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ADVANCING THE BLUE REVOLUTION INITIATIVE

QUARTERLY REPORT 11: JANUARY - MARCH 2010

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PREFACE

The United States Agency for International Development (USAID), through its Washington D.C.-based Bureaus for the Middle East (ME) and for Africa (AFR), and through its Office of Middle East Programs (OMEP) housed in USAID/Egypt, has contracted Development Alternatives, Inc. (DAI) to implement a task order called Advancing the Blue Revolution Initiative (ABRI) under the Water Indefinite Quantity Contract II. The effective dates of the contract are May 1, 2007 through April 30, 2010. ABRI is headquartered at DAI's offices in Bethesda, Maryland; it engages technical expertise and subcontractors throughout the Middle East and increasingly in Africa.

DAI submits progress reports three weeks after the close of each quarter providing details on the status of implementation activities. The reports include a discussion of operational problems and policy constraints encountered; proposed solutions; subsequent work plan modifications; and a schedule of activities for the upcoming quarter. DAI provides updates on project finances and expenditure of personnel level of effort directly to USAID and separate from the quarterly reports.

More detailed information on ABRI is available in other reports for readers who may not be familiar with the project. These reports are available from our project offices and USAID.

Peter Reiss
Chief of Party
USAID/Advancing the Blue Revolution Initiative
Development Alternatives, Inc.
Bethesda, Maryland, USA

CONTENTS

ACRONYMS

ACWUA	Arab Countries Water Utilities Association
ADWEA	Abu Dhabi Water and Electricity Authority
AFD	African Development Bank
AFR	Bureau for Africa
AFWA	African Water Association
AFESD	Arab Fund for Economic and Social Development
AMCOW	Africa Ministers Council on Water
ANE	Bureau for Asia and the Near East
AUB	American University of Beirut
AWA	Arab Water Academy
AWCA	Arab Water Council
AWWA	American Water Works Association
BOT	Build Operate Transfer
BRI	Blue Revolution Initiative
CPWC	Cooperative Programme on Water and Climate
CTO	Cognizant Technical Officer
DCA	Development Credit Authority
DSI	Turkey State Water Works
EQI	Environmental Quality International
EGAT	USAID Bureau for Economic Growth, Agriculture, and Trade
ESCWA	Economic and Social Commission for Western Asia (United Nations)
ETIC	Euphrates-Tigris Initiative for Cooperation
EUWI-FWG	European Union Water Initiative – Finance Working Group
EWAP	Evian Water Action Plan
GAP	Greater Anatolia Project
GDA	Global Development Alliance
GDP	Gross Domestic Product
GIS	Geographic Information Systems
GOE	Government of Egypt
GTZ	Gesellschaft fuer Technische Zusammenarbeit
GWA	Gender and Water Alliance
GWC	Global Water Challenge
HIP	USAID Hygiene Improvement Project
ICT	Information and Communication Technology
ICARDA	International Center for Agricultural Research in the Dry Areas
IDARA	Instituting Water Demand Management in Jordan Program (USAID)
IFC	International Finance Corporation
IJC	International Joint Commission of the United States
IP3	Institute for Public-Private Partnerships
IWA	International Water Association
IUCN	International Union for Conservation of Nature
JEWEL	Jordan Education for Water and Environmental Leadership
JUST	Jordan University for Science and Technology
MDG	Millennium Development Goal
MENA	Middle East and North Africa
MOU	Memorandum of Understanding
NRW	Non-Revenue Water

