AFRICAN DEVELOPMENT BANK

African Water Facility
Facilité africaine de l'eau
Mobilising Resources for Water in Africa

CENTER FOR ENVIRONMENT AND DEVELOPMENT FOR THE ARAB REGION AND EUROPE

MDGs MONITORING AND EVALUATION FOR WATER IN NORTH AFRICA

(ALGERIA, EGYPT, LIBYA, MAURITANIA, MOROCCO, AND TUNISIA)
MEWINA

APPRAISAL REPORT

This report is made available to staff members to whose work it relates. Any further releases must be authorized by the Director AWF

March 2010

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LIST OF ACRONYMS

ADB	African Development Bank
AFESD	Arab Fund for Economic and Social Development
AMCOW	African Ministerial Council on Water
AWA	Arab Water Academia
AWC	Arab Water Council
AWF	African Water Facility
CEDARE	Center for Environment and Development for the Arab Region and Europe
EMWIS	Euro-Mediterranean Information System on Know-How in the Water Sector
GWP	Global Water Partnership
IWRM	Integrated Water Resources Management
JMP	WHO/UNICEF Joint Monitoring Program
LFA	Logical Framework Analysis
MDGs	Millennium Development Goals
MEDWIP	Mediterranean Water Information Partnership
MENA	Middle East and North Africa Region
M&E	Monitoring and Evaluation
N-AMCOW	AMCOW for the Northern Africa sub region
NTF	National Task Force
RA	Rapid Assessment (of Water Sector M&E)
RBO	River Basin Organizations
REC	Regional Economic Communities
RDFA	Regional Director Finance and Administration (CEDARE)
SSO	Saharan and Sahel Observatory
TWO	Transboundary Water Organization
UNDP	United Nations Development Program
WHO	World Health Organization
WMA	Water Monitoring Alliance
WSP	Water and Sanitation Program
WSS	Water Supply and Sanitation
WWC	World Water Council

Project Information

Client information

Recipient	Center for Environment and Development for the Arab Region and Europe (CEDARE)
Executing Agency	Center for Environment and Development for the Arab Region and Europe (CEDARE)

Financing Plan

AWF	EUR 1 912 000
CEDARE	EUR 105 000
N-AMCOW COUNTRIES	EUR 300 000
TOTAL	**EUR 2 317 000**

Currency Equivalents
(December 2009)

1 UC = 1.129 Euro
1 Euro = 1.357 US $

Timeframe (Key milestones)

Application	February 2009
Approval	April 2010
Effectiveness	August 2010
Last disbursement	November 2011
Completion	April 2012

MEWINA Project Logical Framework

ERARCHY OF BJECTIVES	EXPECTED RESULTS	REACH	PERFORMANCE INDICATORS	INDICATIVE TARGETS TIMEFRAME	ASSUMPTI
ve health and f life through management of ources and greater water supply and n made possible by capacity to plan and manage sector.	**IMPACT** Increased efficiency and effectiveness of water sector investments through improved knowledge of needs and progress enabling improved sector planning and management	All population in the N-AMCOW Region covering Algeria, Egypt, Libya, Mauritania, Morocco and Tunisia, totalizing 219,4 million habitants	Increased access to and improved quality of water supply and sanitation services, and strengthened water resources management; Measured progress towards MGD and MGDS targets Improved sector planning and management Sources: National and international statistics WHO/UNICEF-JMP reports	100% access to water supply and sanitation services in 2025 Adequate water allocation to satisfy water demand by 2025 Adequate resources mobilization to finance climate change mitigation measures by 2025	Political, econo environmental AMCOW Cou Governments p adopt National Action Plans ba principles of in resources mana
t purpose: se the N-AMCOW capacity in Water onitoring and n, through the set up a ctor Monitoring and n Mechanism that -AMCOW to annually the status of the Water thin North Africa, monized and le information	**Outcomes:** • Better understanding and knowledge of the state of water sector M&E systems; • Annual water reports produced using data Monitoring system and reporting mechanism established at local, national and sub regional (North Africa) levels to annually report on standardized indicators tracking water resources management and the achievement of the MDGs related to water and sanitation in the North African countries; • Adequate resources mobilized for M&E infrastructure development, capacity building and awareness program to develop a functional and regular observation mechanism on the water sector in the North African countries.	**Beneficiaries:** N-AMCOW EXCO, TAC and Secretariat, N-AMCOW Member States Sector Ministries and M&E Units, AMCOW, AU, donors and partners, population	**Outcome indicators:** N-AMCOW member countries and Secretariat annually report to the AU through AMCOW on the status of water sector	**Progress anticipated in the medium term:** Annual National and Regional reports on water sector since 2011	**Assumption** Effective alignm countries to the framework Effective devel AMCOW Secr Sufficient reso by countries an Mitigation mea Organization o awareness work Project Steering by N-AMCOW Donors involve launching and l workshops

ERARCHY OF BJECTIVES	EXPECTED RESULTS	REACH	PERFORMANCE INDICATORS	INDICATIVE TARGETS TIMEFRAME	ASSUMPTI
and activities:	**Outputs:**	**Beneficiaries:**	**Output indicator:**	**Progress /Timeframe:**	**Assumption**
ent 1 - Assessment of M&E Systems ing on Rapid ent uct M&E Rapid ents **st: € 411,100** **ant: € 400,100**	1.1.Enhanced capacity of Project Stakeholders in assessing water sector M&E 1.2.Assessment Report on Status, strength and weaknesses of Water sector M&E through the effective implementation of the water sector M&E	N-AMCOW Secretariat and member countries,	1.1.Number of Project Stakeholders trained in assessing water sector M&E 1.2.Number of Water sector M&E Assessment Reports at country, transboundary and sub regional level	1.1.Twenty Project Stakeholders trained in assessing water sector M&E Mo+6 1.2. Six National, four Transboundary Water Organizations, and one sub regional Water sector M&E Assessment Reports Mo+9	Risks: (a) Inaccessibil sources or lack commitment of collection instit (b) Unreliable c country level da Mitigation mea (a) Commissio M&E assessme (b) Support Forces with M& all project activ (c) strengthen c for continuous
ent 2 - Standardizing monizing National MCOW M&E and report lopment of a minimum icators, standards, and lopment of M&E al framework and s utional Strengthening al M&E Systems bilation of existing &E data, information **st: € 627,300** **ant: € 613,300**	2.1.A sub regional Water Sector M&E system and mechanism in place which allows North African countries and N-AMCOW to monitor and report on the status of the water sector through standardized data and harmonized information	N-AMCOW Secretariat and member countries, sector stakeholders, other AMCOW Regions, AMCOW, AU	2.1.Availability of N-AMCOW countries Water Sector information on N-AMCOW website 2.2.Number of National baseline reports on the status of the water sector and MDGs 2.3.Number of sub regional reports on the status of the water sector and MDGs in North Africa	2.1.Water Sector information on N-AMCOW countries available on N-AMCOW website Mo+14 2.2.6 National baseline reports on the status of the water sector and MDGs Mo+13 2.3.A sub regional report on the status of the water sector and MDGs in North Africa Mo+14	Risks: (a) Lack of inte involved partie (b) Lack of infr establish nation Mitigation mea (a)Establish national task groups) and i focal points tha coordination w involved a institutions (b) Need assess support to capa through the pro

and activities:	Outputs:	Beneficiaries:	Output indicator:	Progress /Timeframe:	Assumption state
ent 3 - Preparing a frican M&E Program ration of a Regional rk and action plan ration of an awareness city build action plan **st: € 280,600** **ant: € 280,600**	3.1.A Regional M&E Action Plan developed and adequate financial resources mobilized for its implementation through partnerships	N-AMCOW Secretariat, N-AMCOW Countries, sector stakeholders, development partners	3.1.Regional M&E Action Plan Report 3.2. Amount of financial resources mobilized 3.3.Number of partnership agreements signed	3.1.Regional M&E Action Plan Report available Mo+17 3.2. 100 % of financial resources mobilized Mo+20 3.3.At least 10 partnership agreements signed Mo+17	Risk: - Inability to finance a implement the action p - Lack of public interes Mitigation measures: - Base the action plan and demands; Source s from countries and ins Link with country-leve institutions ; Identify a mutual cooperation w international agencies - Engage the NGOs an society in the M&E ac Promote consultation a community participati Emphasize the socio-e and environmental ben
ent 4 – Project ment o of the RPMU, the 6 d NTF tion of consulting firm A and of individual ts uct 1 launching and 2 n regional workshops, ng and 12 validation workshops, 12 s workshops ene 5 Steering ee Meetings nize 1 donors round rvision of Consultants, ng of the ntation of the project; of quarterly progress d the project on report. **st: € 906,750** **ant: € 538,750**	2.1.RPMU, 6 NPCT and NTF in place 2.2.Consulting firm Selected for the RA and individual consultants selected 2.3.1 launching and 2 validation regional workshops, 6 launching and 12 validation national workshops, 12 awareness workshops organized 2.4.5 Steering Committee Meetings convened 2.5.1 donors round table organized 2.6.Quarterly progress reports and project completion report prepared in time.	N-AMCOW Secretariat, N-AMCOW Countries, sector stakeholders, development partners	2.1.RPMU contracts, nomination of NPCT and NTF 2.2.Consulting firm contract for the RA and individual consultants contracts 2.3.1 launching and 2 validation regional workshops, 6 launching and 12 validation national workshops, 12 awareness workshops Reports 2.4.5 Minutes of Steering Committee Meetings 2.5.1 donors round table Report 2.6.Quarterly progress reports and project completion report	2.1.RPMU contracts, nomination of NPCT and NTF signed Mo+5 2.2.Consulting firm contract for the RA and individual consultants contracts signed Mo+5 2.3.1 launching (Mo+7) and 2 validation regional workshops (Mo+14; Mo+17), 6 launching (Mo+7) and 12 validation (Mo+9;; Mo+14)national workshops, 12 awareness workshops (Mo+19)Reports 2.4.5 Minutes of Steering Committee Meetings Mo +6, Mo+11; Mo+14; M0+17; Mo+19 2.5.1 donors round table Report Mo+20 2.6.Quarterly progress reports Mo+4 and project completion report Mo+22.	

ost: € 2,261,000; Contingencies 3%: € 56,000; **Total cost including contingencies: € 2,317,000**

rces: AWF Grant: €1,912,000; CEDARE Contribution: €105,000; Country contribution: €300,000

EXECUTIVE SUMMARY

Background and origin of the project: The North African Countries (Egypt, Libya, Tunisia, Algeria, Morocco, and Mauritania) form together the North African sub-region for the African Ministers Council on Water (N-AMCOW). This sub region has geographical, cultural, climatic, hydrologic and socio-economic similarities. With their deep roots in Africa and strong ties with the Euro-Mediterranean countries, they are the link with the Europe through the Mediterranean window. Similarly, they hold strong ties with other Countries in Africa and the Middle East. The AMCOW framework brings all African Countries around a common agenda of achieving continental water security and the MDGs targets. The North African countries have limited water resources; the availability of renewable water resources varies from 230 m3/year for Algeria to about 600 m3/year for Morocco; their average dependency ratio is 58.76 %, and varies from 0% for Morocco to more than 96% for Egypt and Mauritania; they are all considered as water scarce and they are facing serious impacts of climate change. Most of the N-AMCOW countries are on track to achieve the water supply and sanitation (WSS) targets related to the Millennium Development Goals (MDGS). Several countries such as Morocco, Tunisia and Egypt have developed rather strong M&E sub system, mostly oriented to WSS. However there is a lack of mechanisms for sub-regional collaboration among their water sectors in M&E and surveillance systems, with indicators and tools shared among them which are also regionally and globally acceptable. There is a need for these countries to build comprehensive Water Sector M&E systems, strengthen their national capacities in M&E and develop cooperation and assistance to build a sub-regional North African mechanism which ensures regional and global reporting mandates and stronger synergies between these countries.

Objective: The project objective is to increase the N-AMCOW countries capacity in Water Sector Monitoring and Evaluation, through the set up a Water Sector Monitoring and Evaluation Mechanism that allows N-AMCOW to annually report on the status of the Water Sector within North Africa, using harmonized and comparable information generated by standardized data collected by the six North Africa Countries' M&E systems.

Outcomes: The main outcomes of the project are (i) Better understanding and knowledge of the state of water sector M&E systems, current gaps and developments in the N-AMCOW member countries, (ii) Monitoring system and reporting mechanism established at local, national and sub regional (North Africa) levels to annually report on standardized indicators tracking water resources management and the achievement of the MDGs related to water and sanitation in the North African countries, and (iii) Adequate resources mobilized for M&E infrastructure development, capacity building and awareness program to develop a functional and regular observation mechanism on the water sector in the North African countries.

Institutional arrangements: The Center for Environment and Development of the Arab Region and Europe (CEDARE) is a Regional Organization based in Cairo, Egypt. As host of N-AMCOW Secretariat, the CEDARE will establish a Project Regional Management Unit and provide professional and logistical support to the Unit. National Project Coordination Teams will implement activities at country level. Members of the Technical Advisory Committee of N-AMCOW will provide guidance and advice regarding the project implementation.

Description: The proposed "MDGs Monitoring and Evaluation for Water in North Africa" project consists of three main components: i) Assessment of existing M&E Systems in N-AMCOW countries; ii) Standardizing and harmonizing National and N-AMCOW M&E systems and reporting; and iii) Preparing a North African M&E Action Plan and Program.

Cost and Financing: The project will have a duration of 20 months from Grant signature. The total cost of the project is estimated at € 2,317,000 consisting of the three above mentioned components costs of € 1,410,250 as well as project management costs totaling € 906 750. The MDGs Monitoring and Evaluation for Water in North Africa Project is to be financed by an AWF grant of € 1,912,000 or 82.5% of the total cost of the project, whilst the CEDARE and the six riparian countries will contribute of amounts € 105,000 (4.5%) and € 300,000 (13.0%) respectively.

Justification: The project is in line with the AWF strategy and falls under the Operational Area: "Improving Water Knowledge – Monitoring and Evaluation". It is also a direct response of North Africa to the AU Head of States and Governments commitments for accelerating the achievement of water and sanitation goals in Africa (11th AU Summit, 30th June – 1st July 2008, Sharm El Sheikh, Egypt). The action will promote the joint development, harmonization and standardization of monitoring and information systems across North African Countries. It will therefore facilitate decision making in water infrastructure investments and serve as a sub-regional platform to inform the impacts of climate change on surface and groundwater resources with standardized data and harmonized information.

Recommendation: It is recommended that an AWF Grant, not exceeding € 1,912,000 be extended to the Center for Environment and Development of the Arab Region and Europe (CEDARE) for the purpose of implementing the "MDGs Monitoring and Evaluation for Water in North Africa" project, as described in this report.

BACKGROUND

1.1 Origin of the Project

1.1.1 Algeria, Egypt, Libya, Mauritania, Morocco and Tunisia constitute the Northern Region of Africa and are the member countries of the Northern Region of the African Ministerial Council on Water (AMCOW), commonly named N-AMCOW. The countries have decided to harmonize and standardize their Water Sector monitoring and evaluation framework. They are also member countries of the Arab Water Council (AWC) and of the Euro Mediterranean System on Know-How in the Water Sector (EMWIS), except Libya which is participating in the EMWIS as an observer. The total population of the six countries was 219.4 million habitants in 2008.

1.1.2 The six North African countries have 32,160 km3 of annual exploitable water resources, comprised of 24,610 km3 of renewable surface water, and 7,550 km3 of renewable groundwater. With less than 600 m3 per habitant per year, they are considered as water scarce. The water resource is shared between 3 or more other countries. The average dependency ratio, which measures the ratio between internal and external water resources is 58,76 %, and vary from 0% for Morocco to more than 96% for Egypt and Mauritania. The major Transboundary water resources they share are the Nile River (for Egypt), the Senegal River (for Mauritania), the Nubian Sandstone Aquifer System (for Egypt and Libya), the North Western Sahara Aquifer System (Algeria, Libya and Tunisia), and the Taoudeni/Tanezrouft Aquifer System (Algeria and Mauritania).

1.1.3 An important part of water resources in the North Africa region originates from the precipitation. Any changes in precipitation characteristics affects water resources of this region already under water scarcity conditions. The N-AMCOW countries have experienced different drought episodes with variable impacts on economy and water resources. The first signs of changes have already appeared in this region through both the temperatures and the precipitation evolutions. Temperatures have increased by 1 to 2 °C during the twentieth century. Rainfall amounts registered, for example in Algeria, show a negative trend at national and regional scales. Nationally, spring rainfall has declined by over 30% since the 1975s, impacting on the availability of water resources. The water table the Mitidja aquifer recorded a decrease varying from 7 to 40 meters.

1.1.4 According to the IPCC report on climate change, Morocco, Algeria and Tunisia are facing higher water scarcity with low potential of adaptation measures. Mauritania will face increased rainfall variability, with increased frequency of droughts and flooding, also with low potential of adaptation measures. Egypt will face rising sea level, increased flood frequency and potential infrastructure damages. It has a high vulnerability to climate change and will have a medium potential of adaptation measures such as minimizing infrastructure development and conjunctive use of surface and ground waters.

1.1.5 Whilst Governments of the N-AMCOW region face increasing demands for accountability for improved water supply, sanitation and other water resources services from their citizens, they lack mechanisms to demonstrate their effectiveness and impacts on the overall status of people's livelihoods. Monitoring and evaluation of progress towards achievement of the Millennium Development Goals (MDGs) and of the Africa Water Vision (AWV) is for them a challenge. This is important in enabling countries to increase the investments in water resources development and to generate the needed developmental changes in order to make sustained and lasting impacts on poverty alleviation, socio-economic development, regional integration, and enhanced environmental management.

1.1.6 The Center for Environment and Development for the Arab Region and Europe (CEDARE) is a regional technical center aiming at supporting its member countries in environmental management and development. As hosting body of the N-AMCOW Secretariat, the CEDARE developed a sub regional program called "A Water MDGs Monitoring and Evaluation Program in North Africa" to support N-AMCOW and its member countries in Water Sector M&E.

1.1.7 The project concept was submitted to the AWF during the 3rd session of the AWF Governing Council held in Cairo, Egypt, 25-26 June 2006 and matured within the context of the AWF mandate on regional M&E and the Water Sector M&E Pan African Study undertaken in 2008. A regional stakeholders' workshop held in Cairo, Egypt, 15-17 June 2008, endorsed the Program document and recognized the dire need of M&E systems development. However, considering the various status of M&E systems development in the riparian countries, the meeting concluded to phase the initial Program. A diagnostic and program preparation phase was therefore prepared in connection with the Pan African M&E Assessment process, subject to the present support project to "MDGs Monitoring and Evaluation for Water in North Africa"(MEWINA).

1.2 Sector Priorities

1.2.1 The North Africa region did not develop a regional water policy and associated action plan. Sector priorities are therefore those enshrined in the country water sector policy and strategy documents. An assessment conducted in December 2005 by the Arab Water Council (AWC) in cooperation with UNDP and the CEDARE widely recognized the need for action on IWRM planning and application for meeting water challenges in the countries of North Africa. The assessment identified strategic entry points to bridge the existing gap that hinders the progress of IWRM development and implementation in the Arab Region, including the necessary reporting on the state of the Water in the Arab Region.

1.2.2 Recognizing the significant progress made in the development of IWRM plans (see Annex 1), representatives of the North African countries gathered in Rabat[1], Morocco 24-25 January 2006, called for concrete action on IWRM. More specifically, they stressed the need to enhance knowledge sharing and strengthen regional information exchange systems on IWRM and secure close cooperation between all sector stakeholders. The project is therefore a direct response to the Rabat Declaration.

1.2.3 Complementing the efforts undertaken by the North Africa countries, various regional and international initiatives are contributing to the target set for IWRM planning and application at the national level through activities that are currently implemented or are in the pipe-line (See Annex 2). However, few of these activities directly address the regional water sector monitoring and evaluation gap, except the Euro-Mediterranean Information System on know-how in the Water Sector (EMWIS) support to enhance and improve the National Water Information Systems in the participating countries.

