’ summarizing the outcomes of the CC negotiation process and highlighting crucial issues pertaining to the Arab region

*Activity Result 3.2: Public awareness about climate change resilience, energy efficiency and renewable energy raised** Develop and implement action plan for public awareness campaigns on CC
* Develop and publish material and stories on CC themes via different media channels
 | UNDP | Meetings/Travel: 400,000Expertise: 900,000Contracts: 600,000Staff: 360,0000Run cost: 50,000M&E: 30,000Audit: 20,000Misc.: 30,000**Output III** **Total: 2,390,000** |

# Management Arrangements

Project Board:

A Project Board (PB) will comprise various roles. The Senior Supplier role will be represented by UNDP RBAS, the Executive role will be fulfilled by UNDP RBAS who as such will also chair the meetings, and Country Offices representatives of participating countries will attend as Senior Beneficiaries.

The PB will carry out the following functions:

* Ensure that the project goals and objectives are achieved in the defined timeframe;
* Review the project progress and suggest implementation strategies periodically;
* Review the project expenditures against activities and outcomes; and
* Approve Annual Work Plans

The PB will be the group responsible for making management decisions for the project and holding periodic reviews. In order to ensure UNDP’s ultimate accountability, the final decision making rests with UNDP RBAS in accordance with its applicable regulations, rules, policies and procedures. Project reviews by the PB will be carried out on an annual basis during the running of the project or as necessary when raised by the Project Manager. PB meetings may be carried out electronically when “physical” meetings are not possible.

Project Manager:

A full-time Project Manager will be responsible for the day-to-day management and decision making of the project and will be accountable to UNDP RBAS/RPD and the PB. S/he will ensure that the project produces the results specified in the project document, to the required standards of quality and within the specified constraints of time and cost. The Project Manager will provide the necessary secretariat to the PB and will prepare and submit the following reports/documents: Annual Work Plans, Quarterly and Annual substantive Progress Reports, Issue Log, Risk Log, Lessons Learnt Log, using standard reporting formats provided by UNDP.

The PM will be also working closely and coordinate with a range of key partners (national, regional and international) and will be supported by consultants and experts working in the different thematic areas of climate change of relevance to the project. S/he will also be coordinating the work of the technical support group and ensuring an optimized benefit from their technical guidance to the project and beneficiary countries. The PM will coordinate closely with various technical facilities that have already been established, including the Regional Technical Advisors for Mitigation, Adaptation and energy, Boots on the Ground colleagues, AAP’s Inter-Regional Technical Support Component (IRTSC) and others.

The ACRI PM will also coordinate closely with the Energy and Environment Practice Leader based in the Regional Centre in Cairo (RCC) as well as other practices (Poverty, CSOs, Governance, Capacity Development, Disaster Risk Reduction, and Knowledge Management) given the cross-practice nature of the interventions. This will ensure that the linkage between regional initiatives and the Country Offices in the region is maintained. This will be particularly important for sharing of knowledge with COs whose countries are not signatory to the project, as well as for building upon national undertakings, not to mention knowledge generation and the scale up potential for other countries.

While the overall oversight and decision making of the project remains with the Regional Programme of UNDP RBAS, the UNDP Country Offices for the countries endorsing ACRI will be responsible for the coordination and implementation of the activities at the national level, in accordance with standard UNDP policies and practices. The COs will receive technical, policy and programme support from the ACRI project manager, ACRI team and the TSG for the implementation of activities.

Technical Support Group

The regional Technical Support Group (TSG) will initially be comprised of a local or international expert in each of the three thematic areas: i) water and food security; ii) SLR and coastal erosion; and iii) sustainable energy. The TSG positions will not be on a permanent basis but rather *ad-hoc* as determined by the PM. The TSG will provide technical support and advice to the project as a whole in order to: i) ensure the most up-to-date and relevant information is used within ACRI; ii) the most appropriate training and capacity building is provided; and iii) appropriate coordination and south-south cooperation is drawn upon to ensure synergies, cross-learning and avoidance of duplication of activities. The TSG will, where appropriate, draw on the advice of existing national level networks comprised of climate change experts and academics. Additional specific expertise will be hired on a consulting basis to further provide technical expertise when needed. This will be determined by the PM in consultation with TSG and could be, for example, expertise related to: i) gender equity; ii) public campaigning and awareness raising; or iii) country-specific issues in one of the thematic areas

Project Support Unit:

The project will be based in Cairo. A Project Support Unit (PSU) in Cairo (that is already in place and fully operational) will assist the Project Manager in the day-to-day implementation of the project, through the provision of all services of operational nature. As the project grows, additional capacity will be contracted to reinforce the existing PSU to ensure timely and smooth implementation of activities.

Project Assurance:

Project Assurance will be the responsibility of UNDP RBAS/RPD. The Project Assurance role will support the PB by carrying out objective and independent project oversight and monitoring functions. This role ensures that the appropriate project management milestones are managed and completed

The Implementing Entity:

The project will be implemented by UNDP. UNDP will be responsible for the use of project funds through effective process management and well-established project review and oversight mechanisms. As such, UNDP will produce quarterly and annual financial progress reports, accounting for the use of project funds. The Project Manager will also sign a budgeted Annual Work Plan on an annual basis, as per UNDP rules and regulations.