NWSC	National Water and Sewage Corporation
NWRA	National Water Resources Authority (Yemen)
NWRIS	National Water Resources Information System
O&M	Operation and Maintenance
OES	Bureau of Oceans and International Environmental and Scientific Affairs
O/MEA	Office of Middle East Affairs
OMEP	USAID Office of Middle East Programs
ONEP	Office National de l'Eau Potable (Morocco)
ORMVAH	Office Régional de Mise en Valeur Agricole du Haouz (Morocco)
PMP	Performance Monitoring Plan
PWRF	Philippines Water Revolving Fund Program (USAID)
RAED	Arab Network for Environment and Development
RITSEC	Regional Information Technology and Software Engineering Center
SEEP	Small Enterprise Education Promotion Network
SIDA	Swedish International Development Agency
SIWI	Stockholm International Water Institute
SSUWC	Southern Sudan Urban Water Corporation
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO-IHE	UNESCO – International Water Education Institute
UNISDR	United Nations International Strategy on Disaster Reduction
UNU	United Nations University
WASH	Water Hygiene and Sanitation
WBCSD	World Business Council on Sustainable Development
WEF	Water Environment Federation
WEF	World Economic Forum
WIN	Water Integrity Network
WOP	Water Operator Partnership
WUA	Water User Association
WWC	World Water Council
WWF	World Wildlife Fund
WWW	World Water Week

1. STATUS OF IMPLEMENTATION ACTIVITIES

TASK 1: PROMOTE TRANSBOUNDARY WATER COOPERATION TO IMPROVE WATER SECURITY

Activity 1.1: Design a Track 2 Shared Initiative by Riparian Experts on the Tigris-Euphrates

Activity Manager: Faisal Rifai (DAI)

This activity consisted of five tasks: Advancement and Outreach, Data Inventory, Data Harmonization, Capacity Building, and Clearinghouse. It has been successful in sparking a sequence of efforts that led to greater cohesiveness among the riparian participants, attracting a cadre of investigators, and increasing international attention in both the collaborative process and the achievements of the activity.

Given that the main data sources were from government institutions, ETIC/ABRI promoted dialogue, communication, and networking among the experts, government officials, and stakeholders in order to share information. As part of this effort, the Iraqi, Syrian, and Turkish teams convened several meetings in their home countries, communicated with each other through emails and teleconferences, and convened four in-person meetings in Turkey and Syria (Iraq, as a meeting venue, was not considered due to security considerations). The first in-person team meeting was held in Damascus, Syria on May 25-27, 2009; the second and third meetings were held in Ankara, Turkey on July 4-6 and October 1-3, 2009; and the fourth meeting was in Aleppo, Syria on January 15-19, 2010. During each meeting, the teams of experts reviewed, discussed, and coordinated the activity's progress and elaborated on the data inventory, standards for the harmonization of data, the clearinghouse, and the capacity building arrangements.

Achievements:

Task 1: Advancement and Outreach

The purpose of Task 1 was to make various institutions aware of the value of the joint ABRI/ETIC activity and the partnership among the universities. During the reporting period, ETIC/ABRI experts from Iraq, Syria, Turkey, and AUB met while in Aleppo in January 2010 with the Turkish Consul, the Rector of Aleppo University, the Assistant Field Officer of the United Nations High Commissioner for Refugees in charge of Iraqi refugees in Aleppo, and the Chairman of the Aleppo Chapter of the Syrian Engineering Syndicate. The experts presented the ETIC/ABRI activity and highlighted the results of their collaboration in the TE region.

Task 2: Data Inventory

Under Task 2, the teams (1) identified existing databases focusing on the TE Region, (2) determined data gaps, (3) described the formats and standards of available data in the three countries, and (4) developed a comprehensive list of available data for the three countries with a view to storing them in a common database in standardized and fully documented formats. During the reporting period, the teams determined the format for collecting and reporting data and the interface programs needed to convert the inventory data to the required format. To complete Task 2, the teams then advanced, developed, and enhanced the data sheets, taking

into consideration the often poorly documented raw data, their content, coverage, producer, accuracy, or sources. Finally, the experts developed lists of identified data to be stored in a common database with standardized and fully documented formats.

