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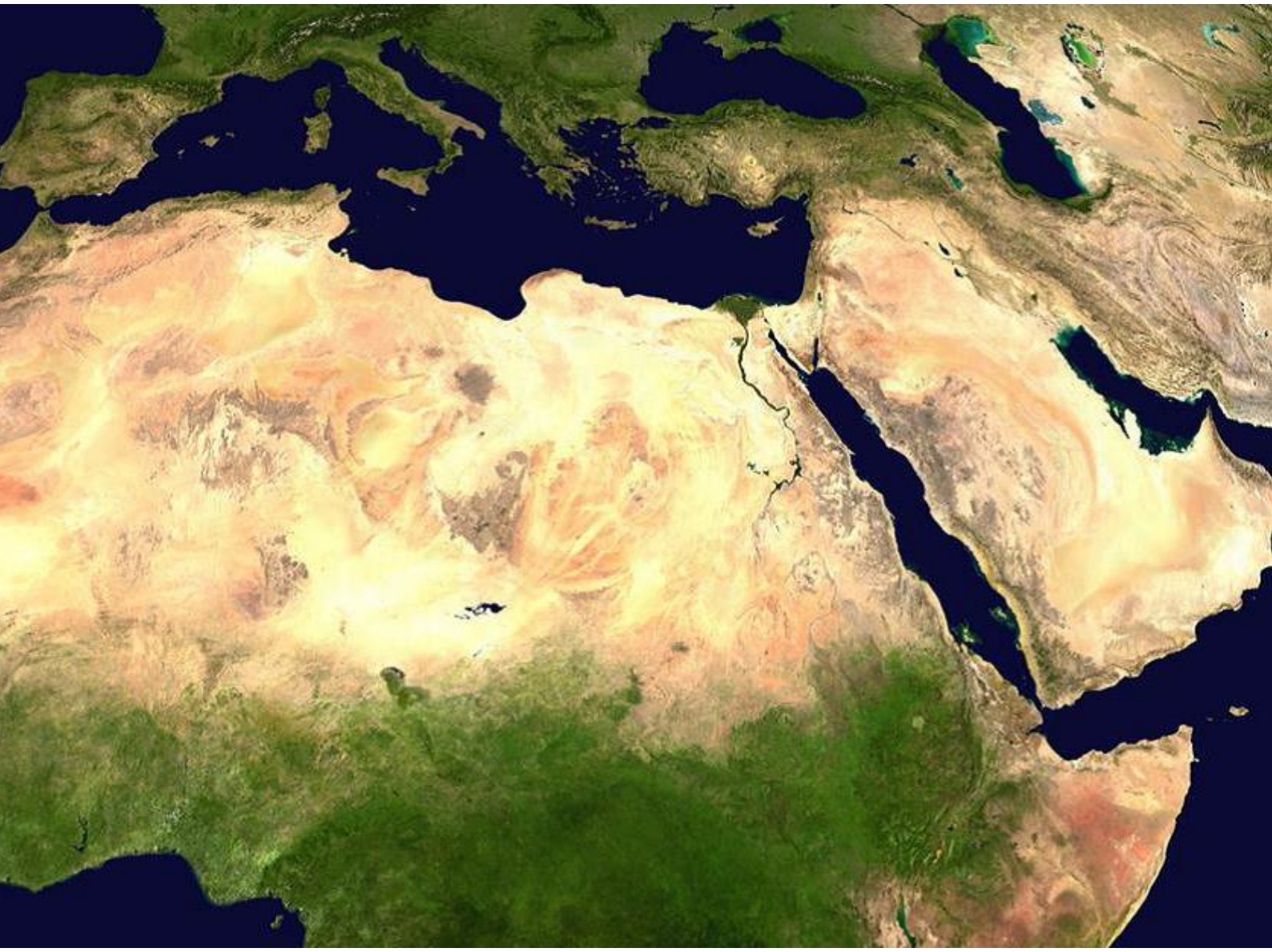

# Climate Change and Water in the Arab Region

## Mapping of Knowledge and Institutions
## Annex – Institutional Matrix

ACCWaM Adaptation to Climate Change in the Water Sector in the MENA Region

## Imprint

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On behalf of the
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## Annex - Institutional Matrix

**Governmental**

| **Parent: Egyptian Environmental Affairs Agency** |
|---|
| **Name**: Climate Change Central Department (CCCD) |
| Reference: http://www.eeaa.gov.eg/ecc/ |
| **Assessment**: Mandated, but limited capacity in adaptation. Lost leadership in recent years due to personality of former director. |
| **Contact**: Mr. Ezzat Lewis Hannalla Agaiby, Head, Climate Change Central Department Egyptian Environmental Affairs Agency (EEAA) 30 Misr Helwan El-Zyrae Road, Maadi Cairo (20-2) 2524-6162 (20-2) 2524-6162 ccu@eeaa.gov.eg (20-2) 2528-5094, email: eztlws@yahoo.com. Saber Osman (saber.mosman@gmail.com) leads the Adaptation Group, and is very helpful and eager to develop activities. |
| **Activitie**s: UNFCCC focal point for climate change in Egypt. The Climate Change Central Department (formerly the Climate Change Unit) of EEAA is charged with coordinating all national and international climate change activities. Historically the clean development mechanism has been their principle focus. The clean development mechanism is prioritised as a new source of international capital investment flow to Egypt, primarily in the energy ,industrial, transportation, waste management, agricultural, and land use sectors. The CCCD was responsible for coordinating the Second National Communication, with funding from UNDP, but were not selected to coordinate the Climate Change Risk Management Programme or lead development of the National Adaptation Strategy, in part reflecting personal politics rather than technical capacity. Adaptation activities are limited from lack of funding and lack of interest at senior levels within CCCD/EEAA. In 2011 UNDP provided 480 000 USD for a new project to develop Egypt's 3rd National Communication to the UNFCCC. |
| **Name**: Preparation of Egypt's 3rd National Communication to UNFCCC |
| **Reference**: http://www.undp.org.eg/Portals/0/Project%20Docs/Env_Pro%20Doc_%20Third%20National%20Communication.pdf |
| **Assessment**: This is an important policy process for ACCWAM to follow. |
| **Contact**: Mr. Ezzat Lewis Hannalla Agaiby, Head, Climate Change Central Department email: eztlws@yahoo.com. Mohamed Bayoumi, UNDP Assistant Resident Representative email mohamed.bayoumi@undp.org |
| **Activities**: Funded by UNDP, the project will enable Egypt to prepare and submit its Third National Communication to the Conference of Parties (CoP) of the UN Framework Convention on Climate Change. It will update and strengthen information provided regarding national circumstances, inventories of greenhouse gases, policies and measures undertaken to mitigate climate change, assessments of vulnerability to climate change and steps taken to adapt to climate change, and information on public awareness, education, training, systematic research and observation, and technology transfer. The project will also increase the capacity of experts and institutions in Egypt to produce subsequent National Communications that meet all guidelines established by the CoP and that serve as a source of information for national policies and measures to mitigate and adapt to climate change in key economic and social sectors. |
| **Name**: Climate Change Risk Management Programme (CCRMP) |
| **Reference**: http://www.mdgfund.org/content/climatechangeriskmanagementegypt, http://www.eeaa.gov.eg/English/info/project_details.asp?project_id=58 |
| **Assessment**: Programme provides administrative coordination rather than technical expertise. |