1.2.4 The project is also a N-AMCOW response to the African Water Vision requirements on water sector M&E, recalled by the recent regional declarations (Sharm el-Sheikh commitments for accelerating the achievement of water and sanitation goals in Africa - July 2008; First African Water Week - March 2008; eThekwini Declaration on Sanitation – January 2008) as follow (see also annex 3):

- **Enhance** information and knowledge management as well as strengthen monitoring and evaluation;

[1] . The Rabat Seminar was organized by the government of Morocco, Global Water Partnership-Mediterranean (GWP-Med), UNEP Collaborating Centre on Water (UCC-Water) and the African Development Bank (ADB)

- **Build** institutional and human resources capacity at all levels including the decentralized local government level for Program implementation,
- **Report** annually on progress made in the implementation of African commitment on water and sanitation.

1.3 Problem Definition

1.3.1 By setting clear and time-bound targets, the MDGs and the AWV have highlighted the need for improved information on the progress made and thus for monitoring and reporting. Monitoring then becomes a critical component of planning and action. Monitoring change in situations over time is necessary to gauge the effectiveness of interventions and measure the impact of policy reforms and investment at national and sub-national levels. Accurate information, the end product of reliable assessment and monitoring efforts, is the civil society's most powerful advocacy tool to improve access to water and water services.

1.3.2 The global trend in M&E, inspired by the Paris Declaration-2005 on Aid Effectiveness, is oriented towards national ownership. This is underscored by the development of common denominators to ensure harmonization and alignment of national systems for monitoring and evaluation, without compromising the quality, reliability and usefulness of M&E products at the country-level.

1.3.3 The existing M&E systems within the six countries in the North African region vary in terms of the organizations and processes used for collecting data, quality of the collected data, completeness and consistency of parameters collected, reporting systems and the dissemination of the available information. The M&E sub systems developed by these countries for Water Supply and Sanitation (WSS) are rather strong, specifically those developed through Urban Water Utilities such as ONEP and SONEDE. However, consistency with rural WSS sub systems is to be ensured, as well as linkages with the sub systems used to monitor water resources allocation. Morocco and Algeria have organized their system under the IWRM principles through basin Agencies. Tunisia has organized its monitoring system through the 24 administrative regions.

1.3.4 According to the latest WHO/UNICEF – Joint Monitoring Program (JMP) report dated July 2008 (see figures in Annex 4), Egypt, Mauritania, Morocco and Tunisia are on track for the MDGS related to access to water. Algeria is reported not on track with a significant decrease of access to water from 1990 (94%) to 2006 (85%). However, national reports indicate 90% access to water in 2005, and foresee 95% in 2009. Libya is reported with "insufficient data". With regards to Sanitation, Mauritania is considered not on track, with access reported in 2006 as 24% (44% access to sanitation in urban areas, and 10% in rural areas) and a target at 60 %. However, Mauritania reported in 2008 55% access to sanitation in urban areas, and 20% in rural areas. There is therefore a critical need to assess the M&E systems within the countries and their consistency with the global reporting.

1.3.5 In addition to this, several bi-lateral and multilateral agencies are operating in the water sector in each country, and each agency (or project) has its own protocol for monitoring and evaluation, resulting in incomparable sets of data with limited value. A review of water and sanitation coverage data showed that the definition of sustainable access to safe water and sanitation facilities and services sometimes differ not only from one country to another, but also for a given country over time[2]. These factors together impose lack of credibility and difficulties on sharing and exchange information at the local, regional and international level, and make it

[2] The achievements of MDGs in North Africa, CEDARE, 2005.

extremely difficult to monitor and evaluate the impact of investments in the sector or to plan and implement new investment projects.

1.3.6 Moreover, discrepancies between national data and the Global WHO/UNICEF Joint Monitoring Program on Water Supply and Sanitation are a critical and permanent issue and a better understanding on the global definition and criteria is critically needed to ensure coherent linkages from local to national, regional and global water sector M&E.

1.4 Objective of the project

1.4.1 The project objective is to set up a Water Sector Monitoring and Evaluation Mechanism that allows N-AMCOW to annually report on the status of the Water Sector within North Africa, using harmonized and comparable information generated by standardized data collected by the six North Africa Countries' M&E systems.

1.5 Beneficiaries and Stakeholders

1.5.1 The primary beneficiaries of a credible, valid and usable N-AMCOW water sector M&E Program are the six governments of the N-AMCOW region. Through the Project, the N-AMCOW itself and its Secretariat, will benefit from a sub regional mechanism to fulfil their reporting requirement to the AMCOW and the African Union, which are therefore benefitting from the Project. In addition to them government institutions, members of the private sector, NGOs, research and educational centres, as well as the public at large will benefit from more robust M&E system through access and use of regular, standardized and reliable information.

1.5.2 Regional and global stakeholders, interested in understanding and obtaining information and acquiring knowledge about water services and resources and the effectiveness of investments in the sector, are also part of the project and future Program implementation. They include, among others:

- Transboundary Water Organizations (TWO) such as the Nile Basin Initiative, the Organization for the Senegal River (OMVS), the Nubian Sandstone Aquifer System (NSAS) and the North Western Sahara Aquifer System (NWSAS);
- Regional Economic Communities (REC) such as the CEN-SAD and the Arab Maghreb Union (AMU);
- Bilateral and multi-lateral development agencies ;
- Development partners in the region such as EMWIS, the GWP Mediterranean, the WHO/UNICEF-JMP, the Water Monitoring Alliance.

1.5.3 As host of the N-AMCOW Secretariat, the Center for Environment and Development for the Arab Region and Europe (CEDARE) is the direct beneficiary of the project, benefiting for a strengthened capacity in water sector M&E, of the M&E Program to be prepared, and part of the Resources to be mobilized.

1.6 Justification of AWF intervention

1.6.1 The project ties in well with the AWF strategy and falls under the Operational Area: "Improving Water Knowledge – Monitoring and Evaluation". The action will promote the joint development, harmonization and standardization of monitoring and information systems across North African Countries. It will therefore facilitate decision making in water infrastructure investments and serve as a sub-regional platform to inform the impacts of climate change on surface and groundwater resources with standardized data and harmonized information.

1.6.2 The N-AMCOW project to be supported is the first application of the Regional Action Plan on Water Sector M&E initiated by the Regional Consultative Meeting on Building Partnership to Support African Countries in Water Sector Monitoring and Evaluation, Tunis, September 2006, organized by the Facility under the auspices of the AMCOW. It will also implement the Pan African Action Plan as resulting from the Pan African Assessment on Africa Water Sector Monitoring and Evaluation conducted in 2008 by the AWF on behalf of the AMCOW, and use the template for rapid assessment of country M&E systems designed during this Pan African Assessment and refined in August 2009. The Project will also serve as a pilot implementation of the Framework for Reporting Actions to the African Union adopted by the 7th Annual Assembly of AMCOW on 13th November 2009 as the Roadmap for the Implementation of the Sharm El-Sheikh Commitment on "Delivering on Africa's Water Security Commitments.

1.6.3 Finally, the project is a complementary effort to the ongoing AWF funded projects in North Africa, by setting up the basis of the M&E system leading to the evaluation of their impacts on the ground. These are: the Project supporting the establishment of an IWRM plan in Mauritania, the GéoAquifer Project on shared management of the North Western Sahara Aquifer System, the project of Artificial Recharge of Haouz Ground Water Aquifer in Morocco, the SINEAU Project on set up of the National Water Information System in Tunisia, and the Master Plan Study for the Rehabilitation/Replacement of Major Hydraulic Structures in Egypt. It will also facilitate a better monitoring by the six North African Countries and N-AMCOW of the outcomes and impacts of the Project on Infrastructure Development in Africa (PIDA) in the riparian countries.

2 THE PROJECT

2.1 Impacts

2.1.1 Driven by water scarcity the governments of the North African countries are engaged in implementing important reforms in the water sector. The impact of these investments and reform process will contribute in achieving the MDGs, by ensuring adequate allocation of water resources to the economic sectors, and increased efficiency in the use of these resources. They need to be monitored and evaluated to ensure their effectiveness in achieving the targets and, where required, adjustment of their planification shall be informed by reliable and comparable information. Thus the long term impacts of the project is therefore an increased efficiency and effectiveness of water sector investments through improved knowledge of needs and progress enabling improved sector planning and management. This will be achieved through:

- Better and efficient policy decision for improved water resources allocation and utilization;
- Enhanced planning and efficiency of water services for increased productivity of available water resources;
- Credible and comparable information available at country and sub regional level to measure the impacts of climate change on the water resources and take the necessary actions to mitigate them.

2.2 Outcomes

2.2.1 The project is expected to close a gap in the process of inducing improvement in water resources management and water services in the North-African countries. The overall outcome will be better knowledge und understanding of the quality and effectiveness of services provided and the population needs and satisfaction with these services. The expected specific outcomes of the project are:

- Better understanding and knowledge of the state of water sector in the N-AMCOW member countries, of the progress towards integrated water resources management, and of water and sanitation service provision in the rural and urban areas and their present and future development strategies in relation to the MDGs;
- Annual water reports produced using data Monitoring system and reporting mechanism established at local, national and sub regional (North Africa) levels to annually report on standardized indicators tracking water resources management and the achievement of the MDGs related to water and sanitation in the North African countries;
- Adequate resources mobilized for M&E infrastructure development, capacity building and awareness program to develop a functional and regular observation mechanism on the water sector in the North African countries.

2.3 Outputs:

2.3.1 The project is expected to harmonize and strengthen the M&E capacity in the participating country and enhance national, sub-regional and regional cooperation in exchanging knowledge and information regarding improved water resources management and reliable and effective water services. The expected direct results of implementing the project activities are:

- An Enhanced capacity of Project Stakeholders in assessing water sector M&E;
- An assessment report on the state of existing water sector M&E system, through the effective implementation of the water sector M&E;
- A sub regional Water Sector M&E system and mechanism in place which allows North African countries and N-AMCOW to monitor and report on the status of the water sector through standardized data and harmonized information
- A Regional M&E Action Plan developed and financial resources mobilized for its implementation through partnerships.

2.4 Activities

2.4.1 Project activities will be implemented under the following four components:

Component 1 - Assessment of existing M&E Systems

2.4.2 This assessment will use the M&E Rapid Assessment Methodology and Template developed by the AWF (See annex 8), and provide the countries and N-AMCOW with an independent assessment of the M&E systems in place. It will start by a one week training workshop to familiarize the project stakeholders with the methodology and template. The training will gather the Regional Project Management Unit, the national coordinators, the individual consultants and the CEDARE staff. The training session will culminate in the project regional launching workshop, organized back to back. Immediately on return, National Project Coordination Teams will organize launching workshops to inform the country stakeholders on the project activities and the rapid assessment.

2.4.3 The Rapid Assessment conducted in each country and in the Transboundary Water Organizations will inform about the performance of the water sector, and the ways to harmonize and standardize their key indicators, and link the existing M&E systems at sub regional level. The rapid assessments reports will be discussed in National workshops at the end of Month 9. The Rapid Assessment will provide the following results:

- Existing water institutions, their missions and mandate, service deficiencies and their geographical coverage, institutional gaps and financial constraints;
- Progress in developing integrated water resources management and associated institutional arrangements;

- Existing data statistics units, standards and indicators used in M&E, information dissemination and reporting systems, and associated strengths and weaknesses;
- Existing national budgets including support Programs/initiatives such as National water and statistic support projects and Programs;
- Existing planning processes and their linkages with global systems such as the WHO/UNICEF Joint Monitoring Program – JMP and the World Water Assessment and Development Reports.

A regional synthesis report will be produced by the Regional Coordination, and discussed in the regional workshop to be held Month 14.

Component 2 – Standardizing and harmonizing National and N-AMCOW M&E systems and reporting

2.4.4 The first set of activities will lead to the standardization and harmonization of national M&E systems and the creation of the basis of the sub regional reporting mechanism to collect, analyze, and manage data and information on water resources planning, management, and service provision particularly those aiming at achieving the MDGs. The standardization and harmonization include:

- Review of the set of indicators developed at global level by UN-Water for the Commission of Sustainable Developpement (CSD), including both WSS and IWRM indicators,
- Adaptation to North African region and definition of a set national/sub regional water related indicators to be monitored, including standards and criteria; this will include development of adequate guidelines and tools for the use of the NPCT;
- Organization and operationalization of the related national M&E arrangements, including decentralized M&E, enabling the national M&E subsystems to inform the agreed indicators;
- Development of the N-AMCOW M&E operational mechanism leading to the aggregation at sub regional level of the standardized information produced at national level

2.4.5 The second set of activities will consist in the assessment of the progress to the WSS MDGs by 2010, in the way of the preparation and edition of the national and N-AMCOW reports on the status of the water sector. These baseline reports will use standardized data and harmonized information compiled at national level, complemented by surveys and questionnaires at decentralized level. The output of activities 2.4.6 will provide the basis for carrying out the required assessment with the potential of continuous improvement of the quality of the country-level produced data and information and ensured synergy of M&E at the regional level. The first N-AMCOW report will be reviewed in a regional workshop to be held months 14.

2.4.6 Based on the findings of the rapid assessments, the activities to be conducted in component 2, will lead to the preparation of the N-AMCOW annual report to AMCOW on the status of the Water Sector in North Africa. The report structure will follow the reporting requirements determined by AMCOW in its "Action Plan and Framework for Reporting to the African Union". It will also be consistent with the Arab Water Report structure as determined by the Arab Water Council, this to avoid any duplication of effort and ensure consistency reporting of the North African Countries to their various bodies.

Component 3 - Preparing a North African M&E Action Plan and Program

2.4.7 Based on the assessment of the strengths and weaknesses identified during implementation of the previous components, a sub-regional M&E action plan related to North AMCOW Water Sector Monitoring and Evaluation will be developed. The action plan to be validated at country and N-AMCOW level, shall comprise milestones and budget to undertake the sets of actions and approaches along main areas which are:

- Strengthening existing national systems for water sector M&E, including capacity building to collect, analyze, and manage sector data, and infrastructure for M&E; Strengthening the M&E linkages with the National Statistic Offices, EMWIS and other relevant regional programs and initiatives;
- Helping countries to develop national action plans consistent with the regional plan but addressing the specific situation in each country, including adaptive measures to mitigate climate change;
- Strengthening regional collaboration in water sector M&E;
- Development of an awareness Program.

2.4.8 Initiation of the implementation of the awareness Program, by conducting two awareness workshops in the riparian countries to inform the water sector and statistics stakeholders on the mechanism and associate them in the way forward to elaborate, from local to sub regional and regional and global level, relevant WSS and IWRM reports with reliable data.

2.4.9 These activities will culminate in the organization of a round table to mobilize adequate funding by countries and donors to implement the regional M&E Action Plan and Program.

Component 4 – Project Management

2.4.10 Project Management Activities to be carried out include: Establishment of the Regional Project Management Unit, establishment of the National Project Coordination Teams (NPCT) and the National Task Forces (NTF), selection and supervision of the consultants, organization of the training, launching, validation and awareness workshops, maintenance of the N-AMCOW website, monitoring of the implementation of the project; preparation of quarterly progress reports including financial management and accounting details and preparation of the project completion report.

2.5 Risks

2.5.1 The Project has been developed with the assumption that the political, economic and environmental stability will be maintained in the N-AMCOW Countries, and that the six Governments produce and adopt National Strategies and Action Plans based on the principles of integrated water resources management.

2.5.2 Project outcomes are the expected to be achieved in the assumption that there is an effective alignment of countries to the AU reporting framework, that the N-AMCOW Secretariat will be developed and strengthened as recommended by the project assessment, and that sufficient resources will be mobilized by the countries and the donors to finance both M&E Systems and water infrastructure development. Measures developed to mitigate this include the organization of Training and awareness workshops attended at the largest audience, the set up of a Project Steering Committee led by N-AMCOW TAC members, and systematic donors involvement in launching and key validation workshops.

2.5.3 The expected risks involved in implementing the project activities and their possible mitigation measures are given in the following table:

Activity	Risks	Mitigation Measures
Assessment of the M&E systems in place	(a) Inaccessibility to data sources or lack of interest and commitment of key data collection institution	(a) Commission country-level M&E assessments (b) Support National Task Forces with M&E expert during all project activities (c) strengthen country capacity for continuous updating of data

	(b) Unreliable or conflicting country level data	
Standardizing and harmonizing National and NAMCOW M&E systems and report	(a) Lack of interest between involved parties (b) Lack of infrastructure to establish national M&E system	(a) Establish and strengthen national task forces (working groups) and identify national focal points that are capable of coordination with the different involved agencies and institutions (b) Need assessment and support to capacity building through the project
Preparing a North African M&E Program	Inability to finance and implement the action plan.	(a)Base the action plan on needs and demands; (b) Source support from countries and institutions that have capacity and tested tools; (c) Link with country-level institutions with mandate for national statistics. (d) Identify areas of mutual cooperation with international agencies
	Lack of public interest	(a) Engage the NGOs and civil society in the M&E activities (b) Promote consultation and community participation. (c) Emphasize the socio-economic and environmental benefits of achieving the MDGs

2.5.4 An additional risk would be the duplication of the efforts being carried out by another programs implemented by regional and international agencies or networks in the sub-region. The start-up workshop will be instrumental in mitigating this risk. Specific MoU will be signed with relevant M&E regional partners to ensure coordinated activities and support.

2.6 Cost and Financing plan

2.6.1 The estimated cost of the project is 2,317,000 Euros as shown in Tables 2.1 and 2.2 by components and by categories respectively, and detailed in Annex 6. AWF grant amount of 1,912,000 Euros is representing 82,5% of the project cost; CEDARE and the N-AMCOW member countries will contribute in kind (mostly office accommodation for countries, and counterpart staff) for amount estimated to 405,000 Euro representing 13% of the project cost. A provision of 3 % of the cost has been considered to cover contingencies.

Table 2.1 Cost Estimates by Components (EUR) - Excluding Taxes

COMPONENTS	AWF	IN KIND CONTRIBUTION		TOTAL PROJECT
		CEDARE	COUNTRIES	
Component 1 - Assessment of existing M&E Systems	**400 100**	**5 000**	**6 000**	**411 100**
Component 2 - Standardizing and harmonizing National and NAMCOW M&E systems and reporting	**613 300**	**2 000**	**12 000**	**627 300**
Component 3 - Preparing a North African M&E Programme	**268 600**	**0**	**12 000**	**280 600**
Component 4: Project Management	**538 750**	**98 000**	**270 000**	**906 750**
TOTAL	**1 820 750**	**105 000**	**300 000**	**2 225 750**
Contingencies 3%	91 250			91 250
Grand TOTAL	**1 912 000**	**105 000**	**300 000**	**2 317 000**
%	**82,5%**	**4,5%**	**13,0%**	**100,0%**

Table 2.2 Cost Estimates by Expenditure Categories (EUR) - Excluding Taxes

Categories of expenditures	AWF	CEDARE	COUNTRIES	TOTAL
Goods	92 210			92 210
Services	954 565			954 565
Others	773 976	105 000	300 000	1 178 976
Total Base costs	1 820 750	105 000	300 000	2 225 750
Contingencies (3%)	91 250			91 250
TOTAL PROJECT COST	1 912 000	105 000	300 000	2 317 000
Percentages (%)	82,5%	4,5%	13,0%	100%

3 IMPLEMENTATION

3.1 Recipient

3.1.1 The Recipient of the Grant is the Center for Environment and Development for the Arab Region and Europe (CEDARE) as hosting body of the N-AMCOW Secretariat. The CEDARE is legally based and located in Cairo, Egypt. It was established in 1992 on the basis of a joint commitment by the Arab Fund for Economic and Social Development (AFESD), the United Nations Development Program (UNDP) and the Government of Egypt. CEDARE's main mission is to build capacities and promote skills in environmental management; to transfer technologies; and to assist in environmental education and development of environmental policies within its 26 member countries, namely: Albania, Algeria, Bahrain, Croatia, Djibouti, Egypt, France, Greece, Iraq, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Spain, Sudan, Syria, Tunisia, Turkey, United Arab Emirates, Yemen. For the purpose of this Project, interventions shall be limited to the six N-AMCOW riparian countries.