Task 3: Data Harmonization

The focus of Task 3, Data Harmonization, was to process the data inventory for harmonization, consistency of collection, and analysis. Following the data harmonization, the work teams selected a joint project on a trans-boundary subject for a case study and produced nine original thematic maps for the TE region in GIS format. They also collected data related to hydraulic structures in the TE region through a variety of procedures and processed and stored the data using available hardware platforms and software. Additionally, the experts defined the advantages and disadvantages of each approach and its deliverability into a GIS model, determining that the most practical GIS modeling software compatible with the existing hardware capabilities of the participating universities was the ArcGIS program from ESRI and open source GIS systems that are used world-wide.

Task 4: Capacity Building

Task 4 focused on capacity building. The first step the team carried out was a training needs assessment among young scientists in the TE region. The results of the assessment pointed to the need for training on the principles and practices of GIS. In response to the results, the team organized a training for these young scientists to be held in January 2010 and prepared training manuals and training curricula in consultation with a group of experienced trainers. When selecting the trainees, the organizers strove for diversity among the young professionals (who were between the ages of 22 and 45 years) to ensure a good balance among sectors, geography, gender and disciplines. The participants who attended the GIS training workshop in January 2010 were diverse, bright, dynamic, motivated young professionals and included participants from ten universities and five government institutions from Iraq, Turkey, and Syria. The program included sessions on the fundamentals of hydraulic structures, the institutional structures of the water sectors in the riparian countries, and principles and practices of GIS in the TE region.

TASK 2: ACTIVITIES TO IMPROVE WATER RESOURCE MANAGEMENT

Activity 2.1: Identify Opportunities for Improved Aquifer Management in Yemen

Activity Manager: Ali Farhan (Hydro-Yemen)

Yemen is one of the oldest civilizations in the world (originating about the 9th century BC). It is located in an arid region with no permanent rivers, though the country has extensively developed groundwater resources. In contrast to the rest of the countries of the central Middle Eastern region, 30% of Yemen's population lack access to clean water and 70% live without access to sanitation services (World Bank 2007a). Currently, demand for surface water in Yemen exceeds its availability, with deficits often reduced by pumping nonrenewable storage from deep aquifers. This, in turn, has resulted in major groundwater depletion in a number of regions of the country, which in some cases is alarming: the decline in water level in some wells has been found to be 2 – 6 meters per year (e.g., in the Sana'a basin).

Efforts during the reporting period focused on Tasks 3 and 4.

Task 3: Review and Design of a Monitoring Network

Task 3 was divided into two parts: the well monitoring network and the hydrological, climatological and surface water monitoring network. ABRI defined the shared objectives of the two networks:

- To evaluate the existing network, review all historical data, and possibly re-operate parts of the network to measure meteorological parameters, surface water, and groundwater; and

- To design a new monitoring network.

Evaluation of the Well Monitoring Network

At the time the activity began, there was no existing well monitoring network in Buwaish and Fuwwah Wadis. The ABRI technical team visit to the Hadhramout NWRA branch revealed that it possessed no wells for monitoring purposes and instead found only that the Local Water Supply and Sanitation Corporation (LWSSC) had undertaken some water level measurements at Al-Mukalla. The team also discovered that 61 wells and boreholes had already been dug in the area. Out of these, only 51 wells and boreholes satisfied the selection criteria for monitoring. Taking into consideration the total area of the wadis and the current distribution of the existing wells, the team concluded that the 10 monitoring wells already used by NWRA were sufficient. Thus, the monitoring well density was one for every 110 km^2.

The ABRI technical team also surveyed the monitoring/measuring devices used by local water officials. LCWSS used a flow meter device to measure groundwater abstraction rates and manual readings for groundwater level measurements. Within the last three years, the Ground Water and Soil Conservation Project (GSCP) installed groundwater monitoring equipment in many wells in Yemen using the automatic water level and water quality recorders under the supervision of NWRA. This equipment was placed on abandoned wells, which were not “monitoring wells”, but instead are considered “wells that are monitored”. The difference is that monitoring the water level in these wells is not representative for the monitoring objectives of detecting water level changes due to changes in water savings under GSCP. ABRI reported all these findings to NWRA.