**ACRI Project Manager**

**Project Board**

**Senior Beneficiary**

Participating COs representatives

**Executive**

UNDP- RBAS

**Senior Supplier**

UNDP

**Project Assurance**

UNDP RBAS/RPD

**Project Support Unit**

**Project Organisation Structure**

**Technical Expertise/Advice (TSG & Consultants)**

**RCC Practices / BDP/EEG**

# Monitoring Framework And Evaluation

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

Within the annual cycle

* On a quarterly basis, a substantive Quarterly Progress Report (QPR) shall record progress towards the completion of key results.
* An Issue Log shall be activated and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.
* Based on the initial risk analysis submitted, a risk log shall be activated and regularly updated by reviewing the external environment that may affect the project implementation.
* Based on the above information recorded in Atlas, an Annual Project Progress Report (APPR) shall be submitted by the Project Manager, using the standard report format.
* A project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project.

Annually

* **Annual Review Report**. An Annual Review Report shall be prepared by the Project Manager. As minimum requirement, the Annual Review Report shall consist of the standard format for the QPR covering the whole year with updated information for each above element of the QPR as well as a summary of results achieved against pre-defined annual targets at the output level.
* **Annual Project Review**. Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.
* **Independent mid-term review and final evaluation**. The project will be subject to an external mid-term review as well as an independent external end-of project evaluation at the end of the project life.

# Legal Context

Consistent with the Standard Basic Assistance Agreements between the Participating Countries and the United Nations Development Programme, the responsibility for the safety and security of the implementing partner (formerly executing agency) and its personnel and property, and of UNDP’s property in the implementing partner’s (formerly executing agency) custody, rests with the implementing partner (formerly executing agency).

The implementing partner (formerly executing agency) shall:

a)            put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

b)            assume all risks and liabilities related to the implementing partner’s (formerly executing agency) security, and the full implementation of the security plan.

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

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

# Annexes

* ANNEX I: Risk Analysis Log
* ANNEX II: Annual Work Plan (Year One)
* ANNEX III: (Draft) Terms of Reference for key staff members
* ANNEX IV: Framework of Actions/Conclusions of the Regional Forum on addressing climate change impacts in the Arab countries, Morocco 2010
* ANNEX V: References

**ANNEX 1: Risk Analysis Log**

|  |  |  |
| --- | --- | --- |
| **Project Title: Arab Climate Resilience Initiative** | **Award ID:** | **Date:** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Description** | **Date Identified** | **Type** | **Impact &****Probability** | **Countermeasures / Management response** | **Owner** | **Submitted, updated by** | **Last Update** | **Status** |
| 1 | Lack of commitment by signatory countries around certain intervention areas (i.e. promoting sustainable energy opportunities) |  | Political, Strategic | P= 2 I= 2 | Strong stakeholder involvement has already taken place prior to programme design, resulting in stakeholder and political buy-in from the start.Awareness-raising and advocacy among decision-makers is a major programme focus. Identification and development of leadership/champions for climate change intervention areas will take place.  | Project Manager |  |  |  |
| 2 | Limited engagement and involvement of government ministries beyond Ministries of Environment (i.e. Ministries of Finance, Foreign Affairs, Energy, Agriculture, etc) |  | Political | P=3I=3 | An integrated approach to dealing with climate change impacts and supporting mitigation efforts will require a coordinated response by government ministries. Throughout the consultative process and events held as part of the launch of ACRI, a wide range of ministerial representatives were successfully engaged around ACRI’s different thematic areas. Depending on the country and intervention area, the Project Manager will direct advocacy towards relevant ministries with the support C.O. counterparts. | Project Manager |  |  |  |
| 4 | The mobilization of adequate financial resources to support the cost of implementing intended Project outputs fails.  |  | Financial | P=3I=3 | Project Team will maintain close coordination to identify and pursue funding opportunities, including non-traditional donors. The Project Team will also develop a partnership strategy and pursue its implementation. | Project Manager |  |  |  |
| 5 | The engagement and involvement of signatory governments in project activities fails due to political unrest or transformation. |  | Strategic, Political | P=2I=3 | The project will closely follow political developments across the region and align the scope of regional activities accordingly. | Project Manager |  |  |  |