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| **Contact**: Mona ElAgizy, Coordinator, Climate Change Risk Management Programme, Egyptian Environmental Affairs Agency. Tel: 02 2525 35 33, ccrmp.egypt@gmail.com. Mohamed Bayoumi, UNDP Assistant Resident Representative email mohamed.bayoumi@undp.org |
| **Activities**: With funds from the Spanish MDG Achievement Fund channelled through UNDP, the CCRMP coordinates the activities of four component projects. In theory it should eventually serve as the principle coordinating hub for all climate change activities in Egypt. UNDP is the lead donor, with specific donors supporting each sub-project. CCRMP is a national cross-cutting programme implemented across multiple ministries and sectors, targeting both adaptation and mitigation. For adaptation, the programme will assist in providing tools to make strategic decisions to strengthen the institutional capacity to develop and to implement national strategies in the water resources, agricultural, and other sectors. For mitigation, it will assist in policies to help mitigate Egypt's contribution to emissions by providing an enabling environment and incentive schemes to promote financing of renewable energy and energy efficiency initiatives as well as taking advantage of the Clean Development Mechanism (CDM). The four component projects are: 1, development of a Supreme Energy Council to coordinate energy policy (Cabinet of Ministers with UNDP and UNEP), 2, promotion of the Clean Development Mechanism (EEAA with UNEP, UNDP & UNIDO), 3, Forecasting & Integrated Water Resources Management to develop an integrated model for future Nile Water flows (MWRI with UNESCO, UNEP & UNDP), 4, Vulnerability & Adaptation of the Agricultural Sector (Ministry of Agriculture and Land Reclamation (MALR) with IFAD and FAO). The two adaptation component projects are discussed under the MWRI and MALR respectively. CCRMP was not placed under the Climate Change Central Department due to personal politics surrounding the former director. |
| **Parent: Ministry of Agriculture and Land Reclamation (MARL)** |
| Name: Vulnerability & Adaptation of the Agricultural Sector |
| Reference: http://www.ccrmp.org/Vulnerability%20&%20Adaptation%20of%20the%20Agricultural%20Sector%20Component.htm |
| Assessment: ? |
| Contact: Dr Mosaad Kotb Hassanein, Director, Central Lab for Agricultural Climate, +20 2 374 900 53, mosaadkotb@arc.sci.eg |
| Activities: Part of the CCRMP. Project funded by IFAD and FAO to develop stress tolerant crops, to identify optional cropping patterns, to optimize the use of potentially less water resources and increased temperature, and to disseminate information in response to climate change risks. CLAC are involved as a research institution, no information available on leadership inside the MALR. |
| Name: EGYPT-Farm-level Irrigation Modernization |
| Reference: http://www.worldbank.org/projects/P117745/egypt-farm-level-irrigation-modernization?lang=en |
| Assessment: |
| Dates: 14/12/2010 – 30/6/2016 |
| Contact: Maurice Saade, |
| Activities: 100 million USD from the World Bank plus 80 million USD from the GOE. The development objective of the Farm-level Irrigation Modernization Project for the Egypt, Arab Republic (EFIMP) of is to increase agricultural profitability and improve equity in access to higher-quality water for up to 140,000 small-scale farmers on up to 200,000 feddans (80,000 hectares) in the command areas of Mahmoudia, Manaifa, and Meet Yazid located in the Nile Delta. There are two components to the project. The first component of the project is marwa and farm-level irrigation improvements. This component supports marwa and farm-level irrigation modernization in the command areas of Mahmoudia, Manaifa and Meet Yazid. In these locations, |

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| branch canal and mesqa improvements have been carried out or are currently ongoing, and mesqa water user associations (WUAs) have been formed for sustainable operation and maintenance (O&M) and irrigation management. This component will provide financing for the following activities: (i) change of approximately 75 percent of the mesqa pump stations from diesel pumps to electric ones and installation of dedicated rural electric-power grids; (ii) farm-level improvements such as laser land-leveling, reshaping field drains, soil improvements, flexible hose systems, and gated pipes; (iii) support workshops for use and maintenance of mesqa and marwa level works and land improvement activities; and (iv) field surveys, designs, and construction supervision and management. The second component of the project is farm-level technology modernization. This component aims to enhance farmer knowledge and uptake of improved irrigation and associated land improvement and crop production technologies in parallel with and in support of the marwa-level irrigation modernization carried out under component one. The component will include: (i) increasing farmer awareness of marwa improvements through farmer meetings and exchange visits; (ii) demonstrations of improved marwa and farm-level irrigation systems, improved on-farm water management, and associated land improvement and agronomic practices for both field crops and horticultural crops; (iii) implementation support, including pilots and studies to support development of future field-level irrigation improvement and monitoring and evaluation (M&E) activities; and (iv) environmental monitoring and mainstreaming. |
| Name: Desert Research Center |
| Reference: http://www.drc-egypt.org/ |
| Assessment: Unknown - shell institution? |
| **Contact**: Director was Ismail Abdelgalil - not confirmed. drc@drc-egypt.org |
| **Activities**: Independent of the ARC. The DRC's mandate is investigating desert potential for agricultural development, including conducting studies on behalf of government institutions, societies and small landholders, preparing postgraduate research assistants and scholars for higher degree study in the field of scientific research, conducting applied research and projects related to the development of desert and new reclaimed areas, transfer of technologies to local farmers, Bedouins, investors, stakeholders, etc. through training and extension programs, exploring and evaluating groundwater aquifers in desert regions, drilling and testing productive and test water wells, surveying and evaluating surface water in coastal regions, monitoring groundwater in desert and newly reclaimed areas, managing desert and newly reclaimed soils with respect to their agricultural use and development. Little information is available about the research and activities of the DRC. Could be a shell institution. |
| **Name**: Agricultural Research Center (ARC) |
| **Reference**: http://www.arc.sci.eg/ |
| Assessment: generally poorly equipped and under-funded, low salary levels, but some good people. |
| **Contact:** Prof. Dr Mohamed M. El Garhi, Vice President for extension and Training & Supervisor of extension sector, mo_garhy@hotmail.com |
| **Activities**: ARC is one of the largest agricultural research institutions in the world, reputedly employing over 100 000 people, 10 000 of whom have either PhDs or MScs. Currently ARC includes 16 Institutes, 13 central laboratories, 10 regional stations, 36 specific research stations, 21 research administrations across the country, and 4 research, extension and training centres of excellence. However, there has been a struggle to improve the performance of ARC in terms of conducting and publishing research. Units are underfunded, often without access to basic laboratory supplies and consumables, salaries are low, and many staff are cross-employed by other research institutions and universities. Work on climate change is growing, but is highly dependent on external funding – in addition to the work of CLAC, the Agricultural Genetic Engineering Research Institute (AGERl), Agricultural Economics Research Institute (AERI), and Agricultural Extension & Rural Development Research Institute (AERDRI) have had some activities and projects on climate adaptation. AERDRI were involved in an IDRC funded project on agricultural adaptation |