As for analyzing available data, the team made it clear that no data is available from observatory wells to carry out a trend analysis. LCWSS collected data for a period of time, but only from pumping wells, due to the absence of observatory wells in the project area. Thus, the data available from LCWSS is exclusively from dynamic water levels that cannot be used for trend analysis. Moreover in order to conduct a trend analysis, the team needed data for at least two to three years from observatory wells. As a result of these findings, ABRI would recommend that the NWRA Hadhramout branch undertake a long-term monitoring program to evaluate the groundwater situation in the two wadis.

Evaluation of the Hydrological, Climatological and Surface Water Monitoring Network

For any water resources management study, all hydro-meteorological data related to the water cycle can either be collected through monitoring or derived from calculations/estimates. In addition to hydro-geological and groundwater data, surface water and hydro-climatological data are also requisite for such study. The ABRI team’s investigation revealed that there was no rainfall station in either Wadis, only a single weather station was located in the surroundings at

Al-Rayan airport. The nearest stations were the three located at Wadi Hajr, one of which was out of order (the weather station located at Sidarah) and the two others were standard rainfall gauges located at Mayfa'a Hajr and Al-Heylah. Data collection from the Al-Rayan Station was not conducted from 1942 to 2000 and none of the rain gauge stations or the weather station have registered sufficiently long-term data. In general, the following features emerged with respect to the existing network:

- The study area seriously lacks historic rainfall data; and
- Only one meteorological station maintained by the Civil Aviation and Meteorological Authority (CAMA) has sufficiently long-term data.

The ABRI team visit also revealed that although the project area has experienced several significant floods in the past, no flood measurements were taken due to the lack of a stream flow gauging station. The team was also unable to track any records from the two wadis gauging stations that were installed in 1982.

Design of Operational Network

Following its assessment, the team found that using the existing network would be challenging. The team was not able to assess the adequacy of the available rain gauges through statistical analysis because the five rain gauges in the two wadis did not have continuous data. From the analysis of the stations in both wadis (650 km^2 Wadi Buwaish and 450 km^2 Wadi Fuwwah), the team found the optimum number of stations to be seven. This finding was based on World Meteorological Organization (WMO) standards that state that one rain gauge is needed per 100-250 km^2 in mountainous regions of temperate, Mediterranean, and tropical zones.

Accompanied by NWRA experts, the ABRI technical team visited the study area to identify sites to install new instruments. During the site visit, the team discussed various issues with local villagers, in particular the availability of space for installation. As a result, the team generated a table that included the proposed locations and followed a similar procedure to select the sites for the Wadi gauge stations for flood measurements. During the site selection, the team considered features such as channel characteristics, the possibility of back water, and accessibility to the site, among others. At the close of Task 3, ABRI suggested two new locations and wrote a final report that catalogued the required monitoring instruments.

Task 4: Groundwater Modeling

During the reporting period, ABRI began Task 4: Groundwater Modeling. Modeling is an attempt to replicate the behaviors of natural groundwater or a hydrologic system by defining the essential features of the system in some controlled physical or mathematical manner. Modeling plays an extremely important role in the management of hydrologic and groundwater system. Thus, as a part of the proposed future regional water resources management plan, NWRA deemed it essential to carry out a groundwater modeling exercise for two the Wadis. The general objectives of this task were:

- Assess general flow direction of groundwater in the aquifer;
- Examine the possibility of interference of the groundwater aquifer layer in both horizontal and vertical directions;
- Assess groundwater storage in the aquifer;
- Examine the implications of various groundwater management strategies;

- Estimate the variation of groundwater levels under present abstraction rates and future abstraction and its spatial distribution for long term sustainability of groundwater storage;
- Impact assessment under various abstraction scenarios;
- Maps and cross section showing the distribution of the water table, fresh water, and brackish groundwater in space and time; and
- Detailed documentation of modeling procedures, assumptions, and results.