## ANNEX II: ANNUAL WORK PLAN

***YEAR 1[[65]](#footnote-33) - 2012***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EXPECTED OUTPUTS** | **PLANNED ACTIVITIES** | **TIMEFRAME** | **RESPONSIBLE PARTIES** | **PLANNED BUDGET** |
| Q1 | Q2 | Q3 | Q4 | Funding Source | Budget Description | Amount |
| **Output 1: Institutional capacity to address CC adaptation, mitigation, and negotiations strengthened****Baseline**:There are no countries in the region acting as NIE**Indicators**:Number of countries are NIE accredited and have access to international funding for climate change**Targets:** A minimum of 4 countries are NIE accredited and have access to international funding on CC | Activity Result 1.1.Conduct an assessment of global, regional and local funding mechanisms for climate change  |  |  | X | X | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Consultants | 15,000 |
| UNDP TRAC | Miscellaneous | 4,000 |
| Organize regional training on CC funding mechanisms & CC related project development processes |  |  |  | X | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Workshop | 80,000 |
| TSG Team (5 x 6 months) | 50,000 |
| UNDP TRAC | Travel | 25,000 |
| UNDP TRAC | consultants | 10,000 |
| Organize a regional training for countries on NIE and MIE accreditation process to facilitate access to funds such as the Adaptation Fund |  |  | X |  | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Consultants | 10,000 |
| UNDP TRAC | Workshop | 60,000 |
| UNDP TRAC | Travel | 10,000 |
| UNDP TRAC | Miscellaneous | 5,000 |
| Activity Result 1.3 Organize 1 workshop for national delegations on effective positioning at multilateral negotiations on CC |  |  |  | X | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Consultants | 10,000 |
| UNDP TRAC | Workshop | 65,522 |
| UNDP TRAC | Travel | 20,000 |
| **Output 2 Resilience to the negative impacts of CC strengthened and opportunities to enhance the production and use of sustainable energy created****Baseline:** Capacity and knowledge on how to increase resilience in the priority areas is currently limited**Indicators:****1:** Number of evidence based CC responses integrated into development planning, policies, strategies and programmes**Targets** * CC baseline assessments, informal gathering and analysis undertaken in at least 3 countries
 | ***Priority Area – Water and Food Security***Activity Result 2.1 Conduct regional assessment on water resources, land use, food security and droughtUndertake social impact analysis of climate change based on the conducted assessment |  |  | X | X | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Consultants | 14,000 |
| UNDP TRAC | Contracts | 10,000 |
| ***Priority Area – Sustainable Energy***Activity Result 2.2Conduct an assessment of the potential of alternative energy sources in the Arab region. |  |  | X | X | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Consultants | 15,000 |
| UNDP TRAC | ACRI support Staff 6 months | 12,000 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Output 3: Knowledge management, advocacy and awareness in countries of the Arab region on CC adaptation, mitigation and negotiations improved****Baseline:** Regional Awareness and knowledge of CC impacts and resilience measure is limited**Indicators:****1:** Number of CC knowledge products produced and discussed2. Number of CC knowledge products downloaded from ACRI website**Targets** * ACRI website launched/updated and at least 4 knowledge products on CC made available on website
 | Activity Result 3.1 Initiate the production of the regional Climate Change Report (team, background papers, |  |  | X | X | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Consultants | 40,000 |
| UNDP TRAC | Contracts | 26,000 |
| UNDP TRAC | Travel | 20,000 |
| UNDP TRAC | Miscellaneous  | 4,000 |
| Activity Result 3.2 Develop and initiate the implementation of the action plan for public awareness campaigns on Climate Change |  |  | X | X | UNDP | UNDP TRAC | Staff | 18,308 |
| UNDP TRAC | Support staff Amman | 1,292 |
| UNDP TRAC | Consultants | 15,000 |
| UNDP TRAC | Miscellaneous  | 5,000 |
| * **Other Costs**
 |  |  |  | UNDP TRAC | Rent | 11,681 |
| UNDP TRAC | Running cost | 5,188 |
| UNDP TRAC | PSU Share | 9,853 |

**TOTAL BUDGET YEAR 1: USD 700,000**

**ANNEX III: (Draft) Terms of References for key staff members**

**Project Manager**

**1. Purpose and Scope of Assignment**

Under the direct supervision of UNDP/RBAS Chief of the Regional Programme Division and in close coordination with the related RCC Practices, the Project Manager is responsible for the day-to-day management and timely delivery of ACRI and associated outputs in accordance with agreed timelines, standards and budget. Key accountabilities include:

**Intellectual leadership**

* Lead and manage ACRI with oversight and accountability for delivery
* Act as a lead resource person in the field of climate change resilience across the region ensuring UNDP’s credibility in delivery on a highly visible programme.
* Provide policy advisory services to the Governments and other partners in the region on climate resilience and sustainable energy issues.
* Provide guidance on and lead the development of cross practice synergies.
* Coordinate and capitalize on the approaches and tools in other practices.
* Represent UNDP/RBAS in regional forums and provide substantive inputs to help shape climate resilient development strategies, policies, norms and standards.
* Provide substantive and managerial leadership for all personnel engaged in the ACRI.
* Lead the advocacy process for ACRI in the region including promotion of the UNDP related global policies, norms and standards around climate change, as well as sharing best practices in the region.
* Lead and engage national and regional partners in joint programming and policy dialogue on climate resilience issues, with the coordination of and advisory support from the TSG.
* Support the development of a knowledge management system in conjunction with the TSG and support the utilization of knowledge management strategies and tools.