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| in Aswan. |
| Name: Central Laboratory for Agricultural Climate (CLAC) |
| Reference: http://www.clac.edu.eg/<br>http://www.arc.sci.eg/InstsLabs/Default.aspx?OrgID=23&lang=en |
| Assessment: |
| Contact: Dr Mosaad Kotb Hassanein, Director, Central Lab for Agricultural Climate, +20 2 374 900 53, mosaadkotb@arc.sci.eg |
| Activities: The Central Laboratory for Agricultural Climate (CLAC) was established in 1996. CLAC consists of four research departments: Agrometeorological Application Research Department; Soilless Culture Research Department; Biological Agriculture Research Department; Climate Modification Research Department. The major objective of CLAC is to establish an agrometeorological network covering the agricultural area including both old and newly reclaimed areas. It also aims at conducting research and training related to different application of daily weather data on current and near future agricultural activities. This includes utilization of mathematical models to estimate daily water requirements, fertilization, pest and disease forecasting, and other crop management practices. Involvement in the FAO/IFAD CCRMP Vulnerability and Adaptation of Agriculture Project is in principle exposing CLAC to capacity building on agroecology and adaptation in agriculture, but as yet capacity to provide strategic policy advice appears limited. |
| Name: The Virtual Extension and Research Communication Network (VERCON) |
| Reference: http://www.vercon.sci.eg/Vercon_en/vercon.asp |
| Assessment: potentially useful means of reaching extension services in pilot projects |
| Contact: Fathy Ashmawy Ahmed El-sayed, Director, Central Lab. for Agricultural Expert Systems(CLAES), ARC, sayed@mail.claes.sci.eg |
| **Activities**: The Virtual Extension and Research Communication Network (VERCON) aims to harness the potential of the Internet and apply it to strengthening and enabling linkages among the research and extension components of the national agricultural knowledge and information system. The overall goal of VERCON is to improve, through strengthened research-extension linkages, the agricultural advisory services provided to Egyptian farmers and in particular to resource poor farmers in order to increase production in food and agriculture with the goal of raising farm incomes. Members include ARC research institutes as well as local extension services and the Agriculture Directorate of Kafr el Sheikh. |
| **Parent: Ministry of Water Resources and Irrigation** |

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| The main policy document of value is the National Water Resources Plan 2017. A participatory irrigation management policy has been adopted by the Egyptian Ministry of Water Resources and Irrigation over the past two decades to support agricultural productivity, decrease open-channel conveyance losses, and increase agricultural water distribution equity. Two recent projects that dealt with the introduction of this policy in the Nile Delta through improvement projects are the irrigation improvement project (IIP) by the Japan International Cooperation Agency (JICA) in Bahr El-Nor, and the integrated water management districts (IWMDs) by the United States Agency for International Development (USAID) in El-Ibrahimia. The implementation of these projects promoted these concepts and tools within the ministry and elsewhere, although sustainability and achievement on the ground has not been overwhelming. The official explanation is that farmers were reluctant to accept the policies because they lacked training on various irrigation system improvement techniques. On the other hand, there are also questions about the extent of participation, particularly at meaningful contributions at the levels of secondary canals and the willingness of the state to cede total authority. There is also the context of the struggle to get effective political/institutional/adminsitrative decentralisation of water authorities to district level. Reform of irrigation system improvement policies so that they are more realistic, and ultimately more successful, supporting agriculture and encouraging Ministry personnel to adopt and support participatory water management as implemented in the targeted Egyptian irrigation projects. This could be relevant context to ACCWAM if it selects a pilot looking at reuse of drainage waters. |
| Name: Nile Forecasting Centre |
| Reference: http://www.semide-eg.org/recersh%20%20and%20devolpment%20-%20other-1%20-Nile%20Forecast%20Center.htm |
| Assessment: |
| Contact: |
| Activities: The aim of the NFC is to provide a real-time hydro-meteorological forecasting system for the Nile River Basin in order to forecast the annual Nile inflow to Lake Nasser to help decision-makers decide on the release policy for the coming year. The NFC is mainly funded by the MWRI and also receives financial support for specific projects from donors which have included USAID, FAO, and the Dutch government. Currently working on projects funded by UNDP and USAID for improving capacity for climate modelling. |
| Name: Forecasting & Integrated Water Resources Management Project |
| Reference: http://www.ccrmp.org/Forecasting%20&%20Integrated%20Water%20Resources%20Management%20Component.htm |
| Assessment: useful background information, not relevant to ACCWAM. |
| Contact: ? |
| **Activities**: Part of the CCRMP. Cooperation with UNEP and UNDP to develop a Regional Circulation Model that will forecast impact of climate change on precipitation in the Nile Basin, and collaborates with UNESCO to adapt the existing hydrological models to forecast climate change impact on Nile River flows to Egypt. The component will also address the inclusion of Climate Change scenarios in national Integrated Water Resources Management plans. In addition, an assessment will be carried out for potential seawater rise adaptation mechanisms in Coastal Zones at risk. Modelling work is being done by the UK Met Office's Hadley Centre using their PRECIS model. Basing a whole sectoral approach and strategy upon just one model is extremely risky, and there are also questions about options to upgrade the model and capacity in the MWRI as new climate projections and representative concentration pathways become available. However, see also the Nile Project funded by USAID. |
| Name: Integrated Irrigation Improvement and Management Project (IIIMP) |