The reliability of any groundwater model depends on properly simulating the groundwater situation in the basin. This then depends on proper calibration, for which it is indispensible to have data on the geometry and hydraulic characteristics of the aquifer and data on water levels and water balance, in addition to other information as needed. NWRA can use the program for different scenarios and work out strategies for groundwater development. At present the model has been developed for a single aquifer and multiple aquifer system for 365 days. It can be altered for different time periods both short and long term and under various contingencies.

Proposed for the coming period:

- Complete Task 4 (groundwater modeling for Wadi Buwaish and Wadi Fuwwah) and submit the groundwater modeling report.

Activity 2.2: Integrate Irrigation Water User Participation into the Latest Commercialization and Private Sector Management Thinking

Activity Manager: Amer Jabarin (ECO Consult)

This activity has been completed.

TASK 3: IMPROVE WATER SUPPLY AND SANITATION SERVICES

Activity 3.1: Support the Arab Countries Water Utilities Association

Activity Manager: Peter Reiss (ABRI Director)

ABRI sought to strengthen regional platforms and networks that include the private sector, donors, non-governmental organizations, and academic and public authorities to address critical issues of water resource management and water supply and sanitation issues.

The Arab Countries Water Utilities Association (ACWUA) was established to address chronic regional problems, such as water scarcity, weak water and environmental policies, high investment needs, lack of management and technical capacity, increasing demand due to growing populations, and conflict. Its role and mandate as a regional platform was tackling the performance and support of water utilities in the region. ABRI set out to support ACWUA's presence in the region and enhance the 'value proposition' it offered to members.

- ABRI provided specialized technical assistance to:
    - Develop a scope of work for ACWUA's Technical Services Director to help them in the recruitment process. Consequently, the position was filled in early 2010.

- Assisted ACWUA in creating a "value proposition" for its members by facilitating knowledge exchange and networking opportunities. This was manifested by the support provided by ABRI during ACWUA's conference on cost recovery in January 2010.

- Develop presentations on behalf of ACWUA for delivery by the Secretary General of the Association for The event held in Abu Dhabi in January 2010 where the Secretary General presented on ACWUA's experience with the role of water utilities in Arab countries with water saving, water conservation, and protection in urban water management for the platform on Water Demand Management IDRC.

- ABRI and ACWUA collaborated in the development of a five-year business plan for the Association that was presented to and approved by its Board of Directors (BoD). The Business Plan, which was completed in early 2010 and presented to ACWUA's Board of Directors in February 2010, covers the period of 2010 through 2014 and will serve as the strategic guide for the development and growth of the Arab Countries Water Utilities Association. ABRI and a working group composed of ACWUA senior management and three Boards members spearheaded the Business Planning process, receiving advice from the International Water Association on an ad hoc basis. It was also coordinated with assistance from the German Technical Assistance Agency (GTZ) and its resident project manager.

  The resulting Business Plan can be considered both a document and a tool. As a document, the Business Plan provides a clear, concise means for ACWUA to communicate its vision and mission to its various audiences and stakeholders, as well as its specific Strategic Goals for the planning period and how it intends to achieve those goals. It also presents the revenue expectations and expense forecast that senior management believes will be necessary to achieve its Strategic Goals.

  As a tool, the Business Plan development defines a process that ACWUA can repeat in the future as it conducts annual updates of the Business Plan, by assessing how it performed against its defined interim milestones, and what changes need to be made to the Business Plan for the subsequent five-year period. To aid this process, the Business Plan contains a computer-based spreadsheet model that accommodates data input, cost, and revenue assumptions that will allow ACWUA to consider new or different assumptions and to forecast their impact on the "business" of the Association.