**Coordination**

* Liaise and collaborate with the RCC related Practice leaders and policy advisors to ensure a synergistic support to COs in the areas of climate change adaptation, mitigation, governance, capacity development, public awareness raising, as well as gender mainstreaming.
* Liaise with UNDP Country Offices to support the implementation of ACRI activities at the national level, with the coordinated advisory support of the TSG for both Country Offices and national entities.

**Partnership Building and Resource Mobilization**

* Manage strategic project relations through liaising with individuals and institutions including government officials, international organizations, civil society, media, the private sector, and private foundations.
* Identify sub-regional and inter-country development and integration opportunities and incorporate them into capacity development initiatives to address cross border issues and collaboration.
* Lead partnership building with international, regional and local institutions and agencies working in climate-related sectors and fields (e.g. water, agriculture and food security, sustainable energy, urban planning, coastal infrastructure, tourism, etc.);
* Manage ACRI’s efforts in resource mobilization including the development of multi-partner proposals;

**Operations Management**

* Overall responsibility for the timely implementation of ACRI according to agreed work plan and timely delivery of all reporting requirements (e.g. Annual and Quarterly Work Plans, budgets, progress reports, risks and issue logs, and other briefings).
* Prepare/manage the preparation of all progress reports including reporting on financial and donors’ reporting
* Prepare all operational matters and documentation needed to organize the project activities, and overlook and account for all the logistics related to the operation of the project, in close coordination with the Programme Support Unit.
* Manage all of ACRI’s financial and human resources, including recruitment, monitoring, assessment and coordination of team members, the TSG, and other consultants.
* Coordinate timely issuance of contracts and due payments of the project team and consultants.
* Coordinate all required procurement processes in line with procurement guidelines.
* Ensure the organization and coordination of ACRI meetings (technical and high-level) including the provision of secretariat for the high level meetings.
* Advise RPD on matters of strategic coordination with project stakeholders including beneficiaries and partners, and undertake related action as needed.
* Undertake missions and other related tasks as needed to fulfill the purpose and scope of this assignment.

**Technical Support Group Advisor(s)**

**1. Purpose and Scope of Assignment:**

A team of senior experts in the different disciplines addressed by ACRI (adaptation, mitigation, R&D, and others) will be formed to provide support technical support and expertise to the project team for the successful implementation of activities. This Technical Support Group (TSG) will be formed at the regional level and will provide support in technical matters to the countries depending on their specific needs in preparing and implementing their resilience plans.

The TSG will be supported by existing national level networks of climate change experts and academics acting in advisory capacities. Additionally, the TSG will facilitate discussion between national level networks to share lessons learned and best practice at a regional level. ACRI’s website will constitute a key platform for the virtual dissemination of information, and outreach to key government stakeholders, academics, and centres of scientific excellence as well as the international scientific community.

The TSG will be responsible for:

* The overall technical guidance for the implementation of ACRI including support in the analysis and design of national adaptation and mitigation projects and facilitating access to the available data and information on climate variability and impacts.
* Providing technical support at a national and regional level to key ministries and stakeholders involved in the implementation of ACRI activities.
* Providing technical support for the: i) regional workshops and development of guidelines and toolkits; ii) assessments and vulnerability analyses in the three priority areas of water security, food security, SLR and sustainable energy; and iii) the development of knowledge products such as articles, bulletins, climate change report as part of ACRI’s public awareness activities.
* Facilitating inter-country discussions among the national level networks of climate change experts and academics in support to advising the countries of the region.

**ANNEX IV: Framework of Action/Conclusions of the Regional Forum on addressing climate change impacts in the Arab countries, Morocco 2010**





United Nations Development Programme

Regional Bureau for Arab States

**Framework of Action / Conclusions of the Regional Forum**

**on Addressing Climate Change**

**Impacts in the Arab Countries**

[**http://www.arabclimateinitiative.org**](http://www.arabclimateinitiative.org)

**Rabat, Morocco**

**4 November 2010**

The Arab Climate Resilience Initiative (ACRI) is based on the *Arab Declaration on Sustainable Development* of the Arab Ministers Responsible for Development, Planning and Environment, of 2002; on the *Arab Ministerial Declaration on Climate Change* issued by the Council of Arab Ministers Responsible for the Environment, of 2007; and on the resolution of the Arab Summit on Climate Change, of 2010.

ACRI is furthermore based on studies by the Intergovernmental Panel on Climate Change (IPCC), which identified the potential impacts of climate change on the Arab countries.

ACRI is based as well on the outcome of regional consultations supported by UNDP in collaboration with Arab governments in Syria, Egypt, Bahrain and Morocco. During those consultations, discussions focused on climate change challenges related to water scarcity and desertification; coastal erosion and sea-level rise; sustainable energy; as well as the local approach to dealing with climate change impacts.

ACRI meetings promoted dialogue and exchange of information on climate change between government officials and experts and specialists in related fields. This approach enabled participants to recognize the appropriate regional priorities and identify strategic areas of action. Some common themes emerged during each of the consultations, such as the need to build capacity at all levels, strengthen regional cooperation, support scientific research, and increase private sector engagement. Specific proposals were made with respect to the issues discussed in these meetings and based on further consultation these proposals can be formulated in an integrated framework.