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| Reference: |
| Assessment: |
| Dates: May 2005 to December 2014 |
| Contact: |
| Activities: With funding from KFW, the World Bank, and other donors in excess of 300 million USD. The Integrated Irrigation Improvement and Management Project aims at assisting the Ministry of Water Resources and Irrigation (MWRI) in improving the management of irrigation and drainage in the project area, to increase the efficiency of irrigated agriculture water use and services. The project has the following five components: Component 1) will cover the implementation of irrigation and drainage rehabilitation, improvement and modernization works and programs at all levels of the selected command areas. Component 2) will cover: (i) regional water and land management adaptive research programs; (ii) extensive on-farm water control and irrigated agriculture practice demonstrations; and (iii) irrigation advisory and production support services strengthening. Component 3) establishment, expansion and scaling up of water user organization functions at the levels of tertiary and secondary system irrigation and drainage hydraulic units throughout the selected command areas. Component 4) will support the management and needed for effective planning, implementation coordination entities, functions and activities and eventual commissioning of irrigation and drainage improvements on the basis of full command areas. Component 5) A project Environmental Management Plan (EMP) will be implemented under this component to demonstrate how improvements in water quality can be achieved. |
| Name: West Delta Water Conservation and Irrigation Project |
| Reference: http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P087970 |
| Assessment: |
| Dates: closed in 2011 |
| Contact: |
| Activities: A grant of 145 million USD from the World Bank towards a total project cost of 213 million USD. The West Delta Water Conservation and Irrigation Rehabilitation Project objectives are to improve the livelihood and increase the income of people in the West Delta region of Egypt through: (i) mitigating further environmental degradation caused by excessive drawdown of the groundwater resources; and (ii) establishing a framework for financial sustainability of irrigation infrastructure in the use of water resources. The project has three components with the first being the design, construction, and operation of surface water system and connection program. This component will finance the design, construction and operation of a surface water irrigation system and connection program within the project area, taking into consideration the specific environment and social requirements. The second component is the market-driven technical support to small and medium scale farmers. This component will provide market-driven technical support to small and medium scale farmers in the project area to increase their market share, at the national and international level. Finally, the third component is the support for institutional development and capacity building of the project management unit (PMU), regulatory office and water user's council (WUC). This component will be funded through donor grants from the Netherlands and will support capacity building of the Ministry of Water Resources and Irrigation (MWRI) for public private partnership contract management, construction supervision consultants, regulatory oversight, and to the WUC association along the lines of the policies for institutional reform proposed by the MWRI and in cooperation with the government of the Netherlands. |
| Name: National Water Research Center (NWRC) |
| Reference: |

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| Assessment: |
| Contact: |
| Activities: |
| Name: Environment and Climatic Research Institute (ECRI) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: Coastal Research Institute (CORI) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: Drainage Research Institute (DRI) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: Research Institute for Groundwater (RIGW) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: Shoreline Protection Authority (SPA) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: Adaptation to Climate Change in the Nile Delta Through Integrated Coastal Zone Management (ACCND-ICZM) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| **Parent: Ministry of Higher Education and Scientific Research** |
| Name: Environmental Research Division, National Research Center (ERD) |
| Reference: http://www.nrc.sci.eg/nrc/Divisions_details.php?id=5 |
| Assessment: Unknown, but general standard of the NRC is high |
| Contact: Prof.Dr.Nagwa Abbas Elesnawy, Head of Water Pollution Department, (+202)33335959, nesnawy@yahoo.com |

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| **Activities**: The ERD offers professional and post-graduate training and consultancy services in addition to conducting research. Main areas of focus are aquatic environment and water quality, waste management, air quality, occupational health and environmental medicine. The Water Pollution Department has worked on assessing wastewater treatment technologies, monitoring drinking water sources, health risk assessments for wastewater reuse in agriculture, toxicity assessment in aquatic environment, and aquaculture and fish production, mostly in the context of consulting services for the private sector. NRC researchers are generally good and relatively well equipped. Like other NRC Divions, ERD can act as a vehicle for cooperation between other government and university research institutes. |
| Name: Agriculture and Biology Research Division, National Research Center (ABRD) |
| Reference: http://www.nrc.sci.eg/nrc/Divisions_details.php?id=2 |
| Assessment: Unknown, but general standard of the NRC is high. |
| Contact: Prof. Dr. Mohamed Rashad Abd El Moez, (+202) 33371362/433/615/933/449 ext. 1699/2190, email: agridivision2007@yahoo.com |
| **Activities**: The ABRD has 16 departments and 24 consultancy groups serving government and the private sector, and serves as the Egyptian coordinator for NEPAD's North African Biosciences Network. They are engaged in national and regional cooperation on genetic improvement of plant crops (especially wheat) for drought conditions. Like other NRC Divions, ABRD can act as a vehicle for cooperation between other government and university research institutes. |
| **Parent: Cabinet of Ministers** |
| Name: Information and Decision Support Center (IDSC) |
| Reference: http://www.idsc.gov.eg/ |
| Assessment: Weak institution with limited technical capacity and many demands. |
| Contact: Mohamed Fawzi, Head of Disaster Risk Reduction, mohfawzi@idsc.net.eg |
| Activities: IDSC is mandated to act as a think tank for the Egyptian cabinet and Prime Minister's Office. They have a sprawling range of ongoing activities with limited in-house technical capacity, meaning that they generally work by retaining consultants from Egyptian universities and research institutions. UNDP awarded funding to IDSC's Disaster Risk Reduction Unit to develop the National Adaptation Strategy after Mohamed Fawzi left EEAA to join IDSC, and so far this has been the organisation's main contribution to climate change, although have they also produced a four assessment studies on the impacts of climate change in the last 5 years. The National Adaptation Strategy was not well received by reviewers. In general the IDSC's reputation for delivery is not good, although in principle they should be well positioned to inform decision-making. |