3.1.2 The Executing Agency will be the Executive Secretariat of the CEDARE, through its Water Resources Management Program. The Executive Secretariat is composed of the Office of the Executive Secretary and 8 Units and Programs, totalizing about 30 staff. The Organizational Structure and Staffing of the CEDARE are given in Annex 7. The Water Resources Management Program comprises five staff. It is the host of the N-AMCOW Secretariat and the Arab Water Council Secretariat, which are run by the CEDARE staff on a part time arrangement.

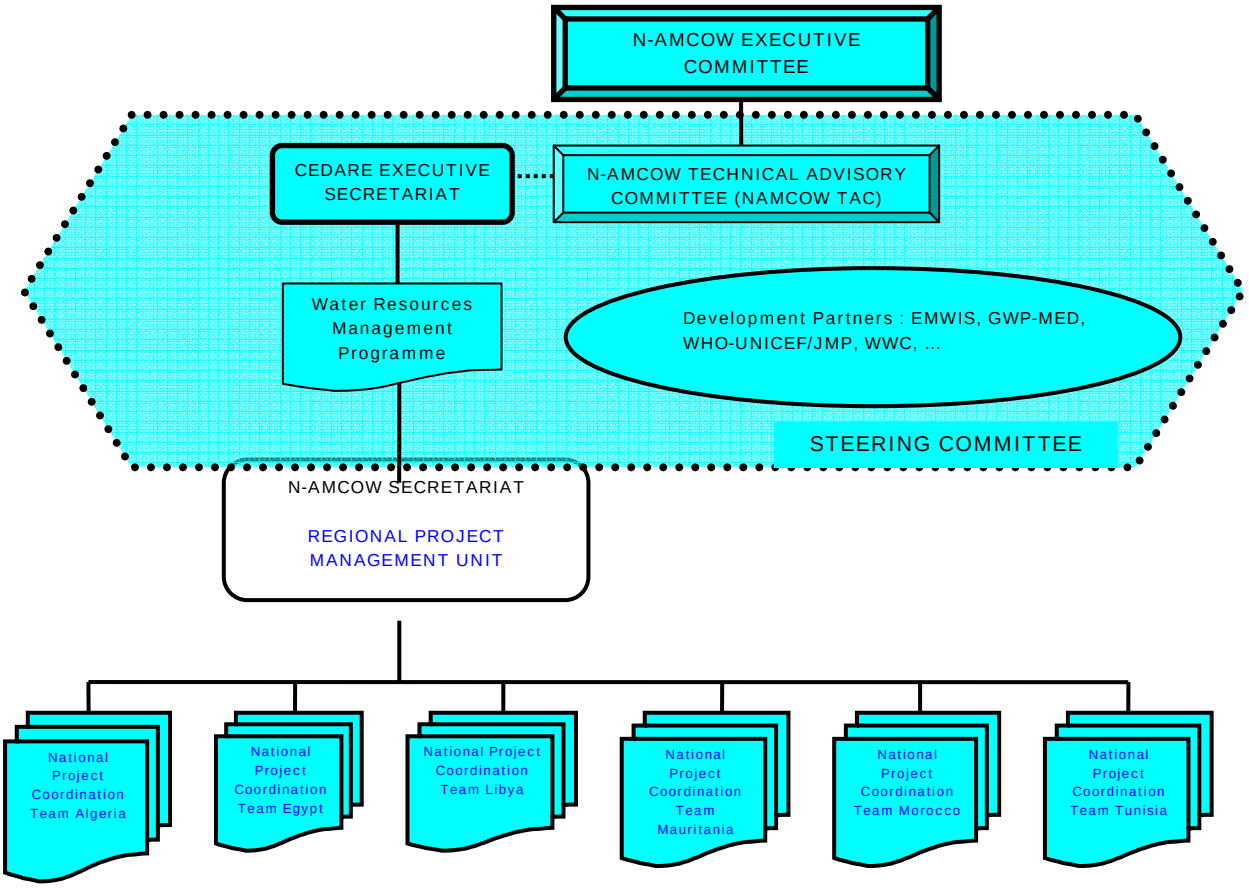
3.1.3 N-AMCOW Secretariat Mandate and Tasks currently run by the CEDARE are described in annex 5. The N-AMCOW Secretariat organizational structure includes the following positions: (i) the Director of N-AMCOW Secretariat, (ii) a Senior Water Resources Specialist, (iii) a Communication Officer / Junior Water Resources Specialist, (iv) an Administrative Assistant, and (v) a Web-Master. These positions are filled by the CEDARE through its current staffing on a part-time basis. The composition of N-AMCOW Secretariat will be confirmed throughout the Project, and options for a sustainable financing of the Secretariat will be explored by the Consultant in charge of the Preparation of the Action Plan and the Programme.

3.2 Implementation Arrangement and Capacity

3.2.1 Implementation of the Project requires permanent dedicated staff, which cannot be ensured by the current staffing of the Water Resources Management Program. The project will therefore recruit and cover the costs of a Regional Project Management Unit which will strengthen N-

AMCOW Secretariat to effectively coordinate the water sector activities and promote a well managed sub-regional M&E mechanism. The organizational structure for project implementation is shown in Figure 1 below. N-AMCOW Secretariat hosted at the CEDARE will therefore perform the role of regional coordination and project management.

Figure 1. Project Organizational Structure



Regional M&E Project Management Unit (PMU)

3.2.2 The CEDARE will establish a Regional Project Management Unit (PMU) by recruiting:

i. A Project Regional Coordinator, responsible for the day to day management of the project, and the procurement of the goods and services, and the timely delivery of the project outputs;

ii. A Regional Financial Assistant, responsible for the accountability of the project ;

iii. A Regional Administrative Assistant, who will assist the Project coordinator in the procurement activities, in the workshop organizations and the project secretariat;

iv. A Regional Webmaster / Communication Officer, who will maintain and update the existing N-AMCOW website, prepare all related communication documents related to the project activities, and ensure quality translation of all project documentation.

3.2.3 The CEDARE will provide technical and logistical backstopping to the Unit. An M&E consultant and a Capacity Building expert will be hired by the RPMU to carry out the consultancy services required to effectively execute the project activities at regional level. A start up mission will assist the countries in (i) finalizing the set up of the National Task Forces (NTF), (ii) nominating of the national coordinators, and (iii) setting up the National Project Coordination Team (NPCT) and arrangements for project implementation, including finalization of the recruitment of country support consultants.

3.2.4 The assessment of the existing M&E systems in place in the countries will be carried out by a consulting firm selected on a competitive basis. Activities under components 2 and 3 will be implemented through the following arrangement: (i) the RPMU, assisted by a M&E consultant, will prepare upfront concept and guidance notes, and review and compile at sub regional level the national reports and works, prepared and conducted by the NPCT assisted by M&E experts

National M&E Task Force and Coordination

3.2.5 Implementation of the project activities at the local and National levels will be conducted through *National Task Force* (NTF), which will be nominated by the lead Water ministries in the member countries, as follow: i) Ministry of Water Resources, *Algeria*; ii) Ministry of Housing and New Communities, *Egypt*; iii) General Water Authority, *Libya*; iv) Secretariat of State in charge of Water, *Morocco*; v) Ministry of Agriculture and Hydraulic Resources, *Tunisia*; and vi) Ministry of Hydraulics and Energy, *Mauritania.* Each NTF will not exceeding 8-10 members from among the units in-charge of monitoring and evaluation of the water sector performance, in terms of: water resources, water supply, sanitation, health, environment, agriculture, hydropower, tourism, and statistical offices. One institution will be identified as a *Focal Point*, to take the lead and its representative in the Task Force will act as the *National Coordinator* between the members of the Task Force and at the same time liaison with the regional coordinator at the N-AMCOW Secretariat.

3.2.6 A National Project Coordination Team (NPCT) will be appointed by the focal point institution, consisting of the National Coordinator, an accountant, and a secretary. The NPCT will be the counterpart of the RPMU at national level, and will be responsible to implement the project activities within the country. It is preferred and will be advantageous of the program if the Coordinator will be the same person who is currently acting as the EMWIS Focal Point within each country to ensure the necessary linkages and coordination with EMWIS related activities in the same country.

3.2.7 The NTF and the *Coordinator* will organize surveys, expert consultation, training and workshops to achieve the set goals and objectives and carry out the project activities. The M&E a Capacity Building expert will be hired by each NPCT to assist and carry out the consultancy services required to effectively execute the project activities at national level.

Project Steering Committee (PSC)

3.2.8 A Project Steering Committee (PSC) will be established to provide overall policy and technical direction. It will meet almost every 3 months to closely follow and guide the project: a PSC meeting will be organized aside each regional workshop, and two special sessions will be organized to review the Rapid Assessment report and the documents submitted to the Round Table. The N-AMCOW TAC President will chair the PSC, which will be composed of the AMCOW TAC member from each of the N-AMCOW Member Country, the N-AMCOW Secretariat, the National Coordinators, the CEDARE, and representatives of key partners as follow: EMWIS, GWP-Med, WWC/WMA, and WHO/UNICEF/JMP.

3.3 Performance Plan

3.3.1 Based on the outcomes and outputs described in chapter 2, the critical measurable indicators for each result (outputs) are shown with a time phased targets in the following table 3.3.

Table 3.3 Performance Plan

Out-come	Delivrable	Timeframe
	Grant Signature and effectiveness	End Month 3 and 5 respectively
	Operational Regional Project Management Unit, National task Force and National Coordination	End Month 5, 3 and 4 respectively
1	**COMPONENT 1 - Assessment of existing M&E Systems**	
	Training on Rapid Assessment Report	End Month 6
	Regional and National Launching Workshops	Regional back to Training and National workshops held end month 7
	M&E Rapid Assessments Report	End Month 9
2	**COMPONENT 2 - Standardizing and harmonizing National and NAMCOW M&E systems and reports**	
	Report on indicators, standards, and criteria;	End Month 10
	M&E operational framework and guidelines	End Month 11
	Baseline reports on country level MDG's and IWRM.	End Month 13
	Baseline report on regional N-AMCOW MDG's and IWRM M&E.	End Month 14
3	**COMPONENT 3 - Preparing a North African M&E Program**	
	Regional framework and action plan based on National M&E systems	End Month 17
	Awareness and capacity build action plan	End Month 17
	Awareness workshops	End Month 19
	Steering Committee Meetings	End Month 7, 11, 14, 17 and 19
	Donors Round Table	Beginning Month 20

3.4 Implementation Schedule

3.4.1 The implementation schedule of the project activities distributed over the 20 months of the project described in the table 3.4 (see next page). Each output is broken down into tasks which are expected to attain the activity indicators.

Table 3.4 Implementation Schedule

Out-come	Activity	Month																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Grant Signature and effectiveness																				
	Recruit Regional Project management Unit, Establish national task Force and identify national Coordinators																				
1	**COMPONENT 1 - Assessment of existing M&E Systems**																				
	Training on Rapid Assessment						TR														
	Regional and National Launching Workshops							RW													
	M&E Rapid Assessments Report									NW											
2	**COMPONENT 2 - Standardizing and harmonizing National and NAMCOW M&E systems and report**																				
	Development of a minimum set of indicators, standards, and criteria;																				
	Develop M&E operational framework and guidelines																				
	Institutional Strengthening of national M&E Systems																				
	Compilation of existing water M&E data, information																				
	Prepare baseline reports on country level MDG's and IWRM.													NW							
	Prepare baseline report on regional NAMCOW MDG's and IWRM M&E.														RW						
	COMPONENT 3 - Prepar a North African M&E Programme																				
	Prepare Regional framework and action plan based on National M&E systems																				
	Develop awareness and capacity build action plan																	RW			
	Conduct awareness workshops																		NW	NW	
	Steering Committee Meetings							SC				SC			SC			SC		SC	
3	Donors Round Table																				RT

TR= Train; RW=Regional Worksop; NW=National workshop; SC=Steer Committee; RT=Round Table

3.5 Procurement and Execution

3.5.1 All procurement of goods and acquisition of consultancy services financed by AWF and summarized in Table 3.5 shall be in accordance with the AWF's Operational Procedures, the Bank's Rules and Procedures for Procurement of Goods and Works, or as appropriate, Rules and Procedures for the Use of Consultants, using the relevant Bank Standard Bidding Documents.

Goods

3.5.2 Procurement of goods comprising office furniture in the aggregate amount of €28,840 (7 contracts) and IT equipment (7 contracts) valued at aggregate amount of €67,980 shall all be procured by the RPMU and the NPCT through Shopping. These goods generally constitute low value items that are readily available in the 6 countries off the shelf.

Consulting Services

3.5.3 The staff of the Regional Project Management Unit (RPMU) comprising a Regional Project Coordinator, a Regional Financial Assistant, a Regional Administrative Assistant and a Regional Webmaster/Communication Officer shall be recruited by the CEDARE through the Bank's procedure for the selection of individual consultants. The maximum aggregated amount for the four contracts is valued at €154,500. The advertisement of the recruitment shall be placed on the national newspapers of the six countries and on regional newspapers. All eligible candidates, who wish to apply for a position, may submit its application form and curriculum vitae.

Table 3.5: Summary of Procurement Arrangements (Euros)

Procurement Categories	SHT		Other		TOTAL	
1. Goods						
1.1 Office furnitures			28 840	**(28 840)**	28 840	**(28 840)**
1.2 IT Equipments			67 980	**(67 980)**	67 980	**(67 980)**
2. Services						
2.1 M&E Specialist (countries) (6)	497 490	**(497 490)**			497 490	**(497 490)**
2.2 Conduct M&E Rapid Assements	184 988	**(184 988)**			184 988	**(184 988)**
2.3Regional PMU recruitment	184 500	**(154 500)**			184 500	**(154 500)**
2.4 M&E Specialist (at CEDARE)	97 335	**(97 335)**			97 335	**(97 335)**
2.5 Translation services	67 980	**(67 980)**			67 980	**(67 980)**
3. Miscellaneous						
3.1 Regional workshops (3)			147 050	**(139 050)**	147 050	**(139 050)**
3.2 National workshops (18)			203 400	**(185 400)**	203 400	**(185 400)**
3.3 Awareness and Capacity Building workshops (12)			135 600	**(123 600)**	135 600	**(123 600)**
3.4 Training Workshop on Rapid Assessment (1)			41 110	**(38 110)**	41 110	**(38 110)**
3.5 Steering Committee Meeting (2)			43 200	**(41 200)**	43 200	**(41 200)**
3.6 Donors Round Table			25 175	**(23 175)**	25 175	**(23 175)**
3.7 National Task Force Meeting (60)			15 450	**(15 450)**	15 450	**(15 450)**
3.8 PMU Allowances			224 160	**(74 160)**	224 160	**(74 160)**
3.9 PMU perdiem			33 372	**(33 372)**	33 372	**(33 372)**
3.10 Operating Costs			190 745	**(100 745)**	190 745	**(100 745)**
3.11 CEDARE hosting			128 625	**(38 625)**	128 625	**(38 625)**
TOTAL	**1 032 293**	**(1 002 293)**	**1 284 707**	**(909 707)**	**2 317 000**	**(1 912 000)**

3.5.4 Procurement by the RPMU of consulting services for the M&E Rapid Assessment and training will be carried out by a consulting firm through contract valued at €188,580. The process for selection shall be through Short List and the method for evaluation is the Quality and Cost Based Selection (QCBS). The advertisement of the procurement shall be placed on the UNDB online, on the Bank's website, on the national newspapers of the six countries and on regional newspapers. All eligible consultants, who wish to provide the required services, may express their interest to be short-listed. The draft terms of reference are included in annex 8.

3.5.5 For the procurement of the following individual consultants, the selection method shall be through the Bank's procedure for the selection of individual consultants: Six M&E Specialists shall be contracted by the six National Project Coordination Teams (NPCT); they will conduct activities at country level; the maximum aggregated amount is valued at €497,490. One M&E Specialist skilled in Capacity Building shall be contracted by the RPMU to conduct activities at sub regional level (North Africa) for maximum amount valued at €97,335.

3.5.6 It is anticipated the CEDARE and the countries to take advanced procurement measures in the selection of the consulting firm and the individual consultants to ensure a fast track implementation of the project activities.

3.5.7 Procurement by the RPMU of translation services for the following reports on N-AMCOW M&E Rapid Assessment, Indicators, M&E operational framework and guidelines, regional N-AMCOW status on MDG's and IWRM M&E, Regional M&E action plan, and Awareness and Capacity Building Action Plan will be carried out by a consulting firm through a contract valued at €67,980. The process for selection shall be through Short List and the method for evaluation is the Quality and Cost Based Selection (QCBS). The advertisement of the procurement shall be placed on the national newspapers of the six countries and on regional newspapers. All eligible translation firms, who wish to provide the required services, may express their interest to be short-listed.

Miscellaneous and Project Management:

3.5.8 Procurement for the following workshops and meetings will follow other procedures (direct payment for costs paid to participants, shopping for stationary and logistic, short list for the recruitment of facilitators – details for each type of event provided in Annex 6.3): 3 Regional (launching and validation) workshops valued at €139,050, 18 National (launching and consultation) workshops valued at €185,400, 12 Awareness and Capacity Building workshops valued at €123,600, a Training Workshop on Rapid Assessment valued at €38,110, 2 Steering Committee Meetings valued at €41,200, and the Donors Round Table valued at €23,175. Allowances and perdiem will be directly paid to the NPCT members (Coordinator, Accountant and Secretary) for maximum amount of €47,250 and €34,020 respectively. Costs for the 60 National Task Force (NTF) Meetings valued at €15,450 will be paid directly to the NTF participants and the logistic service providers. Operating Costs for aggregated amount of €100,745 will be procured by shopping. A negotiated lumpsum amount of €2500 will be monthly paid to the CEDARE to cover part of the indirect expenses associated with the hosting the project which includes telephone and internet, water and electricity, maintenance of facilities, for total amount valued at €38,625. Others costs such as indirect staff time involvement will be covered by the CEDARE for amount estimated to €2000 per month.

Procurement Plan and Review

3.5.9 *Prior Review:* Contracts for Consultancy Services or Goods of value higher than € 10 000 will be subject to prior review by the AWF. The following documents are subject to review and approval by the AWF before promulgation, under prior review: Specific Procurement Notices (SPN), tender/ bid documents or requests for proposals from consulting firms, tender/bid evaluation reports or reports on evaluation of consultants' proposals.

3.5.10*Post Review:* Contract for goods and services of value less than Euros 10,000 will be processed by, and will be under the full responsibility of, the Recipient. Such procurement will be subject to post review by AWF.

3.5.11 *Procurement Plan:* The Recipient is responsible for preparing and submitting to the AWF before Grant signature, a Procurement Plan acceptable to the AWF and setting forth (a) the particular contracts for goods during the life of the project; (b) the proposed modes of procurement; and (c) the related AWF review procedures (prior or post review). The Recipient shall update the Procurement Plan annually or as needed throughout the duration of the project. Any revisions proposed to the Procurement Plan shall be furnished to the AWF for its prior approval. The Recipient shall implement the Procurement Plan in the manner in which it has been approved by the AWF.

3.6 Disbursement Arrangements and Expenditure Schedule

3.6.1 The grant amounts will be disbursed using the Special Account method of disbursement, in line with the Bank rules and procedures. The CEDARE will open a Special Account denominated in foreign currency in a bank acceptable to the Bank. Where possible, the Special Account will be an interest bearing account, and the currency the Euro. In addition, an account in local currency will be opened in the same bank for meeting expenditures in local currency. Both accounts will be managed by the CEDARE. Convertible currency accounts will be opened in each country by NPCT and managed by National Accountants.

3.6.2 Funds will be deposited in the Special Account which will be replenished based on the justification of expenditure for a minimum of 50% of the previous disbursement, the acceptance and the transmission of the M&E Rapid Assessments Report, and the submission of the work plan

for the following period. The account in local currency will be replenished from the Special Account. Table 3.6 above presents the preliminary disbursement schedule.