The programming areas of the ACRI framework include the following:

1. **Supporting institutional capacity to address the impacts of climate change;**
2. **Supporting local approaches to climate change adaptation;**
3. **Enhancing resilience in the three priority areas of water and food security, sea-level rise and coastal erosion, and sustainable energy.**

These areas will comprise a range of interventions, outlined as follows:

**Programming Area 1**

**Supporting institutional capacity to address the impacts of climate change:**

1. Accessing international funding mechanisms in the areas of climate change adaptation and mitigation;
2. Enhancing the capacity of the Arab countries with respect to multilateral negotiations on climate change;
3. Catalyzing public-private partnerships in the areas of the initiative;
4. Integrating climate change into development plans and particularly plans for poverty reduction;
5. Supporting capacity in the field of scientific research on climate change, linking the relevant centers of scientific excellence in the Arab countries and contributing to the dissemination of scientific production in this regard; and
6. Developing the capacities of Arab countries to enhance resilience to extreme-weather events such as floods, dust and sand storms, and heat waves.

**Programming Area 2**

**Supporting local approaches to climate change adaptation:**

Implement a programme to support area-specific and local initiatives to address climate change according to the particularities of each country, based on the following:

1. Strengthening the capacity of local actors in the integration of climate change into area-specific and local development plans, as well as poverty reduction programs;
2. Supporting the development of systems for managing information and knowledge about the local experiences and initiatives to respond to climate change;
3. Establishing a regional association for the arid areas and the oases in the Arab countries, in view of their particular vulnerability to climate change; and
4. Developing a mechanism for decentralized approaches to the climate change challenge.

**Programming Area 3**

**Enhancing resilience in the three priority areas of water and food security, sea-level rise and coastal erosion, and sustainable energy:**

Water and Food Security:

1. Supporting cooperative scientific research in the field of increasing the resilience of the agricultural sector to climate change impacts;
2. Supporting the downscaling of global and regional models for the identification of areas most vulnerable to drought due to climate change, and establishing criteria for identifying priorities for intervention in these areas;
3. Establishing a project to expand and facilitate the use of modern techniques in the search for ground water resources;
4. Increasing the efficiency of water use, and searching for new sources including groundwater and treated wastewater; and
5. Establishing training programs for the agriculture and water sectors to support capacities for addressing potential climate change impacts.

Sea-level rise and coastal erosion:

1. Supporting the establishment of monitoring systems for sea-level rise and land subsidence targeting vulnerable areas;
2. Analyzing the impact of sea-level rise and coastal erosion on affected communities, the agriculture, tourism and manufacturing sectors, as well as affected infrastructure and facilities; and
3. Developing programmes to address sea-level rise and coastal erosion, including planning for disaster reduction and relief the worst-case scenarios.

Sustainable Energy:

1. Supporting policies and programmes to improve energy efficiency;
2. Supporting strategies to deliver clean energy, in particular, to the poorest groups; and
3. Supporting studies on the production and use of renewable such as solar energy, including for the desalination of sea water.

**Implementation Plan:**

UNDP will develop a draft project document containing these components to be discussed with various stakeholders in March 2011. This document will be circulated to the various States two weeks prior to holding the consultations. For the drafting of this document, services will be sought from the experts who have contributed to the consultative meetings and task forces will also hold some meetings on the initiative components. The results of National Communications as well as regional efforts undertaken by the Arab League and other parties will also be taken into account. Following a consultation on the document, Arab governments will be provided with the final text to adopt and sign, before moving on to the implementation phase of the project in the second half of next year.