**Donors & International Organisations**

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| Name: United Nations Development Program (UNDP) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: World Bank |
| Reference: |
| Assessment: |
| Contact: |

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| Activities: |
| Name: International Finance Corporation (IFC) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: African Development Bank (ADB) |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: FAO |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: Monitoring the risks of climate change and sea level rise in the Nile Delta. |
| Reference: http://neareast.fao.org/Pages/Projects.aspx?id=2290207&NavId=0&lang=EN&I=0&DId=0&CId=0&CMSId=6 |
| Assessment: |
| Contact: Mohamed El Ansary (assistant FAO rep. Egypt), e-mail: Mohamed.ElAnsary@fao.org, Tel: (+202) 37602324 – 33316139 |
| Activities: developing the decision-making system for prediction and mitigation of the climate change impact on agriculture and the environment along the Delta coast. It creates a monitoring network to identify the impact of sea level rise on groundwater and the soil. No information on implementing partner. |
| Name: IFAD |
| Reference: http://operations.ifad.org/web/ifad/operations/country/home/tags/egypt |
| Assessment: Possibly useful contacts and results, depending on location and theme of ACCWAM pilots |
| Contact: Mohamed Shaker Hebara Country Programme Officer 1191 Corniche El Nil, World Trade Centre Cairo, Egypt<br>Work: +2 02 25784840-6 Fax: +2 02 25784847, e-mail: m.hebara@ifad.org |
| **Activities**: IFAD do some good work in the region, and have a growing interest in climate change supported by a dedicated unit at their Rome headquarters. In Egypt they have several projects, including a rural development project in West Noubaria focusing on on-farm water management. However, probably of most interest to ACCWAM is the project "On-farm Irrigation Development Project in the Oldlands". This 87 million USD project approved in 2009 aims to establish mechanisms ensuring the efficient use of water resources, which are threatened by climate change, population growth, industrialization, increasing pollution and poor water management. In response to these issues, the project aims to improve the livelihoods of smallholder farmers cultivating an average of 3 feddans of land, as well as landless labourers, unemployed young people and women-headed households. Project investments are expected to generate seasonal and part-time work for more than 21,000 poor rural men and women in the Upper Egypt governorates of Assiut, Qena and Sohag, and the Lower Egypt governorates of Kafr El-Sheikh and Beheira. |

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| **Objectives** 1) to establish mechanisms ensuring the efficient use of water resources, which are threatened by climate change, population growth, industrialization, increasing pollution and poor water management; 2) to improve livelihoods of smallholder farmers. No information available on implementation team or results. |
| Name: Agence Francaise de Developpement (AFD) |
| **Reference**: |
| **Assessment**: |
| Contact: Jean-Pierre Marcelli, 10 Srilanka Street, Zamalek, CAIRO, Egypt, Tel (20) 2 27 35 17 88 or (20) 2 27 35 57 87, afdlecaire@groupe-afd.org |
| **Activities**: Promoting a sustainable management of water resources volume and quality is was part of AFD's country strategy for 2009-11. Their recent work in this area has included technical assistance to farmers for water conservation on reclaimed lands in the West Delta, and co-financing with the African Development Bank of a wastewater treatment plant in Gabal El Asfar . AFD contributes to the Improved Water and wastewater Services Program (IWSP) funded through Horizon 2020. They have a new project continuing their work in the West Delta and building on the IIIMP project: http://www.afd.fr/base-projets/downloadDocument.action?idDocument=936 |
| Name: USAID |
| Reference: http://www.usaid.gov/where-we-work/middle-east/egypt/water-and-sanitation http://wmp.gsfc.nasa.gov/projects/project_Nile.php |
| Assessment: |
| Contact: |
| Activities: |
| Name: Project Nile: Distributed Hydrological Information For Water Management In The Nile Basin |
| Reference: http://wmp.gsfc.nasa.gov/projects/project_Nile.php |
| Assessment: |
| Dates: 1/4/2010 – 31/3/2013 |
| Contact: |
| Activities: Centred in NASA, collaborators in US research institutes, and NBI countries. Primary operational partner is the USAID Office of Middle East Programs. Builds on the work of MWRI with NOAA during 1990's to develop a Nile Forecast System (NFS) for the Aswan High Dam, and the Nile Basin DSS housed in the Nile Basin Initiative. Both of these are sophisticated tools supported by skilled technical staff, but suffer from a significant deficit in distributed hydrological information. In the current project, NASA earth observations will be merged with advanced land surface models in a Land Data Assimilation System (LDAS) customized for the Nile basin. This "Nile LDAS" will produce optimal estimates of hydrological states and fluxes, as vetted against the in situ observations of NBI and MWRI and against diagnostic ET and moisture estimates produced using the USDA's Atmosphere-Land Exchange Inverse (ALEXI) remote sensing technique. Together, Nile LDAS and ALEXI will provide high-quality, near real-time distributed inputs for the NBDSS and NFS. This will improve DSS reliability in applications that include flood warning, reservoir management, and irrigation planning. Little information is available, although the Arab Water Council, Egyptian MWRI and NBI are listed amongst the partners. It can be assumed that the prime beneficiary is expected to be the NBI rather than Egypt's MWRI. |
| Name: European Delegation |
| Reference: |
| Assessment: |
| Contact: Daniel Weiss, Second Secretary Economic Modernisation, +20 2 374 946 80 ext 427, |