Table 3.6: Disbursement Schedule (Euro)

COMPONENTS	Tranche 1	Tranche 2	TOTAL
Component 1 - Assessment of existing M&E Systems	**400 100**	**0**	**400 100**
Component 2 - Standardizing and harmonizing National and NAMCOW M&E systems and reporting	**106 000**	**507 300**	**613 300**
Component 3 - Preparing a North African M&E Programme	**0**	**268 600**	**268 600**
Component 4: Project Management	**376 686**	**197 314**	**574 000**
TOTAL	**882 786**	**973 214**	**1 856 000**
Contingencies 3%	26 804	29 196	**56 000**
Grand TOTAL	**909 589**	**1 002 411**	**1 912 000**
Percentages %	**47,6%**	**52,4%**	**100,0%**

3.7 Accounting and Audit Arrangements

3.7.1 CEDARE is a Regional development institution with legal personality and proven financial management. The institution manages funds coming from Member States and a number of cooperating partners such as the EU, UNDP, FADES, etc. The Regional Director Finance and Administration (RDFA), responsible to the Executive Secretary, is responsible for financial management for the entire institution. Considering the increasing work load in the Regional Finance and Administration Unit (RFAU) with the roll out of the Project, the capacity of RFAU is inadequate to provide effective financial management of the project. Therefore an Accountant (the Regional Financial Assistant - RFA) will be recruited under the project to maintain the project accounts. The RFA will supervise the six National Accountants and maintain an accounting system and books of account specifically for the AWF project; quarterly financial statements shall be prepared in accordance with ADB procedures. These statements will be submitted together with the quarterly progress reports.

3.7.2 All payments will be endorsed by the Executive Director and reviewed for financial correctness and soundness by the RDFA. Segregation of duties shall be maximised between authorising, accounting and bank signatory functions. Two audits shall be carried out by an external auditor recruited by the AWF: an interim audit approximately half-way through the project, and a final audit at the end of the project.

3.8 Monitoring, Evaluation and Reporting Arrangements

3.8.1 The basis for overall project monitoring will be the logical framework and key performance indicators agreed with the CEDARE. A draft logical framework is presented at the beginning of this report. The RPMU will report progress to the Project Steering Committee (PSC) at its annual meetings. The reports will cover technical and financial progress, administrative issues and constraints affecting the project and suggested solutions to enable the PSC take decisions to towards smooth implementation of the project.

3.8.2 The AWF will undertake implementation supervision through regular correspondence with the CEDARE, reviewing progress reports submitted to the PSC, procurement documents, and technical reports from all the consulting assignments. Supervision missions to the CEDARE and/or region will be carried out as need arises.

3.8.4 The Executing Agency shall prepare and submit (i) quarterly progress reports to the African Water Facility, and (ii) a final report of implementation attesting to the completion of the project and showing lessons learnt from implementation.

4 PROJECT BENEFITS

4.1 Effectiveness and Efficiency

4.1.1 Through the project, the North African Countries will develop effective and reliable water sector M&E systems which will help them in guiding and directing the planning and management efforts towards more efficient and effective use of the available water resources on sustainable basis. It will further help in improving people access to clean water, sanitary services, and engage the civil society in promoting the principles of integrated water resource management.

4.1.2 The envisaged strengthening of the N-AMCOW secretariat through the proposed project is expected to provide top-up support to make more consistent time available for N-AMCOW activities towards achieving its objectives. Furthermore, the project will enable N-AMCOW to develop a comprehensive monitoring and evaluation and reporting system on the water sector, and pave the way to mutual exchangeability of water and related data through a sub regional action plan. This will without contest assist the N-AMCOW Countries, and further EMWIS and AWC member countries, in the assessment and management of the risks linked to the climate variability and change.

4.1.3 CEDARE is also taking a lead role in implementing the work plan of the Arab Water Council (AWC) by taking the responsibility of the Technical Secretariat. The AWC will be also one of the beneficiaries considering its responsibility to disseminate the good practices, the know-how, and innovations between countries in the Arab region (22 countries extended over North Africa, Sub-Saharan Africa, and West Asia). In implementing the project, CEDARE will ensure coordination and cooperation with all beneficiaries programs in order to maximize the benefits out of the available resources and avoid duplication of efforts. The project launching workshop will be instrumental in addressing this issue and mapping the road for an effective cooperative effort.

4.1.4 The project as described in this document will help the governments, the people, and the international community to mobilize resources and focus them on the areas where the new investments will be needed and where weaknesses in past investments could be strengthened. Some of the concerned investments are those related to the national and sub-regional M&E system development, and those emerging from the ongoing of future action plans developed by N-AMCOW countries to mitigate the effects of the climate. The N-AMCOW annual report on Water will regularly capitalize these investment needs, and serve as an advocacy tool for AMCOW and the AU to effectively mobilize the resources. More important it will ensure sustainable development for poverty reduction and economic growth, in ensuring adequate allocation of water resources in line with the measure of the performance of sector investments.

4.2 Sustainability

4.2.1 The expected benefits of the project will be an incentive to governments and partners to provide the required financing for operation and maintenance of country owned monitoring and evaluation mechanisms, and data and information management systems that serve the effectiveness and efficiency of investments in the water sector. The availability of reliable data will encourage more investments in the water sector due to increasing transparency of the impacts and outcomes and contribution to sustainable development poverty reduction. It will increase trust and confidence within the members of the society and institutions at country level as well as within the supporting donor's community at the regional and international levels.

4.2.2 It is expected that the project will help the countries to consolidate and enhance their M&E capacities and institutionalize the process as part of the on-going reform process implemented by the countries in the region. The effective contribution of the participating countries in-kind by appointing staff and providing the necessary logistical support to house, and maintain the facilities of the coordination units in a leading Water Related Ministry will be regarded as an important indicator of sustainability of the project outcomes beyond the grant funding. The training and awareness programs of the project will be other driving forces for sustaining the project outcomes.

4.2.3 The establishment of National Task Forces and national coordinator as well strengthening and empowering N-AMCOW Secretariat will ensure continuity of the results after the project. The development of sub-regional and national action plans endorsed and supported by the governments and stakeholders will provide a road map for reliable institutional arrangements. During the project life-time and through the project support the necessary institutional capacities will be developed and the staff will be trained. The regional and national action plans will focus on developing the institutional arrangement that will be in place to ensure the continuity of the results. The regional M&E Program, and the concept note about developing a regional action plan will, in-consultation with the participating countries and cooperating partners, define the form and organizational structure of the institutional arrangements that need to be in-place by the end of the project, and ensure adequate resource mobilization.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

5.1.1 The Project is an important and justified initiative considering the challenges facing the North African Countries to acquire knowledge and information which are necessary to achieve sustainable water resources management and the water related targets of the MDGs. The project is in-line and directly related to the focus areas of interventions of the AWF outlined in its Operational Program for 2009-2011. The project is formulated along the lines and recommendation set by the regional consultative meeting organized by AWF in Tunis on 21-22 September 2006 and fits within the Pan African Action Plan for Water Sector Monitoring and evaluation. It will also enable N-AMCOW to fulfill the annual reporting requirement to the AMCOW and the African Union.

5.1.2 The objective of the project is to develop a sub-regional M&E system that serves primarily the interests of North African Countries, while contributing to global aggregation of data on performance, with focus on the primacy of country owned water sector M&E; improving collaboration among regional, sub-regional, and national water sector M&E institutions; and adding value to country-level water sector M&E by strengthening the M&E chain from country to regional and global levels. The fact that involving six countries most prepared to enhance their water management system is a promising and constructive strategy, subject to replication within other AMCOW Regions.

5.1.3 The project shall pave the way and mobilize resources for improved efficiency of future water sector investments in an environmentally sustainable way. The project will also play an important role in strategic coordination and monitoring of future water related investments in the North African Sub-region whether financed by the Governments or by the external financing and development agencies.

5.2 Recommendations

5.2.1 Based on the assessment of the justification for the project, its relevance and effectiveness, it is recommended that an AWF Grant not exceeding EUR 1.912 million be granted to the CEDARE for the purpose of implementing the project as described in this report, subject to the following specific conditions.

A. Conditions Precedent to Entry into Force of the Grant Agreement and First Disbursement

The Grant shall enter into force on its signature. The first disbursement of the grant shall be conditional upon fulfillment of the following conditions:

(i) Provide evidence of the opening, where possible, of an interest bearing special bank account ("Special Account") in EURO at a bank in Cairo, Egypt into which part of the AWF grant shall be deposited on the request of the executing agency;

(ii) The depository bank of the Special Account has issued a confirmation, in a form acceptable to the Bank that funds in the Special Account will not be segregated as a special deposit for the specific purpose for which the Grant is made, and shall not be subject to claims of setoff, seizure or attachment by the depository bank;

(iii) Provide evidence of (a) the recruitment of a Regional Project Coordinator and a Regional Accountant, and (b) appointment of National Coordinators, whom qualifications and experience shall be acceptable to the AWF.

Annex 1: Progress of development of IWRM plans in the North African Countries

The following table presents the state of progress in formulating strategies, policies or framework towards an IWRM plan.

Country	Plans/Strategies/Policies/Documents towards IWRM	Status of IWRM Plans Development			
		Advanced [1]	In Progress [2]	Unknown, Progress Likely [3]	Unknown, Progress Unlikely [4]
Algeria	- **National Water Law** (2005) - **National Water Development Plan 2006 – 2040** and associated strategy, Ministry of Water Resources, 2008		X	X	
Egypt	**- National Water Resources Plan**; Ministry of Water Resources & Irrigation, 2004. **- Water Supply and Sanitation (WSS) sector reform in 2004** **- Main Features for the Water Policy towards Year 2017**; Ministry of Water Resources & Irrigation, 2000.	X			
Libya	**- National Strategy for Water Resources Management, 2000-2025;** 1999.		X		
Mauritania	- **Integrated Water Resources Management Action Plan** (AGIRE)		X		
Morocco	**- Water Law,** 1995.	X			
Tunisia	**- The Long Term Strategy for the Water Sector in Tunisia**; Ministry of Agriculture, 2003.	X			

[1] Countries having national water plans, strategies, or policies that incorporate most elements and requirements of an IWRM plan. These countries have on-going committees and/or projects advancing on finalizing their IWRM plans.

[2] Countries having water plans, strategies, or policies (not necessarily on a national level) that require major enhancements to satisfy the requirements of an IWRM plan. These countries posses the awareness of the WSSD target for developing IWRM plans and are currently progressing to develop their own IWRM plans.

[3] Countries that may not have developed national water plans, strategies, or policies. However, considering the advanced level of country awareness of WSSD target for developing IWRM plans, country water capacity, and national economical standard, these countries are likely to have an on-going attempt to develop their IWRM plans.

[4] Countries that may not have developed national water plans, strategies, or policies. However, considering the lagging level of country awareness of WSSD target for developing IWRM plans, country water capacity, and national economical standard, these countries are not likely to have an on-going attempt to develop their IWRM plans.

Annex 2: Currently implemented pipe-line of regional initiatives contributing to the target set for IWRM planning and application in North Africa.

- accomplished, UNDP / AWC produced an assessment for the status of national IWRM plans in the Arab countries (including North Africa) in 2005.

- on-going, UNDP / AWC in support of a full-fledged IWRM Program, are performing a preparatory assistance phase to formulate the Program in addition to set the indicators of a State of Water Report for Arab countries.

- on-going GWP / GWP-Med country activities in support to IWRM planning through multi-stakeholder processes (www.gwpforum.org and www.gwpmed.org).

- on-going UNEP support for achieving the 2005 IWRM targets, with support to developing countries, including North Africa, implemented through UCC-Water (www.ucc-water.org).

- ongoing IUCN support for achieving the 2005 IWRM targets,

- the Mediterranean Component of the EU Water Initiative (MED EUWI), led by Greece and the EU Commission, and the structured Country Dialogues on IWRM and Water Supply and Sanitation (WSS). The MED EUWI Secretariat is facilitated by GWP-Med (www.euwi.net).

- On-going Euro-Mediterranean Information System on know-how in the Water Sector (EMWIS) support to enhance and improve the National Water Information Systems –NWIS- in the participating countries. It is also to remove all obstacles at the national level that impede the advancement of the NWIS and, as a consequence, improve and harmonize data/information exchange and sharing between the participating countries and the EMWIS international system via the National Focal Points. (www.emwis.org)

- the upcoming GEF Strategic Partnership for the Mediterranean (2007-2011) and its related IWRM Component that is led by GWP-Med. The IWRM Component coordinates activities with the GEF SP Component on Coastal Aquifers Management and the GEF SP Component on Integrated Coastal Zone Management.

- The Regional Water Demand Initiative for the Middle East and North Africa (WaDI*mena*) is an intra-regional, multi-donor program that is supporting and promoting water demand management (WDM) approaches in the increasingly water-scarce countries of the Middle East and North Africa, or MENA region http://www.idrc.ca/en/ev-57064-201-1-DO_TOPIC.html .

- The UN-Water/Africa (formerly IGWA); operationalizing the Integrated Water Resource Management (IWRM) principles that emanated from the African Water Vision 2025 and assist basin development initiatives; http://www.uneca.org/unregionalconsultations/INFRASTRUCTURE/infrastructure_water.asp

- European Space Agency (ESA) , The TIGER initiative was launched in 2002 to support African Water Authorities to Improve Integrated Water Resources management; http://www.tiger.esa.int

Annex 3: Africa's Political Commitments related to M&E

Sharm el-Sheikh commitments for accelerating the achievement of water and sanitation goals in Africa

(g) **Build** institutional and human resources capacity at all levels including the decentralized local government level for Program implementation, enhance information and knowledge management as well as strengthen monitoring and evaluation;

(q) **Request** AMCOW to annually report on progress made in the implementation of our commitment on water and sanitation with support from regional partners, and to submit these reports for our consideration;

5th World Water Forum

11. We will strive to improve water-related monitoring systems and ensure that useful information is made freely available to all concerned populations, including neighbouring countries.

First African Water Week - March 26-28, 2008 Tunis

a. Meeting the Water and Sanitation MDGs

- develop appropriate monitoring and evaluation mechanisms for water supply and sanitation at local, basin, national and regional levels;
- request the AfDB and the Water and Sanitation Program (Africa) to continue to undertake Country Sector Reviews, within the context of the Pan African mechanism, to update AMCOW on progress and bottlenecks in achieving the MDG targets;
- establish peer review processes for monitoring water and sanitation performance for Members who ascribe to the idea.

eThekwini Declaration

6. To **develop and implement improved sanitation information, monitoring systems and tools** to track progress at local and national levels and to work with global and regional bodies to produce a regular regional report on Africa's sanitation status, the first of which to be published by mid-2010;

9. To **support the leadership of AMCOW** to track the implementation of the eThekwini Declaration and prepare a detailed report on progress in mid 2010, when AMCOW will provisionally host a follow up AfricaSan event;

African Water Vision

1. There is an effective and financially sustainable system for data collection, assessment and dissemination for national and transboundary water basins

Framework for Action

- Establishing a sustainable system for data collection, management, and dissemination, including standardization and harmonization of data

Annex 4: Status of the MDGs related to access to water and sanitation in North Africa (Source JMP Report, July 2008)

Country, area or territory	Year	Population		Drinking water Coverage (%)			
				Urban	Rural	Total	
		Total (,000)	Urban (%)	Improved	Improved	Improved	% of population gained coverage (1990-2006) with respect to median population (Year 1998)
Algeria	1990	25 283	52	99	88	94	16
	2006	33 351	64	87	81	85	
Egypt	1990	55 137	43	97	92	94	33
	2006	74 167	43	99	98	98	
Libyan Arab Jamahiriya	1990	4 364	79	72	68	71	-
	2006	6 039	85	-	-	-	
Mauritania	1990	1 945	40	30	41	37	47
	2006	3 044	41	70	54	60	
Morocco	1990	24 808	48	94	58	75	24
	2006	30 853	59	100	58	83	
Tunisia	1990	8 219	60	95	62	82	31
	2006	10 215	66	99	84	94	
Northern Africa	1990	118 032	49	95	82	88	35
	2006	155 087	54	96	87	92	

Country, area or territory	Year	Population		Sanitation Coverage (%)			
				Urban	Rural	Total	
		Total (,000)	Urban (%)	Improved	Improved	Improved	% of population gained coverage (1990-2006) with respect to median population (Year 1998)
Algeria	1990	25 283	52	99	77	88	30
	2006	33 351	64	98	87	94	
Egypt	1990	55 137	43	68	37	50	33
	2006	74 167	43	85	52	66	
Libyan Arab Jamahiriya	1990	4 364	79	97	96	97	32
	2006	6 039	85	97	96	97	
Mauritania	1990	1 945	40	33	11	20	14
	2006	3 044	41	44	10	24	
Morocco	1990	24 808	48	80	25	52	34
	2006	30 853	59	85	54	72	
Tunisia	1990	8 219	60	95	44	74	28
	2006	10 215	66	96	64	85	
Northern Africa	1990	118 032	49	82	44	62	32
	2006	155 087	54	90	59	76	

Annex 5: N-AMCOW Secretariat Mandate and Tasks

The CEDARE is hosting N-AMCOW Secretariat which Mandate and Main Tasks are as following:

1. Facilitate Meetings of the N-AMCOW TAC & EXCO
2. Mobilizing Resources and Fund Raising to assist in the achievement of the N-AMCOW objectives
3. Empower the N-AMCOW countries (Algeria, Egypt, Libya, Tunisia, Morocco, Mauritania) to advance the state of Water Resources including work towards implementing IWRM, and achieving the Water MDGs
4. Prepare water resources project proposals for N-AMCOW
5. Provide technical and administrative back stopping for the N-AMCOW TAC & EXCO activities
6. Compile National Reports and Prepare N-AMCOW sub-regional reports on the state of the water in North Africa
7. Create Capacity building opportunities for N-AMCOW water professionals
8. Prepare N-AMCOW Meetings reports
9. Communicate water activities and events to N-AMCOW members
10. Maintain continuous communication with N-AMCOW members
11. Develop, host, and maintain a N-AMCOW website
12. Strengthen Experience Exchange & Communication between N-AMCOW and AMCOW HQ as well as AMCOW sub-regions.
13. Prepare Press Releases on several N-AMCOW events
14. Maintain a database of the project outputs

Annex 6: Detailed Budget

	Activities	Unit	Total Number	Unit Cost	TOTAL AWF	IN KIND CONTRIBUTION		TOTAL PROJECT
						CEDARE	COUNTRIES	
C1	**COMPONENT 1 - Assessment of existing M&E Systems**							
1.1	**1.1 Training on M&E Rapid Assesst**							
1.1.1	M&E Specialist - Trainer	pers.month	0,75	11 000	8 250			8 250
1.1.2	Perdiem International Consultant	day	20	150	3 000			3 000
1.1.3	Air Ticket Consultant HQ-Egypt	Unit	2	2 000	4 000			4 000
1.1.4	M&E Specialist (Countries)	pers.month	6	4 000	24 000			24 000
1.1.5	M&E Specialist (Regional)	pers.month	1	6 000	6 000			6 000
1.1.6	perdiem	day	30	150	4 500			4 500
1.1.7	Training Workshop	Unit	1	37 000	37 000	3 000		40 000
1.1st	**Sub Total Training**				**86 750**	**3 000**	**0**	**89 750**
1.2	**Assessment the status of existing M&E system**							
1.2.1	**Conduct M&E Rapid Assesst**							
1.2.1.1	M&E Specialist - Country Assessment	pers.month	6	11 000	66 000			66 000
1.2.1.2	Statistician - Country Assessment	pers.month	2	10 000	15 000			15 000
1.2.1.3	M&E Specialist - TW Assessement	pers.month	1,5	11 000	16 500			16 500
1.2.1.4	Statistician - TW Assessement	pers.month	0,5	10 000	5 000			5 000
1.2.1.5	Perdiem	day	285	150	42 750			42 750
	Reimbursables							
1.2.1.6	Air tickets							
1.2.1.7	Consultant-Egypt	Unit	4	2 000	8 000			8 000
1.2.1.8	Round trip Egypt-Libya-Tunisia-Algeria-Morocco-Mauritania	Unit	4	2 000	8 000			8 000
1.2.1.9	Reports duplication	Lumpsum	1	3 100	3 100			3 100
1.2.2	Translation NAMCOW assessment Report	Unit	1	12 000	12 000			12 000
1.2.3	M&E Specialist (Countries)	Pers.month	6	4 000	24 000			24 000
1.2.4	NTF Meeting	Unit	12	250	3 000			3 000
1.2.5	National Workshop	Unit	6	10 000	60 000		6 000	66 000
1.2.6	Regional Workshop	Unit	1	50 000	50 000	2 000		52 000
1.2st	**Sub total ii-1**				**313 350**	**2 000**	**6 000**	**321 350**
C.1	**Total Component 1 - Assessment of existing M&E Systems**				**400 100**	**5 000**	**6 000**	**411 100**
C2	**COMPONENT 2 - Strengthening National and NAMCOW M&E systems and reporting**							
2.1	**Improved country-owned M&E System**							
2.1.0	Establishing national task Force and identifying national Coordinator - Formulating common goals and targets							0
2.1.1	M&E Specialist (Countries)	pers.month	3	4 000	12 000			12 000
2.1.2	National Launching Workshop	Unit	6	10 000	60 000		6 000	66 000
2.1st	**Sub-total 2.1**				**72 000**	**0**	**6 000**	**78 000**
2.2	Development of a minimum set of indicators, standards, and criteria;							
2.2.1	M&E Specialist (CEDARE)	pers.month	1	6 000	6 000			6 000
2.2.2	perdiem	day	30	150	4 500			4 500
2.2.3	M&E Specialist (Countries)	pers.month	3	4 000	12 000			12 000
2.2.4	Translation of Indicators report	Unit	1	10 000	10 000			10 000
2.2.5	NTF Meeting	Unit	6	250	1 500			1 500
2.2st	**Sub-total 2.2**				**34 000**	**0**	**0**	**34 000**