**ANNEX V: References**

1. Abahussain A. A., Anwar Sh. Abdu, Waleed K. Al-Zubari, Nabil Alaa El-Deen & Mahmood Abdul-Raheem. 2002.Desertification in the Arab Region: analysis of current status and trends. *Journal of Arid Environments.* Volume 51, Pages 521–545. [↑](#endnote-ref-1)
2. Qatar, for example, only receives an estimated 200 m3 per capita per year. (UNDP-RBAS Climate Change Paper Series: Elasha, B.O.2010. Mapping of Climate Change Threats and Human Development Impacts in the Arab States. Arab Human Development Report. UNDP). [↑](#footnote-ref-1)
3. UNDP-RBAS Climate Change Paper Series: Raey, M. E. 2010. Impact of Sea Level Rise on the Arab Region. University of Alexandria and Regional Centre for Disaster Risk Reduction. Arab Academy of Science, Technology and Maritime Transport. [↑](#endnote-ref-2)
4. In many countries within the region, over 50% of the work force is employed in the agriculture sector (UNDP Regional Bureau for Arab States. 2010. ACRI, Draft Concept Note. UNDP.). [↑](#footnote-ref-2)
5. More than half of the region’s 359 million people live within 100 km of a coastline. (National Water Research Centre’s chairperson, Dr Shaden Abdul Gawad, September 2010, Meeting in Cairo regarding Sea Level Rise and Coastal Erosion). [↑](#footnote-ref-3)
6. The increase in temperature has been between 0.2 and 2.0 °C between 1970 and 2004. (UNDP-RBAS Climate Change Paper Series: Elasha, B.O. 2010. Mapping of Climate Change Threats and Human Development Impacts in the Arab Region. Arab Human Development Report. UNDP.) [↑](#footnote-ref-4)
7. The Maghreb is a region of North Africa encompassing the following Arab States: Morocco, Algeria, Tunisia, and Libya. [↑](#footnote-ref-5)
8. Desk Review and Mapping of Climate Change Issues, Initiatives and Actors in Arab States. December 2009. Arab Human Development Report Papers. [↑](#endnote-ref-3)
9. IPCC, 2007. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contributions of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds. Cambridge University Press, Cambridge, United Kingdom. Pp. 976. [↑](#endnote-ref-4)
10. The Arab Water Council. 2009. Vulnerability of arid and semi-arid regions to climate change – Impacts and adaptive strategies, page 1. Pp 11. [↑](#endnote-ref-5)
11. IPCC, 2007. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contributions of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds. Cambridge University Press, Cambridge, United Kingdom. Pp. 976. [↑](#endnote-ref-6)
12. IPCC, 2007. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contributions of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds. Cambridge University Press, Cambridge, United Kingdom. Pp. 976. [↑](#endnote-ref-7)
13. Jevrejeva, S., Moore, J. C. Grinsted, 2010. How will sea level respond to changes in natural and anthropogenic forcing by 2100? A. *Geophys. Res. Lett.*doi:10.1029/2010GL042947. [↑](#endnote-ref-8)
14. UNDP-RBAS Climate Change Paper Series: Elasha, B.O. 2010. Desk Review and Mapping of Climate Change Issues, Initiatives and Actors in Arab States. December 2009. Arab Human Development Report Papers. [↑](#endnote-ref-9)
15. Arab Human Development Report, 2009. Chapter 2: The environment, resource pressures and human security in the Arab Countries. [↑](#endnote-ref-10)
16. World Bank. 2007. Middle East and North Africa Region (MENA): Sustainable Development Sector Department (MNSSD) Regional Business Strategy to Address Climate Change Preliminary draft for consultation and feedback. November 2007. [↑](#endnote-ref-11)
17. UNDP-RBAS Climate Change Paper Series: Raey, M. E. 2010. Impact of Sea Level Rise on the Arab Region. University of Alexandria and Regional Centre for Disaster Risk Reduction. Arab Academy of Science, Technology and Maritime Transport. [↑](#endnote-ref-12)
18. UNDP-RBAS Climate Change Paper Series: Elasha, B.O. 2010. Mapping of Climate Change Threats and Human Development Impacts in the Arab States. Arab Human Development Report. UNDP. [↑](#endnote-ref-13)
19. UNDP-RBAS Climate Change Paper Series: Elasha, B.O. 2010. Mapping of Climate Change Threats and Human Development Impacts in the Arab States. Arab Human Development Report. UNDP. [↑](#endnote-ref-14)
20. From, for example, coastal to inland regions or rural to urban areas. [↑](#footnote-ref-6)
21. It has been predicted, for example, that a 0.5 m increase in sea level will displace 2-4 million Egyptians by 2050 (UNDP-RBAS Climate Change Paper Series: Elasha, B.O.2010. Mapping of Climate Change Threats and Human Development Impacts in the Arab States. Arab Human Development Report. UNDP). [↑](#footnote-ref-7)
22. United Nations.2009. Climate change and its possible security implications. Report of the Secretary General. New York. [↑](#endnote-ref-15)
23. UNEP, 2007. “Chapter 4: Environment for Development”. GEO (Global Environmental Outlook), p.264. [↑](#endnote-ref-16)
24. UNDP-RBAS Climate Change Paper Series: Elasha, B.O. 2010. Mapping of Climate Change Threats and Human Development Impacts in the Arab States. Arab Human Development Report. UNDP. [↑](#endnote-ref-17)