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| daniel.weiss@ec.europa.eu |
| Activities: |
| Name: Sustainable Water Integrated Management – Support Mechanism (SWIM-SM) |
| Reference: SWIM project page |
| Assessment: |
| Contact: Prof. Hosny Khordagui, Team Leader, SWIM-SM, Tel: 0020 1065533734, h.khordagui@swim-sm.eu |
| **Activities**: This is an EU-funded regional project aimed at enhancing regional cooperation in the areas of sustainable and integrated management of water resources through institutional strengthening, inter-sector dialogue, awareness raising, capacity building and stakeholder consultation and participation. See the Regional Section for more details. In Egypt activities focus on the SUSTAIN WATER MED and IMPROWARE. |
| Name: Network of demonstration activities for sustainable integrated wastewater treatment and reuse in the Mediterranean countries (Sustain Water MED) |
| Reference: http://www.swim-sm.eu/index.php?option=com_content&view=article&id=50&Itemid=43&lang=en |
| Assessment: Potentially highly relevant to the activities of ACCWAM in Egypt, depending on the proposed pilot |
| Contact: ? |
| Activities: An EU-funded regional project with activities in Jordan, Morocco and Tunisia. The local counterpart in Egypt is the National Research Center (presumably the ERD?). Overall project objectives are to improve sustainable integrated management of non conventional water resources; enhance the capacity of national organizations and consortium partners in sustainable management of non conventional water resources; and disseminate best practices on sustainable integrated wastewater management and reuse. Specific objective in Egypt is to demonstrate the economic benefit of secondary treated wastewater for irrigation in Abu Rawash Village, Giza Governorate, Egypt. |
| Name: Innovative Means to Protect Water Resources in the Mediterranean Coastal Areas through Re-injection of Treated Water (IMPROWARE) |
| Reference: http://www.swim-sm.eu/index.php?option=com_content&view=article&id=48&Itemid=40&lang=en |
| Assessment: Potentially highly relevant to the activities of ACCWAM in Egypt, depending on the proposed pilot |
| Contact: ? |
| Activities: An EU-funded regional project also with activities in Tunisia. Overall objectives are to demonstrate and promote environmentally sustainable water management policies and practices in Egypt and Tunisia, challenging the deterioration of aquifers caused by saltwater intrusion due to over-exploitation and climate change; support the agricultural and economic activities of the local rural communities in the demonstration sites; derive examples of best practice and "lessons learned" from the action, nurturing consensus building and to share sustainable co-operation experience and capacities; and disseminate sustainable policies, practices and lessons learnt within the Mediterranean region, including to other ENPI partner countries. In Egypt the lead partner is the EEAA, and activites are focused in Al-Arish, North Sinai. |
| Name: Mediterranean Hot Spot Investment Programme - Project Preparation and Implementation Facility (MeHSIP-PPIF) |
| Reference: http://www.mehsip-ppif.eu/index_main.cfm?CFID=30619916&CFTOKEN=8b6ebd270b46e1b5-C5FAB7E3-5056-A32F-D515B3AEEC2525A2 & 4th Progress Report of MeHSIP-PPIF (Phase II) |

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| Assessment: Signficant flow of funds into implementation projects. Includes work on wastewater in target area for ACCWAM in Egypt. |
| Contact: Moustafa Moussa, Egypt Coordinator m.moussa@unesco-ihe.org. Tim Young, Program Leader, t.young@mehsip-ppif.eu |
| Activities: A very large EU-funded program with significant activities across the region. Overall objectives are to reduce pollution loads flowing into the Mediterranean sea, focusing on industrial emissions, solid waste and wastewater. The Horizon 2020 Project List currently contains 86 investment projects with a total estimated value of 7,18bn EUR, including 35 projects worth 2.9 EUR yet to secure funding. Egypt is currently the second largest recipient (after Tunisia) with 1.02 bn EUR of funding, and with projects worth a further 1.8bn EUR in the pipeline. In 2011 work began on an anticipated 327 million EUR wastewater treatment plant for Kafr el-Sheikh near Lake Burullus. Anticipated outcomes are Improved sanitation, environment, quality of life and health of around 440,000 people; implementation of rural wastewater infrastructure not being handled under other IFI funded projects; reduction of pollution of the Rosetta branch of the Nile and the Burullus Lake; expansion of fisheries and agriculture as well as tourism. A list of all their projects can be found in the Progress Report cited above. Principal interlocutors are the EEAA, and the Holding Company for Water and Wastewater. |
| Name: Seventh Framework Program (FP7) |
| Reference: http://cordis.europa.eu/ |
| Assessment: Potentially a source of some external expertise on climate change |
| Contact: Georges Papageorgiou, Minister CounsellorScience, Technology and Innovation, European Delegation, Egypt, georges.papageorgiou@ec.europa.eu |
| Activities: FP7 is the principal research funding mechanism in the EU, and supports projects throughout the world based on consortia of research partners. Regional projects working on climate change and water are listed in the regional section of this report. No projects work exclusively in Egypt. Local partners in these projects are often in a 'backseat' and generally make marginal contributions to the projects. |
| Name: IDRC |
| Reference: www.idrc.ca |
| Assessment: historically significant but currently little capacity to contribute |
| Contact: Hammou Laamrani, Senior Program Officer, email hlaamrani@idrc.org.eg |
| Activities: Following the closure of the Climate Change Adaptation in Africa (CCAA) Program and the Water Demand Management in Middle East and North Africa (WadiMENA) Project, IDRC's activities in the region are diminished. The new Climate Change and Water Program supports the Alexandria Research Center for Adaptation at the University of Alexandria but has no other projects in Egypt. The CCAA program supported a project with the Coastal Research Institute and the University of Alexandria on evaluating adaptation options to sea level rise in Damietta and Dakhaleya Governorates. The WadiMENA website (http://web.idrc.ca/en/ev-57064-201-1-DO_TOPIC.html) remains somewhat useful with lists of institutional linkages, some reports. The responsible officer (Hammou Laamrani) remains a well-connected expert on water issues in the region. |
| Name: GIZ |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |

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| Name: Dutch Cooperation |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| **Name**: Towards an integrated and climate proof approach to the wise use of Lake Burullus; mainstreaming sustainable water resources management, fisheries and biodiversity protection. |
| **Reference**: |
| **Assessment**: would be useful to follow the project as their results come in. |
| **Contact**: Henk Zingstra, Wageningen Centre for Development Innovation, Henk.Zingstra@wur.nl |
| **Activities**: Lead Implementation; Centre for Development Innovation. Wageningen (NL), Partners; CARE Egypt, Terrasphere (NL), Egyptian National Water Research Centre, EEAA. The current project's goal is to make a status description and threat analysis of Lake Burullus accepted by all stakeholders by gathering and analyzing existing data with respect to water quality, salinity, water level fluctuations, land use, the amount and quality of fish caught, biodiversity, and the attitude and expectations of the local population with respect to the status of the Lake. This status description will provide the bases for a process that will lead to a by all stakeholders accepted management plan of the Lake. |
| Name: Japanese International Cooperation Agency (JICA) |
| Reference: http://www.jica.go.jp/egypt/english/activities/activity04.html |
| Assessment: might be worth a follow up visit to learn more about their projects |
| Contact: ? |
| Activities: One of JICA's country priorities is to focus on sustainable rural development and agriculture. Current projects include the Rehabilitation and Improvement of Monshat El Dahab Regulator on Bahr Yusef Canal, which serves Fayoum. This is intended to upgrade the canal's regulator and allow more efficient distribution of water to its service areas, claimed to have the potential for increasing agricultural productivity by up to 11 % in the target area. JICA's project database also lists the following projects active in 2010, but gives no more detailed or recent information: Water Management Improvement Project II, Project for Master Plan Study on Development of Agricultural Produce Marketing for Small-Scale Farmers in the Upper Egypt, Sustainable Food/Bio-energy Production System with Water Saving Irrigation in Egyptian Nile Basin, TCTP on Warm Water Fish Production (2010 – 2012), TCTP on On-Farm Water Management: Irrigation and Drainage for Africa (2010 – 2012). |
| **Parent: Consultative Group on International Agricultural Research** |
| Name: International Water Management Institute (IWMI) |
| Reference: |
| Assessment: very strong researcher with a growing capacity in country, potentially of high value to ACCWAM |
| Contact: Francois Molle, Principal Researcher, f.molle@cgiar.org |
| Activities: Main activity of interest to ACCWAM is the Australian funded project "Management of water and salinity in the Nile Delta: A cross-scale integrated analysis of efficiency and equity issues". Working in Kafr el Sheikh, examining the relationship between water quality and quantity, not just in terms of reuse. Key research question is how management at different levels affects water quality, distribution of salts, etc. Potentially a highly valuable resource group for ACCWAM. |
| Name: The International Center for Agricultural Research in the Dry Areas (ICARDA) |
| Reference: http://www.icarda.org/ |

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| Assessment: Not the strongest of CGIAR centres, but with the strongest local presence and networks. |
| Contact: ? |
| Activities: ICARDA has more than 10 current projects in Egypt, most of which focus on smallholder agriculture in reclaimed lands. |
| Name: WorldFish Centre |
| Reference: http://www.worldfishcenter.org/our-research/ongoing-projects/investment-in-egypts-aquaculture |
| Assessment: Very high quality science, could be useful depending on focus of pilot projects |
| Contact: Malcolm Dickson, Project Leader, IEIDEAS, WorldFish Center, Cairo, tel: 010 2004 3121, email: m.dickson@cgiar.org |
| **Activities**: The current focus of WorldFish activities in Egypt is the Swiss-funded project Improving Employment and Income through Development of Egypt's Aquaculture Sector (IEIDEAS). Implemented with CARE International, MALR, and local fish producers, IEIDEAS focuses on the two areas of the value chain where employment is highest – production and retailing – and where evidence suggests that targeted investments can increase employment and income from aquaculture. Project members will work with three governorates – Behera, Kafr El Sheikh and Sharkia – that currently lead aquaculture production. The project will also target the governorate of El Fayoum where there is a strong producer association offering good opportunities for growth in production. In a fifth governorate (El Mineya) the project will provide more targeted inputs to support emergence of its present rudimentary aquaculture sector. Project members will also work at the national level to invest in policy development aimed at a creating a more effective enabling environment for efficient and sustainable value chains in the aquaculture sector.<br><br>There is also potential for WorldFish to contribute to coastal adaptation efforts by collaborating with CORI and SPA on trialling fish farming as an adaptation in areas suffering from high soil salinity and as a coastal stabilisation measure. |

**Research Sector**

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| **Name: Desert Development Centre (DDC), American University of Cairo** |
| Reference: http://www.aucegypt.edu/research/ddc/Pages/ddchome.aspx |
| Assessment: Professional agriculture and development expertise with strong experience in community engagement |
| Contact: Richard Tutwiler, Director, Desert Development Center, +20 2 279 766 09, ddcdir@aucegypt.ed |
| **Activities**: DDC conducts a fairly substantial range of research in desert areas. Most relevant to ACCWAM is their work related to water scarcity and water demand management. Since 2006, the DDC has been conducting technical and social research on water management, agricultural systems and community development in the oasis community of Abu Minqar, located 100km south of Farafra Oasis in Egypt's Western Desert (this work was in part funded by IDRC's WadiMENA project). They also have some experience in wastewater reserach. |
| **Name: Alexandria University Desalination Studies and Technology Center** |
| Reference: http://www.adst.sci.eg/organization.html |
| Assessment: potentially interesting if considering work on desalination for supplementary irrigation – unclear whether this is an active or shell institution |
| Contact: |
| Activities: (self-appointed?) national focal point for desalination research. Conducting and coordinating Egyptian desalination activities, nationally, regionally and internationally. |

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| Encouraging research, development and appropriate utilization of desalination, desalination technology and water reuse. Promoting training activities in desalination. Encouraging and promoting environmentally responsible and efficient use of technology. Serving as a public forum to provide information on desalination related subjects, water reuse and other solute solvent separations. Offering technical diplomas in desalination technologies, desalination plant operations and maintenance. Establishing contacts between researchers, clients, consultants, contractors and equipment suppliers. Promoting awareness of the true value of water and its augmentation by desalination. |
| **Name: Alexandria Research Centre for Adaptation (ARCA)** |
| Reference: http://arca-eg.org/ |
| Assessment: New policy-oriented research centre facing challenges but growing fast |
| Contact: Prof. Mohamed Abdrabo, ARCA Director, Institute of Graduate Studies and Research, Alexandria University. Tel: 01005167400, email: mabdrabo@hotmail.com |
| Activities: ARCA was established in 2011 with funding from IDRC. It provides a focus for research on adaptation to climate change in the Nile Delta. It has specific expertise in-house on environmental economics, GIS, and spatial planning, and the Director is a Lead Author of the Intergovernmental Panel on Climate Change Working Group 2 (Adaptation). ARCA offers training, small research grants, and studentships on climate adaptation to Egyptian researchers, as well as hosting international visiting professors. ARCA is service-oriented, and launches activities to support the knowledge needs of local communities and policy makers. ARCA is still in early stages, but has considerable potential and is fast growing a viable collaborative network. Their key challenges are hiring qualified staff and ensuring financial sustainability after IDRC funding ends in 2014. |