	Activities	Unit	Total Number	Unit Cost	TOTAL AWF	IN KIND CONTRIBUTION		TOTAL PROJECT
						CEDARE	COUNTRIES	
2.3	Developing M&E operational framework and guidelines							
2.3.1	M&E Specialist (CEDARE)	pers.month	0,5	6 000	3 000			3 000
2.3.2	perdiem	day	15	150	2 250			2 250
2.3.3	M&E Specialist (Countries)	pers.month	6	4 000	24 000			24 000
2.3.4	M&E guidelines translation	Unit	1	10 000	10 000			10 000
2.3.5	NTF Meeting	Unit	6	250	1 500			1 500
2.3st	**Sub-total2.3**				**40 750**	**0**	**0**	**40 750**
2.4	Institutional Strengthening of national M&E Systems							
2.4.1	M&E Specialist (CEDARE)	pers.month	0,5	6 000	3 000			3 000
2.4.2	perdiem	day	15	150	2 250			2 250
2.4.3	M&E Specialist (Countries)	pers.month	12	4 000	48 000			48 000
2.4.4	NTF Meeting	Unit	12	250	3 000			3 000
2.4.5	Local transport	Lumpsum	6	3 000	18 000			18 000
2.4.6	Perdiem	day	120	100	12 000			12 000
2.4.7	miscelleanous		6	500	3 000			3 000
2.4st	**Sub-total 2.4**				**89 250**	**0**	**0**	**89 250**
2.5	Compilation of existing water M&E data, information							
2.5.1	M&E Specialist (Countries)	pers.month	24	4 000	96 000			96 000
2.5.2	Surveyors	pers.month	18	1 000	18 000			18 000
2.5.3	Local transport	lumpsum	6	10 000	60 000			60 000
2.5.4	Perdiem	day	300	100	30 000			30 000
2.5.5	NTF Meeting	Unit	12	250	3 000			3 000
2.5.6	Miscelleanous	lumpsum	6	1 000	6 000			6 000
2.5.1sr	**Sub total 2.5**				**213 000**	**0**	**0**	**213 000**
2.6	Preparing baseline reports on country level MDG's and IWRM.							
2.6.1	M&E Specialist (Countries)		6	4 000	24 000			24 000
2.6.2	NTF Meeting	Unit	6	250	1 500			1 500
2.6.3	Reproduction baseline reports (50)		300	20	6 000			6 000
2.6.4	National consultation Workshop		6	10 000	60 000		6 000	66 000
2.6st	**Sub total 2.6**				**91 500**	**0**	**6 000**	**97 500**
2.7	Preparing baseline report on regional NAMCOW MDG's and IWRM M&E.							
2.7.1	M&E Specialist (CEDARE)	pers.month	1	6 000	6 000			6 000
2.7.2	perdiem	day	30	150	4 500			4 500
2.7.3	NAMCOW Baseline report (15 units)	Unit	15	20	300			300
2.7.4	NAMCOW Baseline report translation	Unit	1	12 000	12 000			12 000
2.7.5	Regional Consultation workshop	Unit	1	50 000	50 000	2 000		52 000
	Sub total 2.7				**72 800**	**2 000**	**0**	**74 800**
C2st	**Sub-Total Component 2**				**613 300**	**2 000**	**12 000**	**627 300**

	Activities	Unit	Total Number	Unit Cost	TOTAL AWF	IN KIND CONTRIBUTION		
						CEDARE	COUNTRIES	TOTAL PROJECT
C3	**COMPONENT 3 - Preparing a North African M&E Programme**							
3.1	Prepare Regional framework and action plan based on National M&E systems							
3.1.1	M&E Specialist (CEDARE)	pers.month	3	6 000	18 000			18 000
3.1.2	perdiem	day	90	150	13 500			13 500
3.1.3	M&E action plan report (15 units)	Unit	15	20	300			300
3.1.4	M&E action plan report translation	Unit	1	10 000	10 000			10 000
3.1st	**Sub total 3.1**				**41 800**	**0**	**0**	**41 800**
3.2	**Raising Awareness**							
3.2.1	Develop awareness and capacity building action plan							
3.2.1.1	M&E Specialist (CEDARE)	Pers.month	2	6 000	12 000			12 000
3.2.1.2	Perdiem	day	60	150	9 000			9 000
3.2.1.3	M&E Specialist(Countries)	Pers.month	6	4 000	24 000			24 000
3.2.1.4	NTF Meeting	Unit	6	250	1 500			1 500
3.2.1.5	Awareness and Capacity Building Report (15 copies)	Unit	15	20	300			300
3.2.1.6	Awareness and Capacity Building report translation	Unit	1	12 000	12 000			12 000
3.2.1st	**Sub total 3.2**				**58 800**	**0**	**0**	**58 800**
3.2.2	Initiate awareness activities							
3.2.2.1	M&E Specialist (Countries)		12	4 000	48 000			48 000
3.2.2.2	Awareness and Capacity Building workshops		12	10 000	120 000		12 000	132 000
3.2.2st	**Sub total 3.3**				**168 000**	**0**	**12 000**	**180 000**
C3st	**Sub-Total Component 3**				**268 600**	**0**	**12 000**	**280 600**

	Activities	Unit	Total Number	Unit Cost	TOTAL AWF	IN KIND CONTRIBUTION		TOTAL PROJECT
						CEDARE	COUNTRIES	
C4	**COMPONENT 4: Project Management**							
4.1	**GOODS**							
4.1.1	Office furniture (2 desks, 6 chairs, 2 cabinets)	Package	7	4 000	28 000			28 000
4.1.2	IT Equipment NAMCOW Sec (1 laptop, 1 desktop, 1 laser printer, 1 color printer, 1 scanner, 1 copier)	Package	1	6 000	6 000			6 000
4.1.3	IT Equipment Countries (6 laptop, 1 desktop,6 laser printer, 1 color printer, 1 scanner, 1 copier)	Package	6	10 000	60 000			60 000
4.2	**Regional PMU Staff (recruited by project) salaries**							
4.2.1	Project Regional Coordinator	Month	15	6 000	90 000	30 000		120 000
4.2.2	Regional Financial Assistant	Month	15	1 500	22 500			22 500
4.2.3	Regional Administrative Assistant	Month	15	1 000	15 000			15 000
4.2.4	Regional Webmaster / Communication Officer	Month	15	1 500	22 500			22 500
4.3	**National PMU allowances**							0
4.4	Project National coordinators	Month	90	400	36 000		60 000	96 000
4.5	Project national accountant	Month	90	250	22 500		50 000	72 500
4.6	Project national secreatriat	Month	90	150	13 500		40 000	53 500
4.4	**Supervision and workshops**			0				
4.4.1	Regional launching Workshop	Unit	1	35 000	35 000	4 000		39 000
4.4.2	Steering Committee NAMCOWTAC	Unit	2	20 000	40 000	2 000		42 000
4.4.3	Donors Round Table	Unit	1	22 500	22 500	2 000		24 500
4.5	**Mission Regional Coordination and CEDARE Staff**							0
4.5.1	Air tickets	Unit	18	700	12 600			12 600
4.5.2	Perdiem	day	120	150	18 000			**18 000**
4.6	**Mission National Coordinations**							0
4.6.1	Local transport	Unit	36	500	18 000			18 000
4.6.2	Perdiem	day	144	100	14 400			**14 400**
4.7	**Operating and hosting costs**							0
4.7.1	Operating Costs CEDARE	Month	15	1 000	15 000	30 000		45 000
4.7.2	Operating Costs Countries	Month	90	500	45 000		60 000	105 000
4.7.3	Hosting Costs	Month	15	2 500	37 500	30 000	60 000	127 500
C4st	**Sub-Total Component 4 Project Management**				**574 000**	**98 000**	**270 000**	**942 000**
	Total				**1 856 000**	**105 000**	**300 000**	**2 261 000**
	Contigencies 3%				56 000			56 000
	Grand TOTAL				**1 912 000**			**2 317 000**
					82,5%	4,5%	13,0%	100,0%

Annex 6.2: Detailed Budget showing country and regional levels of interventions

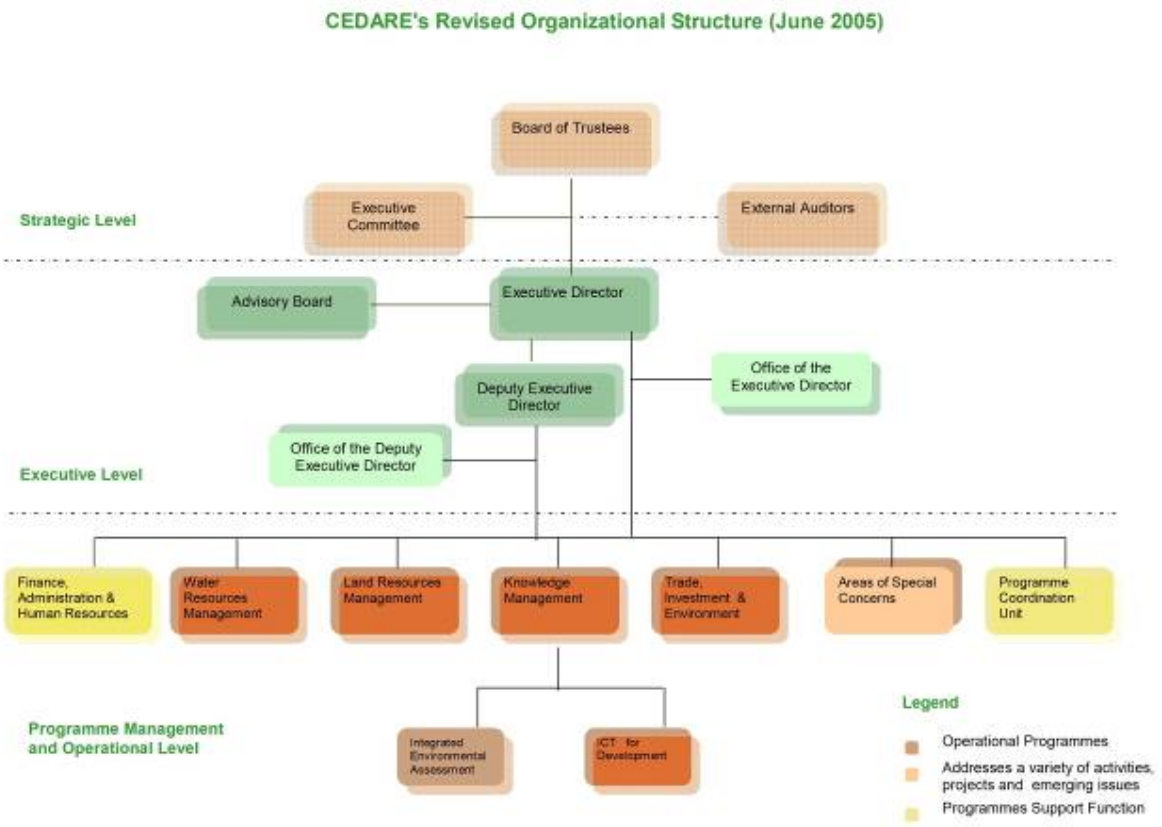
	Activities	CEDARE				COUNTRIES					TOTAL AWF GRANT		
		Unit	Number	Unit Cost	Total cost CEDARE	Number per country	Number	Unit Cost	Total cost per country	Total cost Countries	Total Number	Unit Cost	TOTAL AWF
C1	**COMPONENT 1 - Assessment of existing M&E Systems**												
1.1	**1.1 Training on M&E Rapid Assesst**												
1.1.1	M&E Specialist - Trainer	pers.month	0,75	11 000	8 250						0,75	11 000	8 250
1.1.2	Perdiem International Consultant	day	20	150	3 000						20	150	3 000
1.1.3	Air Ticket Consultant HQ-Egypt	Unit	2	2 000	4 000						2	2 000	4 000
1.1.4	M&E Specialist (Countries)	pers.month				1	6	4 000	4 000	24 000	6	4 000	24 000
1.1.5	M&E Specialist (Regional)	pers.month	1	6 000	6 000						1	6 000	6 000
1.1.6	perdiem	day	30	150	4 500						30	150	4 500
1.1.7	Training Workshop	Unit	1	37 000	37 000						1	37 000	37 000
1.1st	**Sub Total Training**				**62 750**				**4 000**	**24 000**			**86 750**
1.2	**Assessment the status of existing M&E system**												
1.2.1	**Conduct M&E Rapid Assesst**				**164 350**								
1.2.1.1	M&E Specialist - Country Assessment	pers.month	6	11 000	66 000						6	11 000	66 000
1.2.1.2	Statistician - Country Assessment	pers.month	2	10 000	15 000						2	10 000	15 000
1.2.1.3	M&E Specialist - TW Assessement	pers.month	1,5	11 000	16 500						1,5	11 000	16 500
1.2.1.4	Statistician - TW Assessement	pers.month	0,5	10 000	5 000						0,5	10 000	5 000
1.2.1.5	Perdiem	day	285	150	42 750						285	150	42 750
	Reimbursables												
1.2.1.6	Air tickets												
1.2.1.7	Consultant-Egypt	Unit	4	2 000	8 000						4	2 000	8 000
1.2.1.8	Round trip Egypt-Libya-Tunisia-Algeria-Morocco-Mauritania	Unit	4	2 000	8 000						4	2 000	8 000
1.2.1.9	Reports duplication	Lumpsum	1	3 100	3 100						1	3 100	3 100
1.2.2	Translation NAMCOW assessment Report	Unit	1	12 000	12 000						1	12 000	12 000
1.2.3	M&E Specialist (Countries)	Pers.month				1	6	4 000	6	24 000	6	4 000	24 000
1.2.4	NTF Meeting	Unit				2	12	250	500	3 000	12	250	3 000
1.2.5	National Workshop	Unit				1	6	10 000	6	60 000	6	10 000	60 000
1.2.6	Regional Workshop	Unit	1	50 000	50 000						1	50 000	50 000
1.2st	**Sub total ii-1**				**226 350**				**512**	**87 000**			**313 350**
C.1	**Total Component 1 - Assessment of existing M&E Systems**				**289 100**				**4 512**	**111 000**			**400 100**
C2	**COMPONENT 2 - Strengthening National and NAMCOW M&E systems and reporting**												
2.1	**Improved country-owned M&E System**												
2.1.0	Establishing national task Force and identifying national Coordinator - Formulating common goals and targets												
2.1.1	M&E Specialist (Countries)	pers.month				0,5	3	4 000	2 000	12 000	3	4 000	12 000
2.1.2	National Launching Workshop	Unit				1	6	10 000	10 000	60 000	6	10 000	60 000
2.1st	**Sub-total 2.1**				**0**				**12 000**	**72 000**			**72 000**
2.2	Development of a minimum set of indicators, standards, and criteria;												
2.2.1	M&E Specialist (CEDARE)	pers.month	1	6 000	6 000						1	6 000	6 000
2.2.2	perdiem	day	30	150	4 500						30	150	4 500
2.2.3	M&E Specialist (Countries)	pers.month				0,5	3	4 000	2 000	12 000	3	4 000	12 000
2.2.4	Translation of Indicators report	Unit	1	10 000	10 000						1	10 000	10 000
2.2.5	NTF Meeting	Unit			0	1	6	250	250	1 500	6	250	1 500
2.2st	**Sub-total 2.2**				**20 500**				**2 250**	**13 500**			**34 000**

	Activities	CEDARE				COUNTRIES					TOTAL AWF GRANT		
		Unit	Number	Unit Cost	Total cost CEDARE	Number per country	Number	Unit Cost	Total cost per country	Total cost Countries	Total Number	Unit Cost	TOTAL AWF
2.3	Developing M&E operational framework and guidelines												
2.3.1	M&E Specialist (CEDARE)	pers.month	0,5	6 000	3 000						0,5	6 000	3 000
2.3.2	perdiem	day	15	150	2 250						15	150	2 250
2.3.3	M&E Specialist (Countries)	pers.month				1	6	4 000	4 000	24 000	6	4 000	24 000
2.3.4	M&E guidelines translation	Unit	1	10 000	10 000						1	10 000	10 000
2.3.5	NTF Meeting	Unit				1	6	250	250	1 500	6	250	1 500
2.3st	**Sub-total2.3**				**15 250**				**4 250**	**25 500**			**40 750**
2.4	Institutional Strengthening of national M&E Systems												
2.4.1	M&E Specialist (CEDARE)	pers.month	0,5	6 000	3 000						0,5	6 000	3 000
2.4.2	perdiem	day	15	150	2 250						15	150	2 250
2.4.3	M&E Specialist (Countries)	pers.month			0	2	12	4 000	8 000	48 000	12	4 000	48 000
2.4.4	NTF Meeting	Unit			0	2	12	250	500	3 000	12	250	3 000
2.4.5	Local transport	Lumpsum				1	6	3 000	3 000	18 000	6	3 000	18 000
2.4.6	Perdiem	day				20	120	100	2 000	12 000	120	100	12 000
2.4.7	miscelleanous				0	1	6	500	500	3 000	6	500	3 000
2.4st	**Sub-total 2.4**				**5 250**				**14 000**	**84 000**			**89 250**
2.5	Compilation of existing water M&E data, information												
2.5.1	M&E Specialist (Countries)	pers.month				4	24	4 000	16 000	96 000	24	4 000	96 000
2.5.2	Surveyors	pers.month				3	18	1 000	3 000	18 000	18	1 000	18 000
2.5.3	Local transport	lumpsum				1	6	10 000	10 000	60 000	6	10 000	60 000
2.5.4	Perdiem	day				50	300	100	5 000	30 000	300	100	30 000
2.5.5	NTF Meeting	Unit				2	12	250	500	3 000	12	250	3 000
2.5.6	Miscelleanous	lumpsum				1	6	1 000	1 000	6 000	6	1 000	6 000
2.5.1sr	**Sub total 2.5**				**0**				**35 500**	**213 000**			**213 000**
2.6	Preparing baseline reports on country level MDG's and IWRM.												
2.6.1	M&E Specialist (Countries)				0	1	6	4 000	4 000	24 000	6	4 000	24 000
2.6.2	NTF Meeting	Unit			0	1	6	250	250	1 500	6	250	1 500
2.6.3	Reproduction baseline reports (50)				0	50	300	20	1 000	6 000	300	20	6 000
2.6.4	National consultation Workshop					1	6	10 000	10 000	60 000	6	10 000	60 000
2.6st	**Sub total 2.6**				**0**				**15 250**	**91 500**			**91 500**
2.7	Preparing baseline report on regional NAMCOW MDG's and IWRM M&E.												
2.7.1	M&E Specialist (CEDARE)	pers.month	1	6 000	6 000						1	6 000	6 000
2.7.2	perdiem	day	30	150	4 500						30	150	4 500
2.7.3	NAMCOW Baseline report (15 units)	Unit	15	20	300						15	20	300
2.7.4	NAMCOW Baseline report translation	Unit	1	12 000	12 000						1	12 000	12 000
2.7.5	Regional Consultation workshop	Unit	1	50 000	50 000						1	50 000	50 000
	Sub total 2.7				**72 800**				**0**	**0**			**72 800**
C2st	**Sub-Total Component 2**				**113 800**				**83 250**	**499 500**			**613 300**