- To help expand ACWUA's presence and notoriety at the regional and international level, ABRI provided financial support for ACWUA's participation in several events. During the reporting period, ABRI helped develop the sponsorship page for the Non-Revenue-Water specialty conference held by ACWUA in Morocco in January 2010.

- ABRI initiated an activity to provide communications technical assistance to ACWUA to develop an action plan and templates consistent with the communications strategy cited in the business plan.

- ABRI initiated an activity to provide targeted technical assistance to ACWUA in staff capacity development and consumer relations management. Being a fledgling association, ACWUA requires well-trained and clearly directed in-house staff that can fulfill the association's many requirements and a consumer relations system to help it communicate with members. The Management Expert is working with ACWUA's management and staff to clarify roles and

responsibilities and to determine the most appropriate consumer relations software considering ACWUA's five-year business plan.

Proposed for the coming period:

- Engage a Communications expert to work with the communications and knowledge management staff of ACWUA to: Design and support the production of the first membership newsletter; develop a process for issuing press releases by ACWUA; develop templates for hard copy and digital promotional materials and their dissemination channels; document the process for soliciting the support (financial, technical and in-kind) of the private sector and donor agencies and through sponsorship campaigns; assist the knowledge management and communication staff in ACWUA to assess three knowledge management tools already available in ACWUA; assess and recommend additional means or tools of communications, knowledge management and/or dissemination channels suitable for ACWUA's case; compile the above efforts into a communications and knowledge management action plan that includes required activities, roles and responsibilities, timeframe, and estimated costs.
- Engage a Management expert to work with the ACWUA management and staff to clarify roles and responsibilities and to determine what consumer relations software is appropriate and consistent with ACWUA's five-year business plan.
- Engage an Information Technology firm to assist in the development of a specialized customer relations management software.

Activity 3.2: Support the Egypt Regulatory Agency

Activity Manager: Peter Reiss (DAI)

USAID requested ABRI's assistance with two water regulatory reform activities in Egypt: supporting an operator certification program and providing Management Information Systems (MIS) and Information Technology (IT) technical assistance to the Egyptian Water Regulatory Agency (EWRA).

The Ministry of Housing, Utilities, and Urban Development (MHUUD) in Egypt has mandated the development of a program to certify water and wastewater treatment plant operators through a system of examinations. USAID is supporting that mandate under the Water Policy and Regulatory Reform project which developed an operator certification policy and rated and classified all water and wastewater plants on the basis of size and complexity of treatment process. To complete the certification program, ABRI developed a set of core competencies and the associated exam questions and answers for water lab analysts, wastewater lab analysts, water operators, and wastewater operators.

The MIS/IT activity built upon the USAID-funded Water and Wastewater Sector Policy Reform project (WWSPR), through which USAID developed a web based program management system (PRiSM) for EWRA. The PRiSM system tracked over 2,000 construction projects being managed by five MHUUD Agencies. EWRA requested further reports and system enhancements and with the WWSPR project having closed in September of 2009, ABRI was asked to by USAID to provide the technical assistance to make this possible.

Operator Certification Program

First, ABRI grouped the operators based upon classifications of plants, followed by the development of core operator competencies for each group. Once ABRI identified the groups

and developed the core operator competency, the team developed core competency exam questions and answers. Since each operator certification exam consisted of 50 questions, ABRI developed a databank of 150 questions for each of the four water operator classifications and four wastewater classifications.

MIS/IT Technical Assistance

Once EWRA reviewed the site, they recommended a number of modifications and additions. This portion of the activity focused on addressing their recommendations and involved analysis, design, programming and implementation of these modifications and assisting EWRA in publishing the web site.