**NGOs & Civil Society**

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| **Name: 350.org (350)** |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| **Name: Heinrich Boll Foundation (HBF)** |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| **Name: Water Institute for the Nile (WIN)** |
| Reference: WIN Documents |
| Assessment: a nascent initiative with limited capacity at present, but growing fast. Mainly appropriate for engaging with other CSOs and researchers across the Nile Basin, not local communities |
| Contact:Lama El Hatow, e-mail: lelhatow@gmail.com |

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| Activities: recently started think tank focusing on Nile basin issues from a cross-border, collaborative perspective involving stakeholders from all Nile basin countries. Intends to bring together CSO and local stakeholders in one place for discussions and problem solutions related to water management. **Objectives:** 1) Influencing national decision-making on Nile basin issues; 2) raise awareness; 3) provide a platform for youth engagement; 4) empower relevant stakeholders and provide access to capacity building opportunities; 5) promote regional cooperation and conflict-prevention |
| **Name: Center for Development Services (CDS)** |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| **Name: CARE International** |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| **Name: Green Arm,** |
| Reference: http://www.nahdetmasr.org/greenarm |
| Assessment: at a national level able to mobilise youth and conduct awareness raising activities. Limited capacity at a local level. |
| Contact: greenarm@nahdetmasr.org |
| Activities: The Green Arm is a platform for youth-led environmental initiatives in Egypt that address environmental problems of the urban community and promotes green living. Run by volunteers and incubated by the NGO Nahdet Masr, the Green Arm is fairly influential amongst environmental activists. They have had activities on climate change, including seminar series on the outcomes of climate negotiations. |
| Name: |
| Reference:<br>**The Egyptian biodynamic association (EBDA)**<br>The Egyptian biodynamic association (EBDA) is a NGO that provides biodynamic research and extension service to farmers all over Egypt. Its activities include training for farmers, multilateral cooperation with other organizations, awareness raising of the organic agricultural method, biodynamic cultivation of herbs, cereals, vegetables and cotton; moreover, the development of a knowledge database designed to facilitate communication and the exchange of information between all parties interested in organic agriculture (researchers, engineers, farmers and producers). |
| Assessment: |
| Contact: |
| Activities: |
| Name: Better Life |
| Reference: |
| Assessment: |
| Contact: |
| Activities: Minya work at a governorate level– Meher Bushra is the coordinator non-English speaker. |
| Name: Arab Network for Environment and Development (RAED) |
| Reference: http://www.raednetwork.org/ |

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| Assessment: |
| Contact: |
| Activities: |
| Name: |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: |
| Reference: |
| Assessment: |
| Contact: |
| Activities: |
| Name: COPSE Egypt |
| Reference: http://www.cospe-egypt.org/ |
| Assessment: |
| Contact: |
| Activities: |
| Name: Coptic Evangelical Organisation for Social Services |
| Reference: http://www.ceoss.org.eg/ |
| Assessment: |
| Contact: |
| Activities: |

Additional donor projects from aiddata.org: http://aiddata.org/content/index/data-search#51358521ca522eae19ccacc5e1695edc

Who are the partner organisations of CARE and Save the Children? They should have the capacity manage the projects.

**Data Search**

**Filters**

**Projects**

**Financial Flow**

**(164)**

| Year | Donor | Recipient | Title | Commitment | Purpose |
|---|---|---|---|---|---|
| 2010 | Global Environment Facility (GEF) | Egypt | Alexandria Coastal Zone Management Project (ACZM) | 7,500,000USD | Biosphere protec |
| 2010 | World Bank - | Egypt | | 30,000,0 | Water supply an |

| Year | Donor | Recipient | Title | Commitment | Purpose |
|---|---|---|---|---|---|
| | International Bank for Reconstruction and Development (IBRD) | | EG-National Drainage II Add. Financing | 00USD | sanitation - large systems |
| 2010 | World Bank - International Bank for Reconstruction and Development (IBRD) | Egypt | EGYPT-Farm-level Irrigation Modernization | 100,000,000USD | Agricultural wate resources |
| 2009 | Global Environment Facility (GEF) | Egypt | Adaptation to Climate Change in the Nile Delta Through Integrated Coastal Zone Management | 4,100,000USD | Environmental p and administrati management |
| 2009 | African Development Bank (AFDB) | Egypt | Gabal El-Asfar Wastewater Treatment Plant Stage II Phase II | 77,271,441USD | Basic drinking w supply and basic sanitation |
| 2009 | Global Environment Facility (GEF) | Egypt | Integrated and sustainable POPs Management Project | 8,100,000USD | Environmental p and administrati management |
| 2009 | Global Environment Facility (GEF) | Egypt | MED Enhanced Water Resources Management | 6,682,500USD | Water resources and administrati management |
| 2009 | African Development Bank (AFDB) | Egypt | Preparation of a Master Plan for the Rehabilitation/Replacement of Major Hydraulic Structures | 940,614 USD | River developme |
| 2009 | Kuwait | Egypt | Studies Related To A Research Project For The Production Of Membranes For Water | 1,008,842USD | Water Research |
| 2009 | African Development Bank (AFDB) | Egypt | Study Relating to Zefta Barrage | 940,614 USD | Water Supply ar Sanitation, purpo unspecified or de fit under any oth applicable codes |
| 2008 | World Bank - International Bank for Reconstruction and | Egypt | Integrated Sanitation& Sewerage Infrastructure Project | 120,000,000USD | Water supply an sanitation - large systems |

| Year | Donor | Recipient | Title | Commitment | Purpose |
|---|---|---|---|---|---|
| | Development (IBRD) | | | | |
| 2007 | World Bank - International Bank for Reconstruction and Development (IBRD) | Egypt | EGYPT-ALEXANDRIA DEVELOPMENT PROJECT | 100,000,000USD | Urban developm and managemer |
| 2007 | United Nations Development Programme (UNDP) | Egypt | Support to the N-W Coast Devet | 111,560 USD | CRS: Disaster prevention and preparedness |
| 2007 | Brazil | Egypt | Survey Mission to develop a technical cooperation project in the area of the Semi-Arid and Water Resources between Brazil and Arab countries. | 54,736USD | Water Supply ar Sanitation, purpo unspecified or de fit under any oth applicable codes |
| 2007 | World Bank - International Bank for Reconstruction and Development (IBRD) | Egypt | West Delta Water Conservation and Irrigation Rehabilitation Project | 145,000,000USD | Agricultural wate resources |

Individuals
Magda Riad