	Activities	CEDARE				COUNTRIES					TOTAL AWF GRANT		
		Unit	Number	Unit Cost	Total cost CEDARE	Number per country	Number	Unit Cost	Total cost per country	Total cost Countries	Total Number	Unit Cost	TOTAL AWF
C3	**COMPONENT 3 - Preparing a North African M&E Programme**												
3.1	Prepare Regional framework and action plan based on National M&E systems												
3.1.1	M&E Specialist (CEDARE)	pers.month	3	6 000	18 000						3	6 000	18 000
3.1.2	perdiem	day	90	150	13 500						90	150	13 500
3.1.3	M&E action plan report (15 units)	Unit	15	20	300						15	20	300
3.1.4	M&E action plan report translation	Unit	1	10 000	10 000						1	10 000	10 000
3.1st	**Sub total 3.1**				**41 800**				**0**	**0**			**41 800**
3.2	**Raising Awareness**												
3.2.1	Develop awareness and capacity building action plan												
3.2.1.1	M&E Specialist (CEDARE)	Pers.month	2	6 000	12 000						2	6 000	12 000
3.2.1.2	Perdiem	day	60	150	9 000						60	150	9 000
3.2.1.3	M&E Specialist(Countries)	Pers.month				1	6	4 000	4 000	24 000	6	4 000	24 000
3.2.1.4	NTF Meeting	Unit				1	6	250	250	1 500	6	250	1 500
3.2.1.5	Awareness and Capacity Building Report (15 copies)	Unit	15	20	300						15	20	300
3.2.1.6	Awareness and Capacity Building report translation	Unit	1	12 000	12 000						1	12 000	12 000
3.2.1st	**Sub total 3.2**				**33 300**				**4 250**	**25 500**			**58 800**
3.2.2	Initiate awareness activities												
3.2.2.1	M&E Specialist (Countries)					2	12	4 000	8 000	48 000	12	4 000	48 000
3.2.2.2	Awareness and Capacity Building workshops					2	12	10 000	20 000	120 000	12	10 000	120 000
3.2.2st	**Sub total 3.3**				**0**				**28 000**	**168 000**			**168 000**
C3st	**Sub-Total Component 3**				**75 100**				**32 250**	**193 500**			**268 600**

	Activities	CEDARE				COUNTRIES					TOTAL AWF GRANT		
		Unit	Number	Unit Cost	Total cost CEDARE	Number per country	Number	Unit Cost	Total cost per country	Total cost Countries	Total Number	Unit Cost	TOTAL AWF
C4	**COMPONENT 4: Project Management**												
4.1	**GOODS**												
4.1.1	Office furniture (2 desks, 6 chairs, 2 cabinets)	Package	1	4 000	4 000	1	6	4 000	4 000	24 000	7	4 000	28 000
4.1.2	IT Equipment NAMCOW Sec (1 laptop, 1 desktop, 1 laser printer, 1 color printer, 1 scanner, 1 copier)	Package	1	6 000	6 000	0	0		0	0	1	6 000	6 000
4.1.3	IT Equipment Countries (6 laptop, 1 desktop,6 laser printer, 1 color printer, 1 scanner, 1 copier)	Package				1	6	10 000	10 000	60 000	6	10 000	60 000
4.2	**Regional PMU Staff (recruited by project) salaries**												
4.2.1	Project Regional Coordinator	Month	15	6 000	90 000						15	6 000	90 000
4.2.2	Regional Financial Assistant	Month	15	1 500	22 500						15	1 500	22 500
4.2.3	Regional Administrative Assistant	Month	15	1 000	15 000						15	1 000	15 000
4.2.4	Regional Webmaster / Communication Officer	Month	15	1 500	22 500						15	1 500	22 500
4.3	**National PMU allowances**												
4.4	Project National coordinators	Month				15	90	400	6 000	36 000	90	400	36 000
4.5	Project national accountant	Month				15	90	250	3 750	22 500	90	250	22 500
4.6	Project national secreatriat	Month				15	90	150	2 250	13 500	90	150	13 500
4.4	**Supervision and workshops**											0	
4.4.1	Regional launching Workshop	Unit	1	35 000	35 000						1	35 000	35 000
4.4.2	Steering Committee NAMCOWTAC	Unit	2	20 000	40 000						2	20 000	40 000
4.4.3	Donors Round Table	Unit	1	22 500	22 500						1	22 500	22 500
4.5	**Mission Regional Coordination and CEDARE Staff**												
4.5.1	Air tickets	Unit	18	700	12 600						18	700	12 600
4.5.2	Perdiem	day	120	150	18 000						120	150	18 000
4.6	**Mission National Coordinations**												
4.6.1	Local transport	Unit				6	36	500	3 000	18 000	36	500	18 000
4.6.2	Perdiem	day				24	144	100	2 400	14 400	144	100	14 400
4.7	**Operating and hosting costs**												
4.7.1	Operating Costs CEDARE	Month	15	1 000	15 000				0	0	15	1 000	15 000
4.7.2	Operating Costs Countries	Month			0	15	90	500	7 500	45 000	90	500	45 000
4.7.3	Hosting Costs	Month	15	2 500	37 500				0	0	15	2 500	37 500
C4st	**Sub-Total Component 4 Project Management**				**340 600**				**38 900**	**233 400**			**574 000**
	Total				**818 600**				**158 912**	**1 037 400**			**1 856 000**
	Contigencies 3%				24 878				4 767	31 122			56 000
	Grand TOTAL				**843 478**				**163 679**	**1 068 522**			**1 912 000**

Annex 7: CEDARE Organizational Structure and Staffing



CEDARE Staffing (Executive and Operational levels)

Executive Director's Office	Executive Director
	Deputy Director
	Office Manager
Policies and Programs Coordination Unit	Senior Regional Program Coordinator, Head, Policies and Programs Coordination Unit
Water Resources Management Program	Regional Water Resources Program Manager
	Senior Regional Water Resources Specialist
	Senior Regional Land Resources Specialist
	Regional Water Resources Program Assistant
	WEB Designer
Knowledge Management Program	Regional Program Manager
	Head of Information & Communication Technologies for Development Unit
	Regional Program Assistant I
	Geographic Information System Expert
Information and Communication Technologies for Development Unit	Head of Information & Communication Technologies for Development Unit
	Program Assistant
	Program Assistant
Environmental Assessment Unit	Head of Environmental Assessment Unit
	Program Assistant
Trade, Investment & Environment	Senior Advisor of Socioeconomic Aspects of Sustainable Development
Areas of Strategic Concern	Senior Advisor of Socioeconomic Aspects of Sustainable Development
	Senior Regional Specialist, Trade, Investment and Environment/Areas of Special Concern
	Senior Regional Expert
	Regional Specialist Areas of Special Concern (Creative Initiatives, Empowerment of Women & Environmental Awareness)
	Program Assistant
Finance, Administration, and Human Resources Unit	Regional Director of Finance, Administration and Human Resources
	Regional Administrative Officer
	Regional Financial Officer
	Registry Clerck

Annex 8: M&E Rapid Assessment Methodology and Template

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LIST OF ACRONYMS

AEIN	Africa Environmental Information Network
AMCOW	African Ministers' Council on Water
ANBO/ROAB	African Network of Basin Organisations
AWF	African Water Facility
Cap-Net	International Network for Capacity Building in IWRM
CBO	Community-based organisation
DHS	Demographic and Health Surveys
EMWIS	Euro-Mediterranean Water Information System on Know-how in the Water Sector
GIS	Geographic information system
GPS	Global positioning system
HDI	Human Development Index
IWRM	Integrated water resources management
JMP	Joint Monitoring Program
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Surveys
MIS	Management information system
MoU	Memorandum of Understanding
NGO	Non-governmental organisation
NWASCO	National Water and Sanitation Company
OMVS	Organisation pour la Mise en Valeur du Fleuve Sénégal
RBO	River basin organisation
REC	Regional economic community
RMC	Regional member country
RWSS	Rural water supply and sanitation
UNECA	United Nations Economic Commission for Africa
UNICEF	United Nations' Children's Fund
WBO	Water basin organisation
WHO	World Health Organisation
WMA	Water Monitoring Alliance
WPI	Water Poverty Index
WSP	Water and Sanitation Program
WSS	Water supply and sanitation
WUA	Water users' association

INTRODUCTION

Monitoring and evaluation of the water sector is considered the weakest link in efforts to achieve the African Water Vision 2025 and the Millennium Development Goals (MDGs). At the Paris Conference in 2005, the African Ministers of Water and Finance committed to establishing a regional mechanism for tracking progress towards achievement of the MDGs. The first Governing Council of the African Water Facility (AWF) agreed in 2005 that M&E and Information and Knowledge Management should be priority areas of intervention for the AWF. The overall objective of the M&E subcomponent is "to support the establishment of water sector M&E systems and management capabilities at national and regional levels in consultation with stakeholders. As a result, improved M&E standards and methodologies will be developed, and regular M&E reporting mechanisms will be established and become operational in RMCs. The availability of timely and regular monitoring and evaluation results will enhance planning, implementation and management of water sector investments."[3]

Subsequently, in September 2006, the AWF held a regional forum in Tunis of stakeholders involved in sector M&E work in the region to define key requirements for harmonized results oriented M&E in the African water sector. The forum reaffirmed the centrality of RMCs, river basin organizations (RBOs), and Regional Economic Communities (RECs) as the prime stakeholders, and it confirmed AWF's mandate to accelerate the development of a framework to develop the water sector M&E process. It then requested AWF undertake a rapid assessment of the current status, stakeholders and key activities supporting the water sector M&E in Africa and agreed that a Pan African assessment comprised of an M&E mapping exercise was needed to assist AWF in taking decisions about harmonizing and strengthening water sector M&E in Africa. In November 2007, the AWF contracted Cowater International of Canada to undertake a "Pan African Water M&E Assessment" to support these objectives. These guidelines and template for the rapid assessment of country-level M&E systems were designed as part of the Pan African Water M&E Assessment initiative.

This document is intended to provide guidance on conducting a rapid assessment of water sector M&E systems at the country level and to encourage uniformity and consistency between country assessments in order to facilitate cross country comparisons. It covers all three sub-sectors: integrated water resources management (IWRM), water supply, and sanitation, and the order of the guidelines for each sub-sector in Part 1 parallels that of the template in Part 2.

Part 1 is composed of guidelines on what can be expected and what to look for while carrying out a rapid water sector M&E assessment.[4] It provides background material on the water sector's institutional framework and roles and responsibilities of the sector's stakeholders, and it describes the types of organizations to review and interview, information to be acquired and assessments to be made.

Part 2 is comprised of a template composed of a suggested table of contents for the assessment report and a series of questions to help populate it. The questions should be addressed systematically during the rapid assessment and responded to in the final report to the extent possible.

[3] 2005, African Water Facility, "Operational Programme for 2005-2009", AfDB Tunis.

[4] 'Rapid' means that the assessment should require no longer than two weeks of in-country work, though additional effort from one's home office will be necessary. Each assessment should be completed in its entirety within one month, including preparatory, field and home office work to complete the final report.

Part 1: M&E Assessment Guidelines

These guidelines were designed to be read in parallel with the questions provided in the Rapid Assessment Template (Part 2) and are structured in a way so as to facilitate cross-referencing between the two documents. Sections from the template relevant to each section of the guidelines are therefore listed in the right hand column alongside relevant paragraphs.

Guidelines	Template
Pre-Assessment: An Overview of Sector Organizations Before undertaking a rapid assessment, the assessor should acquire a good understanding of the country's sector organizations, their mandates and Programs. This is best done through internet searches, available documentation and networking contacts in-country. The objective is to get a broad understanding of the sector's stakeholders, their Programs and M&E capabilities from the outset from which a plan of action for the assessment can be developed. A list of the key players needs to be drawn up, especially those that would willingly provide reliable information. For verification purposes, visits need to be made to facilities such as water basin organizations, offices responsible for maintaining databases and some projects both rural and urban. The several NGOs operating in the sector can provide another perspective. One such NGO is WaterAid, which has offices in eleven African countries and maintains useful oversight across the sector. Listed below are several other global, regional and sub-regional organizations that may be of relevance to this research; it is not a complete list but offers a good starting point. Global The Joint Monitoring Program (JMP) of UNICEF and WHO, the Water and Sanitation Program (WSP) of the World Bank, the Global Water Partnership (GWP), the World Water Council (WWC) hosting the Water Monitoring Alliance (WMA), , International Network of Basin organizations (INBO), The International Benchmarking Network for Water and Sanitation Utilities (IBNET), AQUASTAT-FAO, GEMS-Water, Global International Waters Assessment (GIWA), , World Water Assessment Program (WWAP), and Cap-Net (the International Network for Capacity Building in IWRM). Regional: African Minister's Council on Water (AMCOW), N, African Network for Basin Organizations (ANBO), UN-Water-Africa, Advanced Real Time Environmental Monitoring Information System (ARTEMIS), , , , , African Water Association (AfWA), Southern African Development Community, Africa Civil Society Network on Water and Sanitation (ANEW),. Water basin and sub-regional organizations: The Euro-Mediterranean Water Information System on Know-how in the Water Sector (EMWIS), the Economic Community of West African States' Water Resources Coordination Unit (ECOWAS-WRCU), Organisation pour la mise en valeur du fleuve Sénégal (OMVS-SOE), the AGRHYMET Regional Centre, Long Term Ecological Observatories Monitoring Network (OSS/ROSELT), TREND), , Nile Basin Initiative, , Agence de bassin Algérois, Commission internationale du bassin Congo-Oubangui-Sangha.	**N/A**
Country Background: Please refer to Section 1 of the Template.	**1**

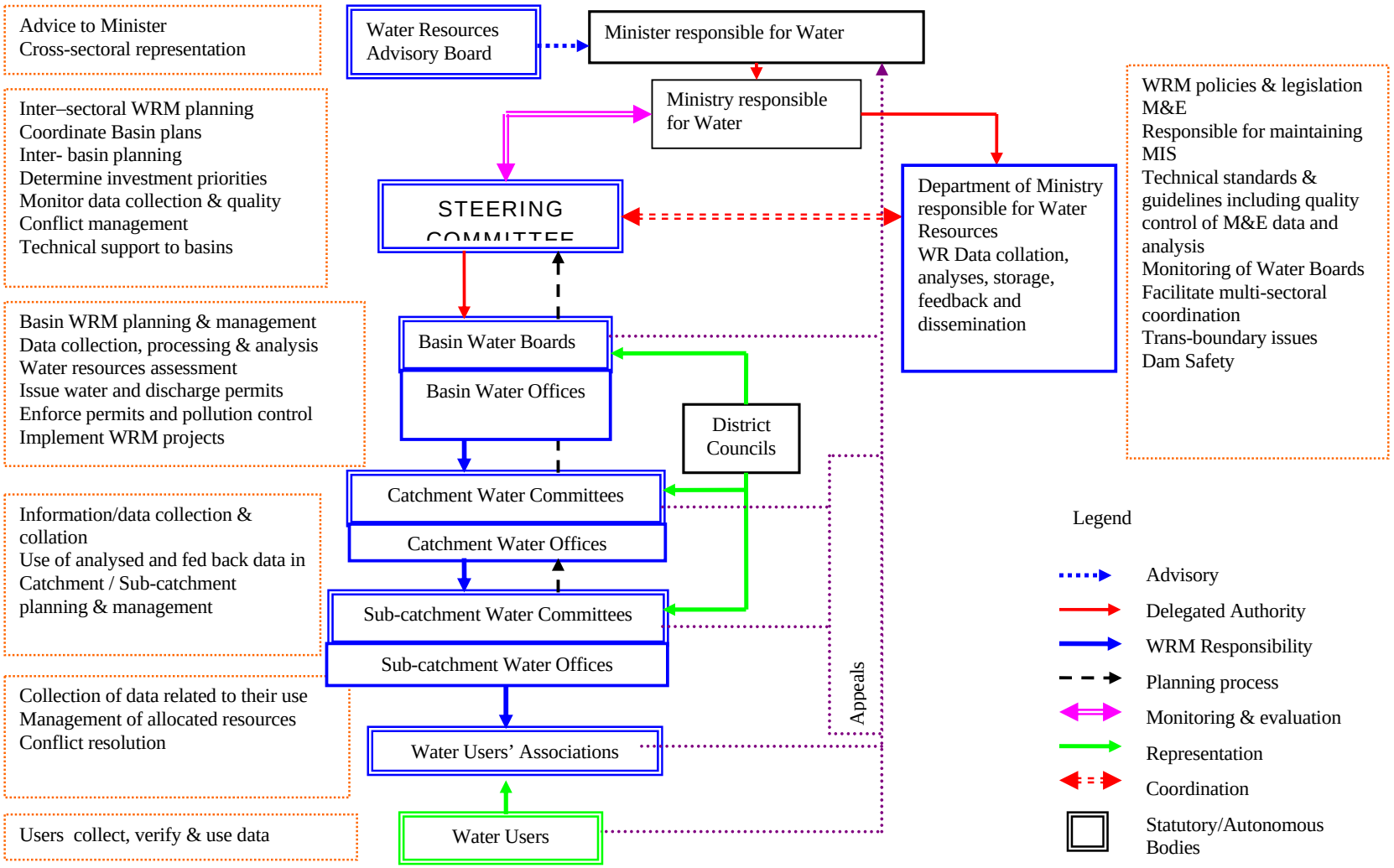
National Water Development Strategies and Policies Most countries now have approved National Water Strategy and Policy documents. They are often sub-divided between sub-sectors, but go a long way to describe sector planning and development options. They often include M&E strategies and policies. Many countries are undergoing sector reform so that policies and background reports detailing the reforms will be available and useful to the M&E assessment. These sector reforms are commonly aimed at achievement of the Africa Water Vision 2025 which is described in the footnote below.[5] Typically, these include sector reform programs strengthening IWRM and separating regulatory from executive functions, public service reforms, the introduction of performance measurement systems, and local government decentralization and reform. In addition, all agreements and MoUs related to transboundary waters need to be identified. They normally include agreements on monitoring of the trans-boundary water resource.	**2**
Sector Overview Please refer to Section 3 of the Template.	**3**
Principle Issues in the Water Sector Please refer to Section 4 of the Template.	**4**
Institutional Framework (IWRM) The organizational structure of sector institutions is to be provided. An example is given below in Figure 1.1 of the planned Tanzanian organizational structure for water resources management. M&E functions should be shown on the organization chart or a separate more detailed M&E organization chart can be prepared. It should show the various levels of information collection, collation, verification, analysis, report preparation, storage, dissemination and use. As a minimum the organizational chart should describe the various M&E responsibilities of each stakeholder. Most countries will be at the early stages of IWRM development. Water user associations (WUAs) will probably be in their formative stages and be influencing basin policy only on major issues such as the sharing of the resource between irrigation and hydro-power. Seldom are water user associations participating in data collection, but they should be. WUAs provide appropriate platforms for consultations and cooperation amongst the different stakeholders and communities. They have important and constructive roles to play in the self-regulation of water use, monitoring pollution, and reporting. Each of these is part of the	**5**

[5] The shared African Water Vision 2025 is for: *An Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and the environment.*

1. There is sustainable access to safe and adequate water supply and sanitation to meet the basic needs of all;
2. There is sufficient water for food and energy security;
3. Water for sustaining ecosystems and biodiversity is adequate in quantity and quality;
4. Institutions that deal with water resources have been reformed to create an enabling environment for effective and integrated management of water in national and transboundary water basins, including management at the lowest appropriate level;
5. Water basins serve as a basis for regional cooperation and development, and are treated as natural assets for all within such basins;
6. There is an adequate number of motivated and highly skilled water professionals;
7. There is an effective and financially sustainable system for data collection, assessment and dissemination for national and trans-boundary water basins;
8. There are effective and sustainable strategies for addressing natural and man-made water-resources problems, including climate variability and change;
9. Water is financed and priced to promote equity, efficiency, and sustainability;
10. There is political will, public awareness and commitment among all for sustainable water –resources management, including the mainstreaming of gender issues and youth concerns and the use of participatory approaches.