25. UNEP, 2007. “Chapter 4: Environment for Development”. GEO (Global Environmental Outlook), p.264. [↑](#endnote-ref-18)
26. The population size within the region is projected to increase by 239 million people between 2010 and 2050. The population size is presently 359 million people. (UNDP Regional Bureau for Arab States.2009. Population Levels, Trends and Policies in the Arab States Region: Challenges and Opportunities. Arab Human Development Paper Series. ). [↑](#footnote-ref-8)
27. Including Saudi Arabia, UAE, Qatar, Kuwait, Bahrain and Oman. [↑](#footnote-ref-9)
28. Regional Programme Document for the Arab States, 2010 – 2013. 2009. [↑](#endnote-ref-19)
29. Including both adaptation- and mitigation-related policies. [↑](#footnote-ref-10)
30. Apart from Morocco, which has developed a National Climate Plan. (UNDP-RBAS Climate Change Paper Series: Houzir, M. 2010. Local and Territorial Approaches to Climate Change in Arab Countries. UNDP.). [↑](#footnote-ref-11)
31. See <http://arabstates.undp.org/index.php>. [↑](#footnote-ref-12)
32. See <http://www.arabclimateinitiative.org/index.html>. [↑](#footnote-ref-13)
33. UNDP Regional Bureau for Arab States. 2010. ACRI, Toward a Unified Response – Draft. UNDP. [↑](#endnote-ref-20)
34. UNFCCC, 2011. Non-Annex 1 National Communications. http://unfccc.int/national\_reports/non-annex\_i\_natcom/items/2979.php. [Accessed 01 March 2011]. [↑](#endnote-ref-21)
35. UNDP-RBAS Climate Change Paper Series: Raey, M. E. 2010. Impact of Sea Level Rise on the Arab Region. University of Alexandria and Regional Centre for Disaster Risk Reduction. Arab Academy of Science, Technology and Maritime Transport. [↑](#endnote-ref-22)
36. UNDP. 2010. Funding for Climate Change in the Arab States. UNDP. [↑](#endnote-ref-23)
37. UNDP-RBAS Climate Change Paper Series: Raey, M. E. 2010. Impact of Sea Level Rise on the Arab Region. University of Alexandria and Regional Centre for Disaster Risk Reduction. Arab Academy of Science, Technology and Maritime Transport. [↑](#endnote-ref-24)
38. UNDP Regional Bureau for Arab States. 2010. ACRI, Draft Concept Note. UNDP. [↑](#endnote-ref-25)
39. UNDP-RBAS Climate Change Paper Series: Raey, M. E. 2010. Impact of Sea Level Rise on the Arab Region. University of Alexandria and Regional Centre for Disaster Risk Reduction. Arab Academy of Science, Technology and Maritime Transport. [↑](#endnote-ref-26)
40. UNDP Regional Bureau for Arab States. 2010. ACRI, Draft Concept Note. UNDP. [↑](#endnote-ref-27)
41. Economic and Social Commission for Western Asia & League of Arab States Joint Technical Secretariat of the Council of Arab Ministers Responsible for the Environment. Arab Region State of Implementation on Climate Change. Draft. http://www.un.org/esa/sustdev/csd/csd14/escwaRIM\_bp2.pdf. [Accessed 20 July 2011]. [↑](#endnote-ref-28)
42. AFED, 2009. Arab Environment: Climate Change, Impact of Climate Change on Arab Countries. Beirut, Lebanon, p. xv. [↑](#endnote-ref-29)
43. UNDP Regional Bureau for Arab States. 2010. ACRI, Draft Concept Note. UNDP. [↑](#endnote-ref-30)
44. UNDP Regional Bureau for Arab States. 2010. ACRI, Draft Concept Note. UNDP. [↑](#endnote-ref-31)
45. UNDP-RBAS Climate Change Paper Series: Gelil, I.A. 2010. Arab Climate Resilience Initiative, Climate Change: Economic challenges and Opportunities in the Arab Regions. UNDP Regional Bureau for Arab States. [↑](#endnote-ref-32)
46. In addition to drawing off the global UNDP network of knowledge and experience across climate-related intervention areas, this will include the incorporation of UNDP toolkits and guidelines in target areas such as gender and community-based climate change adaptation, as well as gender and energy. [↑](#footnote-ref-14)
47. Rio+20 will be held in Rio de Janeiro in June 2012 and will mark the 20th anniversary of the 1992 United Nations Conference on Environment and Development (UNCED, known as the Earth Summit). The objective of the Conference is to secure renewed political commitment for sustainable development, assess the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and address new and emerging challenges. [↑](#footnote-ref-15)
48. Output 2: Resilience to the negative impacts of climate change strengthened (particularly in the priority areas of water security, food security, SLR and coastal erosion) and opportunities to enhance the production and use of sustainable energy created. [↑](#footnote-ref-16)
49. Knowledge products will include at least: i) a regional report on climate change in the countries of the Arab region; ii) a series of ‘popular science’ articles on climate change challenges and implications for the Arab region; iii) a bi-annual bulletin detailing ACRI activities; and iv) a knowledge publication ‘Arab States: Climate Change Impacts and Adaptation and Mitigation Solutions’ based on the information generated and analysed through the initiative. [↑](#footnote-ref-17)
50. Examples of international funding mechanisms include:

	* Adaptation Fund: countries can submit projects for implementation by National Implementing Entities (NIEs) or Multilateral Implementing Agencies (MIEs). As part of the ACRI, at a regional level stakeholders will be provided with training on the establishment of NIE within their respective countries to directly access funds. Additionally, the UNDP has been accredited as a MIE, providing an opportunity for RBAS countries to submit projects through both avenues of funding. Countries eligible to receive funding from the Adaptation Fund include developing country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change. All RBAS countries are thus eligible for funding.
	* Global Environmental Facility (GEF) funds: LDC Fund (eligible countries of the Arab region are: Djibouti, Somalia, Sudan and Yemen) and the Special Climate Change Fund (eligible countries include Non-Annex I countries with a focus on Africa, Asia and small island states i.e. all countries of the Arab region).
	* Mandatory and voluntary carbon markets and trading.
	* The Payment for Ecosystem Services (PES) approach.
	* Other innovative funding mechanisms such as community-based insurance schemes to protect against crop failure (e.g. the drought insurance programme based on rainfall index contracts in Morocco); promoting investments into long-lived infrastructure; and amended regulations and tax policies to support green technologies (fiscal incentives). [↑](#footnote-ref-18)
51. Examples of engagement platforms include the MASDAR Initiative and the World Future Energy Summit held annually in Abu Dhabi. [↑](#footnote-ref-19)
52. Dynamic systems modeling, such as Threshold 21 (T21), is suggested as an appropriate long-term planning tool to drive policy and strategy changes. See www.threshold21.com. [↑](#footnote-ref-20)
53. Qatar, Somalia, Kuwait, Iraq, Libya and Oman have not submitted their INCs and only Algeria, Egypt, Jordan, Lebanon and the UAE have submitted their SNCs to date. [↑](#footnote-ref-21)
54. Centres of excellence will be identified over the course of the initiative. Exchange programmes could be exchange of faculty or facilitation of exchange of students for cooperative research projects. Examples of linkages between research institutes, international universities, centres of scientific excellence, agencies and other partners include *inter alia*: i) the Masdar Institute of Science and Technology, which was developed in cooperation with the Massachusetts’s Institute of Technology (MIT); ii) the DESERTEC University Network, a collaboration of 18 universities and research facilities from the MENA region (see http://www.desertec.org/en/); iii) the Gulf Research Centre in the UAE that collaborates with the National Technical University of Athens; iv) the King Abdulaziz City for Science and Technology’s Middle East Research Centre for Developing Efficient Energy Solutions; v) the Centre of Research Excellence in Renewable Energy at the King Fahd University of Petroleum and Minerals; and vi) the International Renewable Energy Agency (IRENA). [↑](#footnote-ref-22)
55. For example: 1) the Climate Change Vulnerability Monitor, a tool that aims to monitor and assess impact and vulnerability on socio-economic outcomes on a country by country basis by 2030 with its Adaptation Performance Review for national level prioritizing of adaptation actions; 2) The Stocktaking of Tools and Guidelines to Mainstream Climate Change Adaptation, A UNDP BDP-EEG publication (2010) that summarizes existing tools and good practices from a range of organizations aimed at guiding development practitioners in their climate change mainstreaming efforts; and 3) the Technology Needs Assessment Handbook: A UNDP handbook that provides hands-on guidance for identifying the most effective technology options for poverty reduction and climate change mitigation and adaptation. [↑](#footnote-ref-23)
56. Downscaling can be prohibitively costly, and the uncertainties at a regional scale do not disappear at a local scale, thus even downscaled models will not necessarily provide sufficient information for decision making. For example, Global Circulation Models (GCMs) do not take into account ocean temperatures, which can have a considerable influence on local climate. Attempting to downscale GCMs can give a false impression of precision and mask the generally widely variant range of potential future scenarios under climate change. Rather decision makers should focus on a range of plausible climate scenarios covering a wide range of uncertainty. Impacts can be projected across a range of possible futures e.g. 1, 2 or 3 degree rise in temperature. Then planners can develop a robust adaptation response to this range of scenarios. In this way an adaptation plan can cover a range of possible future scenarios which will ensure that the development plans are resilient. [↑](#footnote-ref-24)
57. The ICARDA research, for example, has a theme on ‘sustainable intensification for more productive, profitable and diversified dryland agriculture with well-established linkages to markets’. Research on this theme will be built upon and compiled into best practices guidelines. [↑](#footnote-ref-25)
58. Due to the geographic location, countries of the Arab region have an abundance of solar energy potential. Solar energy generation using photovoltaic (PV) technology is presently used in several isolated applications primarily for water pumping, telecommunications and lighting for remote sites. There are several schemes proposing large-scale Concentrated Solar Power projects, such as the DESERTEC Industrial Initiative. [↑](#footnote-ref-26)
59. Activity Result 1.6: Capacity in the field of scientific research on climate change in the countries of the Arab region supported. [↑](#footnote-ref-27)
60. Water and food security, SLR and coastal erosion and sustainable energy [↑](#footnote-ref-28)
61. Activity Result 1.5: Climate change resilience mainstreaming into gender responsive local and national level development, poverty reduction and economic growth plans strengthened [↑](#footnote-ref-29)
62. See [http://hdr.undp.org/en/humandev/learnmore/title,1281,en.html](http://hdr.undp.org/en/humandev/learnmore/title%2C1281%2Cen.html) . [↑](#footnote-ref-30)
63. Water and food security, SLR and coastal erosion and sustainable energy [↑](#footnote-ref-31)
64. Activity Result 1.6: Capacity in the field of scientific research on climate change in the countries of the Arab region supported. [↑](#footnote-ref-32)
65. Start-up phase of project including the selection of a project manager is planned to be completed by June 2012. A project support unit is already set-up in Cairo and fully staffed to support the implementation of the project. [↑](#footnote-ref-33)