M&E framework. Typically, water basin organizations in Africa are influential only in the major basins and where their input is critical to water sharing and/or trans-boundary considerations. They hold prime responsibility for data collection. In large basins they will have catchment and sub-catchment organizations as well as offices, staff and monitoring networks, all of which will need to be documented for the rapid assessment. In most countries the hydrometric, water use and water quality information will be poor and in some non-existent. Nevertheless, having realized the costs of either under-designing projects resulting in loss of economic opportunity or over-design, resulting in over-exploitation and negative environmental impact, most are trying to improve the quality of their data collection systems and analysis. The upper echelons of the institutional framework usually comprise such bodies as: • Water resources management councils responsible for resource planning, determination of investment priorities, conflict resolution, and policy dialogue • International trans-boundary committees responsible for monitoring and maintaining trans-boundary agreements and • The ministry and its various departments responsible for water resources. These need to be described, with particular attention paid to the water resources ministry. The ministry typically takes charge of information and data collation gathered from the basin boards and will likely have a special M&E section or department coupled to a mechanism for dissemination, such as annual reports, an MIS and a web-site. All need to be documented along with their ability to (1) maintain reliability, consistency and accuracy of information, (2) use the information effectively in planning and managing the sector, and (3) inform the public, stakeholders and government. Surrounding this structure are the various sub-system organizations and stakeholders. These will represent interests of the environment, energy, agriculture, statistics, local government and the media.	

Figure 1: Sample Institutional Framework and M&E Roles in Water Resources Management



IWRM M&E

6

Water resources monitoring refers to the comprehensive collection, storage and analysis of information on the quantity, quality, character, location, patterns of use, and response of the resource to use and user demands, pollution, water quality degradation and environment. M&E is essential to the water resource planning and management process. The information on availability and use facilitates water allocations so that socioeconomic activities within a basin can be optimized within the capacity of the resource. The information assists central, local and municipal governments, as well as investors take decisions on planning and development. The objective is to enable preparation of country-wide inventories of resources so that development opportunities can be quantified and mapped for planning, and implementation. Thus, it is crucial that this IWRM data collection, analysis and dissemination process be transparent, accountable and equally accessible to all users.

Monitoring Networks

6.1

The monitoring networks within the basin, their equipment, facilities, offices and staff are crucial to M&E data quality and reliability. An overall assessment of the existing monitoring stations in each basin is required. This will include river gauging stations, rainfall gauges, meteorological stations, water quality measurement and groundwater observation points. They will need to be quantified.

Table 1.2, below, can be used as an example of the kind of information needed and the level of detail required. In addition to groundwater observation wells, hydrometric stations, meteorological stations, rainfall stations, a basin water testing laboratory, transport and data storage facilities, properly resourced water basin offices will require the following:

- *Surface water monitoring*: current meters, gauging reels, sinkers, sediment samplers, portable boats, bridge cranes, field computers, sediment samplers, GPS, and related tools and accessories.
- *Groundwater monitoring*: dippers, well loggers, resistivity meters, terrameters, geophysical systems (magnetometers), GPS, and related tools and accessories.
- *Water quality monitoring*: field kits and accessories for chemical and bacteriological water quality testing.

Comments can be recorded in the table in the column headed “Remarks and Recommendations.” Consideration should be given to existing and future needs for surface water monitoring. There may be plans already prepared and available for upgrading the monitoring stations and offices. These can be used as a basis for making recommendations.

Data Analysis, Storage and Dissemination

6.2

Water resources assessment and mapping refer to the comprehensive collection and assembly of information on the quantity, quality, character, location, patterns of use and response of the resource to user demands, pollution and water quality degradation processes and environment. Assessment and mapping are prerequisites in the water resources planning process and depend heavily on data collection, storage and analysis at the basin level.

Information on the availability, quality and use of water resources must be available to facilitate decision making in water allocations so that all socio-economic activities within given basins are optimized within the sustainable limits of the resource. Ultimately, countrywide inventories of resources, current and potential uses of water, and all sector-wide development opportunities need to be identified, quantified, and mapped to provide essential information for planning and implementing various development options. This includes a survey and mapping of existing dams/reservoirs, and preparation of guidelines for development of the resource for different purposes. Thus, the IWRM data collection, analysis, and dissemination process must be transparent, accountable, and accessible to all users.

After collection, basin offices are the first point of data storage. Such offices normally have a

data base management system (DBMS) and a GIS database. The DBMS is used in storage, processing, validating, and analysing the many types of multi-disciplinary data, including time series and spatial data on climate, surface water, ground-water, water quality, sediment, other natural resources, as well as related information such as water rights and actual abstractions. The data management chain must be defined and assessed from initial data collection by basin (and possibly sub-catchment) offices (and WUAs) up to regional and central levels. The responsible Department of the central Ministry typically holds ultimate responsibility for quality of data, its storage, analysis and dissemination. Each level needs to be reviewed, described and assessed. Although the headings will need to be tailored to each country, Table 1.2 can be used as a template for description, analysis and recommendations. The Ministry's department responsible for water resources may not be adequately resourced to fulfill its role as the central manager of knowledge and information on water resources. Also, there may be more than one database in operation separately funded by different donors. Such duplication is unfortunate but not uncommon. The M&E assessment will document the current capacity of the department to adequately gather together the information and data, store and analyse it and, just as importantly, report on and disseminate it. It will assess the situation and make recommendations as to its strengthening and upgrading. Necessarily, dissemination goes far beyond storage and publishing annual reports. It should include pro-active feedback to the basin, sub-catchment, WUAs and users. The feedback should target the needs of the reader and be of sufficient quality and relevance to remain in demand. Its use at the various levels needs to be assessed to determine if it is actually being used as intended in planning, management and investment decisions at basin level. The needs of other stakeholders and the extent to which they are being met should also be assessed. These stakeholders include: • The environment, especially in the areas of pollution control, deforestation, and minimum environmental flows; • Local, regional and central governments; • Trans-boundary water resources management; • Tourism; • Agriculture; • Hydropower; • Industry and commerce; • Water supply and sewerage; • Transport/navigation; • National and regional development planning; and, • The media and civil society. This may call for holding a workshop amongst the many stakeholders to determine if their needs are being met and, if not, determining what information is required, in what format, and how it is best disseminated.	**6.2** **6.2**

Table 1: Sample Chart of Basin Monitoring Stations and their Status

BASIN	TYPE OF STATION					REMARKS AND RECOMMENDATION
	RIVER GAUGING	RAINFALL	METEOROLO-GICAL	WATER QUALITY & POLLUTION	GROUND WATER	
River A	63 river gauging stations (29 were rehabilitated and upgraded under previous Project but most stations destroyed by floods, vandalism, or stolen)	45 rain gauging stations all in working condition, spatial distribution inadequate	10 meteorological stations - partially working due to malfunctioning anemometers, thermometers.	12 stations but systematic monitoring required (currently spot monitoring is done)	11 observation boreholes have been drilled, await installation of data loggers.	Review of network and improvement/upgrading of the network are needed to meet present needs. May require 12 additional groundwater observation wells. Basin will have three sub-offices for data gathering and O& M of stations.
River B	48 (operational) 4 (new) 5 (temporary)	50 – all in good working condition, spatial distribution inadequate.	11 - all in good working condition	12 but systematic monitoring required (currently spot monitoring is done)	16 observatory boreholes have been drilled, await installation of data loggers, two more will be drilled.	Review of network and improvement/upgrading of the network are needed to meet present needs. Requires four additional hydrometric stations, five temporal stations, two met stations, and 14 groundwater observation stations. Basin will have five sub-offices for data gathering and O& M of stations.
River C	48 (all in bad condition)	15 (are in good condition, 1 needs rehab, 15 additional required)	Six (all are not functioning)	No systematic monitoring exists (network design and establishment urgently required).	Eight (six fair, two not working, 22 additional stations needed)	29 River Gauging stations and six met stations will be rehabilitated through a future project, 19 to be rehabilitated. Basin will have two sub-offices for data gathering and O& M of stations.
Lake D	21 partially working	45 partially working	10 partially working	122 (operational)	Nil	Additional stations required: seven hydrometric stations, 15 groundwater,

BASIN	TYPE OF STATION					REMARKS AND RECOMMENDATION
	RIVER GAUGING	RAINFALL	METEOROLO-GICAL	WATER QUALITY & POLLUTION	GROUND WATER	
						five met stations and four rainfall stations to meet present needs. Basin will have three sub-offices teams for data gathering and O& M of stations.
River E	30 (all stations not working properly)	None	None	Nil	Nil	The network is in bad shape-requires review and improvement/upgrading to meet present needs. Basin will have three sub-offices for data gathering and O& M of stations.
Lake F	35 hydrometric stations – all in bad shape	None	Five meteorological stations	Nil (but urgently needed)	Nil (but urgently needed)	The network is in bad shape-requires review and improvement/upgrading to meet present needs. Basin will have two sub-offices for data gathering and O& M of stations.
Lake G	26 (24 in bad condition)	18 in good condition but below standard (at least 10 additional stations are needed)	Six (all in bad condition)	Nil (but urgently needed)	Nil (at least 10 stations are needed)	24 hydrometric stations need rehab/upgrading. Basin will have two sub-offices for data gathering and O& M of stations.

Rural Water Supply and Sanitation M&E Rural water supply and sanitation are key elements of both the Africa Water Vision 2025 and the MDGs. Typically, monitoring and evaluation in the water and sanitation sub-sector is necessarily spread across several organizations. To complicate matters more, there are many indicators used and definitions given to what is acceptable coverage. The best starting point is with the formally approved national strategies and policies for water supply and sanitation. These will likely provide the public sector organizational framework and the nationally accepted indicators and standards. M&E is commonly divided four ways between urban and rural, and water and sanitation. Active collection of data across each sub-sector is rare. Even if the various organizations are gathering information, coordination is uncommon. This M&E rapid assessment is the beginning of what may eventually become a coordinated and managed M&E program.	**7**
Rural Water Supply and Sanitation Institutions and Monitoring Networks The first task is to identify all of the institutions working in and monitoring the rural water supply and sanitation sub-sector. These will likely include the lead ministry such as a ministry of water, which may be collecting information from others and then collating, analyzing, storing and disseminating the information. The information gathering may be done by the sub-offices of the ministry at the provincial/state level responsible for the monitoring. In turn, these would likely have district, county, and sub-county level offices collecting information. In those countries that have undergone devolution, the responsibility would be passed to the more autonomous district offices that would link to the ministry of local government. In this case one would probably identify a department of water supply within district government which would have monitoring responsibility. Fully devolved governments may have established information collection through village level organizations and extension agents. These need to be identified. The entire network of monitoring water supplies needs to be described. Likewise, its monitoring efficacy and reliability needs to be assessed. The ministry of health, its sub-offices, clinics and BHUs and their outreach networks may be collecting and analyzing data on sanitation. Likewise under devolved government the district and sub-district departments of health and hygiene will have a role to play in collecting information. These networks need to be identified and described; they also need to be assessed in terms of their coverage, reliability and accuracy. Other sources of information on monitoring RWSS include donor assisted projects and NGOs. These may themselves be collecting information from their projects and areas of operation. One such NGO is WaterAid which usually maintains a useful overview of the sub-sector. Survey and/or statistical departments regularly undertake household surveys, censuses and socio-economic surveys. The questionnaires used often include questions related to water supply and sanitation (although seldom are they sufficiently targeted to provide reliable coverage information). These organizations and surveys need to be identified and their relevance to M&E of the water sector assessed. The WHO/UNICEF Joint Monitoring Program (JMP) has found household surveys (DHS) and Multi-indicator Cluster Surveys (MICS) useful in estimating broad coverage to determine progress towards the MDGs. Under normal circumstances, however, the JMP has had to adapt and interpret the information before using it in inter-country comparisons. Certainly, the local WHO and UNICEF offices should be approached to get a better understanding of sources and data available and used by the JMP. Identifying, describing and assessing their relevance and reliability will be important.	**7.1.1, 7.2.1**
Data Collection *Quality of Information*: in most cases, the information collected will be of the "coverage" type in the form of numbers and accessibility of standpipes, house-connections or tube wells and open wells. In some instances the quality of water provided and access to sanitation will be	**7.1.2, 7.2.2**

measured. The quality of such information, its accuracy and relevance needs to be assessed as do the monitoring systems themselves.

Type of Information: The type of information collected usually varies widely from the numbers of water points and technologies used to the degree of access and the safety of the supply. Determination of whether or not a given technology and source is classified as safe, and whether or not a particular type and situation of latrine is acceptable is often made by the implementing agency. These local definitions need to be acquired and assessed in the context of the definitions and criteria set by the MDGs.

Geographic spread of information: an assessment needs to be made as to the geographic extent of information collection. Is it collected only in project areas? Does it include NGO projects? Are privately owned supplies (such as household handpumps) considered coverage and included?

Timing, Reliability and Verification of Data Collection: How often are surveys undertaken? Are they regular and of consistent design? Are there instances where data is reported on but not actually collected? In other words are assumptions made by the data collectors and their institutions about coverages without actually visiting the field to collect the data?

Survey Design: the designs of surveys need to be assessed. Countries will not be able to undertake a 100% sample, so sample size, clustering, timing of surveys and the representativeness of the sample taken need to be assessed.

Water Quality: Details are needed of the tests used to assess the drinking water quality. These may include total or thermo-tolerant coliforms and faecal streptococci, turbidity, dissolved solids, pH, arsenic, fluorides, and heavy metals. Local standards for "safe water" also need to be obtained from sector institutions. The caliber and reliability of the staff used for sample collection and their methods need to be determined and assessed, as does the accuracy and reliability of laboratory testing.

Population: Most coverage information is reported as percentages for comparative purposes. The denominator (being the total population) is important to get right. The source and accuracy of population data being used needs to be determined and assessed as should the methods used for any projections or estimates of population. Some methods of estimating coverage avoid the use of population entirely by counting the number of areas (such as sub-counties or hamlets) with at least one water supply. All the local methods being used to estimate coverages need to be identified, documented and assessed.

The Definition of Coverage: There are many definitions for coverage. Even within a single country there will be variations. National policies on water supply and sanitation will have the officially accepted definitions for coverage. These should be compared to the internationally accepted definitions used by the MDGs, which rely on proxy indicators. Being technology based, they are relatively easy to determine in the field, verifiable, comparable and quantifiable. As a result they have been accepted as adequate for the purpose of measuring sector progress towards the MDGs. There are however, questions being raised about their consistency. For example, there are wide variations in the safety of water provided by the same technologies under different installation procedures and operating regimes.

Table2 can be used during the rapid assessment as a guide.

Table 2: Indicators and Sampling for Data Collection

QUESTION	RESPONSE	COMMENTS
For what purpose (related to water supply and sanitation) is the data being collected?		
Is the data being collected by direct observation (such as through household surveys) or through knowledge of delivery of services by projects		

Data Storage and Analysis The information collected will be passed upwards to a point of storage and analysis. The chain needs to be identified and assessed for its reliability and consistency. For example, where information is not in regular demand, the impetus to collect it dissipates. Methods of data storage range from stacks of dusty files on the shelf to websites giving ready access to databases. They need to be identified, documented and assessed.	**7.1.3, 7.2.3**

QUESTION	RESPONSE	COMMENTS
(supply side)?		
Which indicators are being used? How do they compare to the indicators used by the JMP to measure progress towards the MDG?		
What is the geographic area and/or population being surveyed?		
Is the survey held on a timely basis? Are there disparities which require interpretation, and if so, does the interpretation reflect reality?		
Comment on the survey design and the sample and its representativeness.		
Are there quality checks on the data collection? Is the data verified?		
Coverage is the most common objective. Does the survey and its indicators give a realistic/accurate determination of coverage?		
Is the local definition of coverage the same as that of the MDGs.		
Is water quality tested and do the sample collection, indicators and water analysis give a realistic/accurate determination of water safety?		
Are the coverage rates based on area, or population? If based on area, do they accurately reflect population? If based on population, is the total population up-to-date and accurate or have interpretations been made which are of doubtful quality?		

Information Dissemination and Use What happens to the data after analysis and storage? For example: ➢ Is it compiled into reports which are then disseminated to other government offices, or is the dissemination pro-active and targeted? ➢ Are the information and reports readily available from sector institutions, libraries and the internet? ➢ Has the information been institutionalized, do sector institutions own, respect and utilize the information effectively? ➢ Is there a two-way flow of information between those collecting the data and those who analyse and store it? In other words, do the collectors and providers get fed back the information in analysed format? Who uses the information, for what purpose, and how often? ➢ Is the information from the M&E system used by management for sector planning, budgeting and reporting and how? ➢ Is it used by the media, educational institutions such as universities and the public at large, such as private sector consultants? ➢ Is it used locally, regionally and internationally to assess coverage and progress towards local targets and MDGs? ➢ Is there feedback on the quality and reliability of the information provided? What is being said here is that without dissemination and effective use of the information, there is little point in collecting it in the first place. Dissemination and use is seldom stressed but is, in fact, just as important as its collection and storage. The Rapid Assessment must give dissemination and use the priority it deserves.	**7.1.4, 7.2.4**
Urban Water Supply and Sanitation M&E There are many parallels between rural and urban in water supply and sanitation. Urban water supply and sanitation are also key elements of both the Africa Water Vision 2025 and the MDGs. The reader is therefore encouraged to review the sections above, as much of what has already been said about rural WSS also applies to urban WSS.	**8**

Institutions and Monitoring Networks One should begin with the local definition of urban. It is usually subdivided between market centres and towns, municipalities and cities. Responsibility for water and sanitation in the smaller towns is usually held by local government or regional water boards. Municipalities and city councils or assemblies often hold responsibility for their water supply and sanitation. Increasingly, however, public private partnerships are being used in the management of urban water supplies, which involve leases, concessions or management contracts between private organizations and government. These usually improve service delivery by achieving greater financial viability and monitoring capacity. A case in point is the regulatory agency NWASCO of Zambia, which licences 10 commercial utilities, 13 local authorities and six private water providers running water supply and sanitation services. Each year their progress is published in annual reports and made available to the public, a process which engenders improvements in monitoring through competition for top marks amongst service providers. All such urban water supply and sanitation institutions and their organizational frameworks need to be documented along with their M&E programs. Where public sector agencies such as municipal departments and water boards hold responsibility for water and sanitation, care must be taken to ensure that M&E responsibilities are defined for all urban sectors including lowest income areas, and that sanitation is included. Urban sanitation is divided between on-site sanitation (latrines and septic tanks) and sewerage. Sewerage is normally the responsibility of municipal water and sewerage departments, while on site sanitation normally falls under departments of health. Unfortunately, health departments seldom assume responsibility for either implementing or for monitoring urban sanitation. Notable exceptions to this include health departments that monitor sanitation and hygiene practices (e.g. Lesotho) and track water quality and incidences of water-borne illnesses, such as in Tanzania The monitoring of water and sanitation is generally better in urban than in rural areas, since targets are more accessible, institutions are better resourced and households are in regular contact through water and sewerage rates collection. A good understanding of the monitoring networks is needed, e.g. who is responsible for data collection, of which sub-sector, where, and with what frequency. The impetus to collect the information and pass it through for analysis and storage needs to be understood.	**8.1.1, 8.2.1**
Data Collection Reference is again made to the preceding sections on rural water monitoring. In urban centres however, the majority of supplies will be through household connections, yard taps and public standpipes or kisosks. Monitoring would normally include water quality, reliability and hours/day of service.	**8.1.2, 8.2.2**
Data Storage, Analysis and Dissemination Same as the case of rural water supplies and sanitation. Please see sections 8.4 and 8.5 in these guidelines on RWSS.	**8.1.3, 8.1.4, 8.2.3, 8.2.4**
M&E Sub-Systems There are several subsystems that link to the water sector which both demand and supply information which need to be included in rapid assessments of water sector M&E. As listed above, they include the environment, forestry, local government and municipalities, trans-boundary water resources management, tourism, agriculture/irrigation, hydropower, health agencies, industry and commerce, training and research institutions, civil society and climate change. All are linked in one way or another to achievement of the Africa Water Vision of 2025. Each has its own monitoring requirements, some of which are provided by M&E of the water sector.	**9**

The Environment Most countries have approved environmental strategies policies which give the institutional framework, criteria/standards, monitoring network information and even plans. These need to be reviewed to acquire an understanding of which are the key institutions and networks for the rapid assessment. The environment and transport/navigation sectors have minimum flow requirements and rely on water sector monitoring to provide information. Likewise, pollution control needs flow data and will be monitoring water quality. Deforestation affects runoff, sediment and flooding. The environmental ministry or department will maintain information on deforestation trends which is important to water sector monitoring. There are numerous other environmentally related to sub-sectors which the rapid assessment should review for their information and M&E networks. These include fisheries, soil and land resources, biological diversity, industry, mining, climate and planning and development. Assessments as to their relevance and calibre/quality need to be made as do recommendations as to how they can best collaborate or be integrated with the water sector M&E networks and systems.	**9.1**
Physical Sub-Systems Data Physical and special information is normally collected and held in databases of surveys, land, and statistical departments. The information relates closely to the water sector and includes soil and geological characteristics, topography, land use, roads, administrative boundaries, government services, human settlements and rivers, lakes and wetlands. These databases and departments are normally long-standing and well established. Again, their calibre, shared interests, linkages and potential collaboration and integration with water sector M&E needs to be assessed and recommendations made.	**9.2**
Censuses and Socio-economic Surveys As previously mentioned, population censuses are important denominators for estimates of water and sanitation coverage. Often, demarcation of census areas conforms to administrative or electoral boundaries. This makes their use difficult when monitoring or evaluating project areas different than those of the census. Censuses sometimes include questions that are socio-economic in nature and sometimes related to services provision such as water supply. The rapid assessment should review census methodology and identify constraints and opportunities of applying census data to monitoring water and sanitation coverage. Several ministries and departments will be involved in the collection and use of socio-economic information. These include finance, planning and development, health, statistical offices, agriculture, local government and environment as well as the universities and private sector such as the NGOs. Most countries will have set up a socio-economic database which may be housed within the statistics, surveys or planning departments. The use of GIS databases and mapping is becoming widespread. Satellite imagery is a welcome addition to the tools available to the water sector M&E system.	**9.3**
Meteorological Monitoring Networks There will be numerous meteorological stations across the country operated by the meteorological and agricultural departments. These will be providing information on rainfall, temperature, wind, solar radiation, evaporation and atmospheric pressure. All are important to water sector monitoring and need to be integrated into the sector's M&E system.	**9.4**
Agriculture Ministries of Agriculture are normally a source of information on the amount and quality of water demand and use by irrigation. They will also maintain information on the use of pesticide and fertilizer use which has important connotations for municipal drinking water quality. With depletion of surface waters in both quantity and quality, agriculture turns to groundwater. Most agricultural ministries maintain a network of groundwater observation	**9.5**

stations, especially in the water stressed regions. In view of the high demand for irrigation water, agricultural groundwater monitoring networks are usually more developed than those of water ministries. Both need to be reviewed and assessed. Opportunities for their joint strengthening and even integration need to be identified and recommendations made. The same can be said for hydrological stations which agricultural departments may be operating. Similarly, agricultural departments normally maintain meteorological networks. These are often already integrated with those of the meteorological departments.	
Universities and Research Institutes Universities and research institutions have strong interest in the water sector, especially within civil and environmental engineering, forestry and agriculture faculties. They will need to be contacted to determine their relevance, information requirements and areas of potential collaboration.	**9.6**
Transboundary Water Resources Management Most transboundary waters have MoUs or agreements between riparian countries that are overseen by commissions, committees or boards. The rapid assessment should obtain copies of the MoUs and/or agreements and investigate as to whether current M&E systems are meeting the oversight body's needs. They will contain agreed modes of water resource monitoring, the maintenance of databases and the sharing of information as well as the use of data in shared resource development.	**9.7**
Climate Change The impact of human activity on the world's climate was all-but-confirmed in the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report in 2007, which noted among other findings that the 1995-2006 period ranked among the twelve warmest years in the instrumental record of global surface temperature, and that globally the area affected by drought has likely increased since the 1970s. Yet most ordinary Africans who have witnessed increasingly frequent warm spells, heavy precipitation events and severe droughts over the last five decades likely needed little additional confirmation. Since Africa is predicted to be one of the regions in the world to be the most vulnerable to the impact of climate change over the next century, it is becoming increasingly important for African countries to develop monitoring systems capable of tracking its effects to inform strategies to adapt to and attenuate them. In the context of the Rapid M&E Assessment, these efforts – such as the development of National Adaptation Action Plans like those already drafted by Mauritania, Niger and Senegal; improving climate information collection networks at the country and transboundary water basin level; and, developing national action plans on IWRM – should be reviewed and assessed. Given the multi-sectoral nature of climate change, touching on the environment, transboundary water basin management, meteorology and agriculture, climate change monitoring and adaptation measures can be assessed in conjunction with assessments of these and other sectors discussed above.	**9.8**

Background Documentation

The following is a brief list of reference documents that could make valuable reading in preparation for the Rapid Assessment:

- African Development Bank, "African Water Facility: Operational Procedures," African Development Bank, November 2005, www.afdb.org
- African Water Facility, "Summary Report on the Tunis Regional Consultative Meeting, 21-22 September 2006, Tunis," Water Sector Monitoring & Evaluation Working Group, African Water Facility, Tunis, March 2007, www.watermonitoringalliance.net/fileadmin/wma/documents/Tunis_ME_Meeting_Report_DF.doc

- Cap-Net, "Integrated Water Resources Management Plans: Training Manual and Operational Guide," Cap-Net, Global Water Partnership, UNDP, March 2005, http://www.adbi.org/3rdpartycdrom/2005/10/03/1907.iwrm.plans
- EasyInfo, "Technical and Financial Feasibility Studies of the National Water Information Systems in 12 Mediterranean Countries: Executive Summary," EMWIS/SEMIDE, January, 2006, www.emwis.net/documents/meetings/fol791509/ fol466073/ fol908769/exfile505487
- IPCC Working Group, "Climate Change 2007 Synthesis Report: Summary for Policymakers," Intergovernmental Panel on Climate Change, November 2007, http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf
- Water and Sanitation Program (WSP), "Country-level Sector Information and Monitoring Systems (SIMS) for Water and Sanitation in Africa," Practitioners Workshop, Nairobi, Kenya, March 27-29, 2007, www.wsp.org/regions/region.asp?id=11
- WSP-Africa, "Getting Africa on Track to Meet the MDGs on Water and Sanitation: A Status Overview of Sixteen African Countries," AMCOW, African Development Bank, EU Water Initiative, WSP, UNDP, December 2006, www.wsp.org/filez/pubs/319200725615_312007101903_MDGs_All_final3_high.pdf
- UNECA, Annual Water Development Report, "Indicators – Measuring the Progress of the Africa Water Vision".

PART 2: RAPID ASSESSMENT REPORT TEMPLATE

Part 2 provides the assessor with descriptions of the rapid assessment report's contents and a series of recommended questions to be asked during the investigation to facilitate obtaining and including all of the required information.

The Rapid Assessment Report Template is to be used in combination with the Part 1: Guidelines, in which more detailed background information is provided on each section and sub-section along with tables to be filled in and included in the main report or its annexes.

The Template is presented in the format of a table of contents used to structure the Rapid Assessment's final report. Each sub-heading is followed by a suggested number of pages of content. All told, the final report should not exceed approximately 30 pages plus annexes.

Executive Summary *(1-2 pages)*

- Provide a summary of the key findings of the rapid assessment.

Acronyms

- Provide a complete list of acronyms used in the final report. For a model, see the list of acronyms preceding Part 1: Guidelines.

1. Country Background *(0.5 page)*

- Briefly describe the country, its location, urban centres, population growth, governance and basic statistics such as GDP and HDI.

2. National Water Development Strategies and Policies *(0.5 page + annexed list of titles followed by brief descriptions)*

- Are national strategies and policies for IWRM and WSS in place or under development? If so, the assessor should obtain copies.
- What are the principal strategies and policies influencing M&E? For example, are the African Water Vision 2025 and the MDGs being used as targets and MDG indicators locally accepted and used?
- Are poverty reduction and gender mainstreaming strategies integrated into sector policies?

3. Overview of the Sector *(2.5 pages)*

- Provide an overview of the sector. This should give the reader a basic introduction to the sources, uses and management of water resources as well as the status of principal water and sanitation sector development Programs.

3.1 Water Resources and IWRM

3.1.1 Water Resources Overview

- What are the country's principal sources of water? What are its main river basins, lake basins, aquifers, and their sizes?
- Which are trans-boundary waters?
- What is the distribution of rainfall across the country?

3.1.2 Water Resource Use

- Report available statistics on the volume of water used and its geographical, basin and/or seasonal distribution under the headings below, where possible. :
  - **3.1.2 (a) Irrigation**
  - **3.1.2 (b) Energy**
  - **3.1.2 (c) Transport**
  - **3.1.2 (d) Environment**
  - **3.1.2 (e) Industrial**
  - **3.1.2 (f) Domestic**
- What is the country's Water Poverty Index (WPI) ranking?

3.2 Water Supply and Sanitation

3.2.1: Water Supply

- Provide an overview of urban and rural water supply. What coverage rates are being reported? Are they accurate and representative?
- Are there national water supply development Programs underway? If so, briefly describe them and their targets. Are the Vision 2025 and MDG targets being met? What is the potential for their being met in the future?

3.2.2 Sanitation, Wastewater and Sewerage

- Provide an overview of urban and rural sanitation. What coverage rates are being reported? Are they accurate and representative?
- Are there national sanitation development Programs underway? If so, briefly describe them and their targets. Are the Vision 2025 and MDG targets being met? What is the potential for their being met in the future?

3.2.4 WSS Financing

- How is water supply being financed, through what mechanisms and what are the existing cost recovery policies and practices?

3.2.5 WSS Planning and Reform:

- Are there national water supply development plans underway? If so, briefly describe them and their targets. What plans are there for future Programs and reforms?
- Are there sector reforms (such as SWAP or governance devolution/decentralization) taking place? If so, what are the key reforms being made?

4. Principal Issues in the Water Sector *(1 page)*

- List up to 10 principal issues facing the sector and provide a brief, one paragraph description of each principal issue. The following are some examples: (1) conflict over distribution of water (including transboundary waters) between multiple users, (2) ineffective management of groundwater or its pollution by industry,(3) inappropriate governance and institutional arrangements in managing water basins, (4) lack of policy and planning, (5) unreliability of coverage data, (6) depletion of water resources through pollution and environmental degradation, (7) excessive subsidization of water and sanitation provision, (8) variability of climate and rainfall coupled with climate change, and (9) growing water scarcity and desertification.

5. Institutional Framework *(6 pages including figures)*

M&E is covered in the subsequent sections of the assessment report. This section refers to roles and responsibilities in the implementation and administration of the sector.

- Describe the sector's institutional framework using an organizational chart if possible.

5.1 Water Resources

- Using an organization chart, such as Figure 1.1 or a matrix, illustrate the principal ministry, boards and councils, its departments, water basin boards and offices, catchment committees and offices, water user associations and community based organizations and their roles and responsibilities. Describe linkages whether of a regulatory, advisory or information sharing nature between the various levels and organizations.
- What are the principal sources of funding for the IWRM framework? Are they sustainable?
- What other stakeholders are active in the sector? These typically include actors from the following spheres: Environment, Local government, Energy, Agriculture, Transport, Surveys and statistics, Meteorology, Universities, research and training institutions, NGOs, Media, and the private sector.

5.3 Rural Water Supply and Sanitation

- List which organizations and institutions are working in rural water and/or sanitation. They will likely include the lead water ministry and its departments, regional water boards, the health ministry, local government and its district offices, NGOs, water management or user committees, and the private sector companies.
- Describe these organizations and their primary roles using a simple table listing the institution in one column and a brief description of their role in another.

5.4 Urban Water Supply and Sewerage/Sanitation

- As in the preceding section, describe the sector's stakeholders and their roles in the form of an organization chart or matrix. Also list and describe the roles of stakeholders in sewerage and sewage treatment.

- Describe the sector's mechanisms of self-financing, subsidization and donor support.

6. IWRM M&E *(4 pages)*

- Is there a structured IWRM M&E framework? If so illustrate it in an M&E organizational chart showing institutions, their relationships and their roles.
- Are any international transboundary basin organisations such as OMVS or NBI operating in the country? What role do they play?
- Which regional and global organizations are active in water sector monitoring and evaluation in the country? List and briefly describe their areas of activity (can be attached in annex form).

6.1 Basin Monitoring Networks

- Review the resources, facilities and capabilities of national and transboundary water basins organisations.
- In a matrix, such as Table 1.1 of the Guidelines, briefly describe the facilities available to each basin in terms of human resources, river gauging, meteorological stations, rainfall, water quality and groundwater observation and quality.
- What are the principal strengths and weaknesses of these basin offices? If the information is available, what would be required to make them fully operational?
- Has resource mapping been carried out and are inventories of resources available for each basin?

6.2 Data Analysis, Storage and Dissemination

- What is the quality and timeliness of data being collected in each basin?
- What indicators and performance criteria are being used?
- Is the data verified, are there quality checks on its collection?
- How is the data managed/collated and analysed? Is the data collected regionally or centrally before or after analysis? Is an MIS or DBMS available, functional and used? Is the MIS or DBMS readily accessible at the basin and levels? Is the information prepared in a user-friendly format and fed back to regional basin levels?
- How is the data analysed, stored and prepared for dissemination?
- How is the information used?

7. Rural Water Supply and Sanitation M&E *(6 pages)*

7.1 Rural Water Supply M&E

7.1.1 Institutions and Monitoring Networks

- Which institutions are collecting data on rural water supply?
- Is there a structured M&E framework for the RWS sub-sector? If so illustrate it in an M&E organizational chart showing institutions, their relationships and their roles.

7.1.2 Indicators and Sampling for Data Collection

- *Table 1.2 in Part 1: Guidelines can be used to record observations and comments about surveys and data collection being undertaken. Each survey or data collection initiative should be described and commented on using separate tables.*
- An overall assessment should be made of the M&E data collection approaches and methods being used in the country.
- The assessment should note whether data is disaggregated by gender.

7.1.3 Data Storage and Analysis

- In each case, how is the data collated, stored and analysed? Describe the data management chain. What is the quality of analysis, storage and access? Are there one or several databases and

institutions storing the data? Are they coordinated? Is the data and information harmonized between them?

7.1.4 Information Dissemination and Use

- How is collected data used, by what institutions, for what purposes and to what effect? Is there a two-way flow of information both to the central organization and back to the data collectors and providers?
- In what form is the data/information processed and published? On what platform is the data presented: reports, website, or survey documentation?
- Is dissemination pro-active and targeted? How and to whom? Does it reach those who need it most, including the media, libraries, universities, research and training institutions, the public and the private sector?
- Is the information used in sector management, planning and development? Is it used to assess sector performance and progress towards targets? Is it used by regional and global organizations interested in sector progress and performance?

7.2 Rural Sanitation M&E

7.2.1 Institutions and Monitoring Networks

- *Refer to 7.1.1 of* this *template, which can be used as a guide to reporting on institutions and monitoring networks in rural sanitation.*

7.2.2 Indicators and Sampling for Data Collection

- What is the definition of adequate sanitation used locally to describe adequate sanitation? Does it conform to the definition used by the JMP in assessing progress towards the MDGs?
- Is data collected disaggregated by gender?

7.2.3 Data Storage and Analysis

- Refer *to Section 7.1.3, which can be used to report on data storage and analysis in the rural sanitation sub-sector.*

7.2.4 Information Dissemination and Use

- *Refer to Section 7.1.4, which can be used to report on information dissemination and use in the rural sanitation sub-sector.*

8. Urban Water Supply and Sanitation M&E *(3 pages)*

8.1 Urban Water Supply M&E

- *Refer to sections 7.1.1, 7.1.2, 7.1.3 and 7.1.4, which relate to rural water supply. They can be used to guide the approach used and the questions to be asked about urban water supply with the understanding that they will need to be adapted to the very different nature of organizations working in urban areas. In cases where institutional roles overlap, reference can be made to preceding tables and descriptions rather than repeating them for each sub-sector.*

8.1.1 Institutions and Monitoring Network
8.1.2 Data Collection
8.1.3 Data Storage and Analysis
8.1.4 Information Dissemination and Use

8.2 Urban Sanitation

Refer to Section 7, which relates to rural water supply and sanitation. This can be used to guide the approach used and the questions to be asked about urban sanitation. They will need to be adapted to reflect the different organizations responsible for urban sanitation and sewerage.

Distinction should be made between on site sanitation and sewerage. In most instances, sewerage and septic tanks are available to the more wealthy and commercial areas of towns and cities. On-site

sanitation refers primarily to latrines and eco-sanitation. These are used in the less wealthy and peri-urban residential areas. The local definition of adequate sanitation should be provided and compared to that used by the JMP and MDGs.

9. M&E Subsystems (4 pages)

Most water resources institutions will have their own M&E data collection, analysis, storage and dissemination systems. However, there will be overlaps with the water sector, which will need to be identified and reported on. Care should also be taken to identify where the water sector can utilize data from these subsystems and where the water sector M&E information can be of use to these subsystems.

9.1 Environment

- What M&E systems and capacities do the environment related organizations possess?
- What areas are water sector related?
- Are there opportunities for sharing M&E data, especially in the subsectors of:
- Pollution control
- Deforestation
- Environmental flows?

9.2 Physical Sub-Systems Data

- What data can be useful to the water sector?
- Is it M&E data? If so, how can it best be used?

9.3 Census and Socio-Economic Surveys

Censuses and socio-economic surveys are of direct relevance to the water supply and sanitation sub-sectors in that they provide the baseline for population. Household surveys often include questions related to water supply and sanitation.

- Is census data used in water and sanitation M&E?
- Report on the quality of census data and its relevance to sector M&E. For example, are the timelines for the census the same as those of WSS M&E or do interpretations have to be made and what is the quality of these interpretations?
- Are the boundaries used in the census the same as those used for monitoring WSS? That is, do they cover the same populations or are there unacceptable differences that are being overlooked?

9.4 Meteorological Monitoring Networks

- Obtain information on meteorological stations, surveys and reports. Is there data collection which can be utilized by the water sector? These will likely be found in the form of rainfall statistics. What is the calibre of this information?
- How can this data be integrated into the water sector's monitoring systems?

9.5 Agriculture

- How extensive are these monitoring networks? Describe them.
- How reliable is the information?
- How can it be integrated or at least used by the water sector?

9.6 Universities and Research

- Which universities, training institutions and research establishments are working in the water sector?
- Do they provide or utilize M&E data?
- How can the water sector better relate, serve and draw upon these institutions?

9.8 Climate Change

- What measures are being undertaken and tools are being used to monitor the impact of climate change on domestic and transboundary water resources?

- If climate change monitoring is being undertaken, is it the responsibility of one particular ministry or organization, or is a multi-sectoral approach being taken? Which ministries or organizations are involved in these activities?
- If the country has an IWRM Action Plan, to what extent does it address climate change adaptation?

10. M&E Issues, Conclusions and Recommendations *(5 pages)*

10.1 Issues

- Summarise in bullet form the key issues undermining effective water sector monitoring and evaluation in the country.

10.2 Opportunities

- Describe, if applicable, key developments being undertaken in the sector that represent significant potential for improvement in both its management and monitoring.

10.3 Recommendations

- Provide up to five key recommendations related to strengthening water sector M&E in the country based on the findings of this assessment.

APPENDICES