At the close of the activity, ABRI will have developed the following documents for the operator certification program:

- Water lab analysis core competencies,
- Water lab analysis operator certification exam questions and answers,
- Wastewater lab analysis core competencies,
- Wastewater lab analysis operator certification exam questions and answers,
- Wastewater operator core competencies,
- Wastewater operator exam questions and answers,
- Water operator core competencies, and
- Water operator exam questions and answers

For the MIS/IT technical assistance, ABRI:

- Analyzed the required modifications to the web site and a new design;
- Developed the approved design;
- Added capabilities for easy administration and management of the web site for updating content;
- Provided training to EWRA IT staff on site administration;
- Assisted EWRA staff in publishing the site on the internet; and
- Wrote and delivered the user's guide for the revised website.

Proposed for the coming period:

The above mentioned documents will be completed and submitted to ABRI by CH2M Hill, who was contracted to complete this activity.

Activity 3.3: Develop a Twinning Relationship in Africa

Activity personnel: Jeremy Hagger (DAI)

The African Water Association is the apex organization representing water and wastewater utilities on the African continent. The organization recently launched a new initiative, the Water Operators Partnership – Africa (WOP-A), which will be the African affiliate of the Global Water Operator Partnership (WOP) program called for by the United Nations Secretary General and coordinated by U.N. Habitat. The basic strategy of the initiative is to achieve accelerated utility improvements through more intense and systematic knowledge sharing by means of peer to peer utility partnerships. The premise of the WOP-A program is that in spite of shortcomings, African utilities themselves have a range of locally appropriate, good practices to be shared

between them and that there are already a number of African utilities that are strong sector performers. Over the last decade in Africa, more than 30 African countries have implemented institutional reforms of water and sanitation services. Some reforms have been more successful than others, but all provide lessons to be shared in the sector.

Until now the trend has been to bring in external and/or non-utility consultants to engage with water and sanitation utilities on specific, short-term projects for institutional capacity building. These consultancies have not always led to sustainable solutions. Supporters of the WOP program approach believed that there is real potential for using twinning and the utility to utility partnership approach to improve practical utility operational problems, such as reducing non-revenue water and increasing revenue collections. There is an outstanding need, however, to recruit initial utility partners, prepare sample program materials and documents, and launch the first pilot exchanges. ABRI had the resources necessary to jump-start the WOP-A program.

During the reporting period, ABRI worked with USAID/Sudan and NWSC to assist in the development of a Memorandum of Understanding between the two utilities, which was then signed by the respective Ministers in a February 2010 signing ceremony in Kampala, Uganda also witnessed by the AfWA Secretary General and representatives of USAID/Uganda. The signing ceremony was held during a three day utility reform seminar, for which ABRI facilitated the travel of the Minister plus four SSUWC officers. The work program outlined in the MOU consisted of a diagnostic analysis of the structure and responsibilities of SSUWC and a comparison of its regulatory framework with that of the NWSC. The goal is to deliver a mutual work product that will improve the effectiveness of the SSUWC's delivery capacity and to provide options for future direction for the Southern Sudanese Ministry of Water and Irrigation.

Additionally, ABRI supported the participation of a delegation from SSUWC (3 members) at the 15th Annual AfWA Congress in Kampala, Uganda in March 2010 by paying for their registration and travel costs.

Proposed for the Coming Period:

- ABRI will request a waiver from USAID/Washington to subcontract with the National Water and Sewerage Corporation as a government entity.
- NWSC delegates will travel to Juba, Sudan to conduct an assessment of SSUWC and, later, to present their findings and a performance improvement plan.

Activity 3.4: Africa Non-Revenue Water Manual and Conference

Activity personnel: Jeremy Hagger (DAI)

This activity achieved numerous milestones during the reporting period, completing and printing the "first final" draft of the Non-Revenue Water (NRW) Manual and launching it at the 15th AfWA Congress in Kampala, Uganda in March 2010. ABRI used the conference session to showcase some of the African NRW success stories and to advocate the establishment of WOPs structured around a NRW theme. The first edition of the NRW Manual for Africa was completed in February 2010 and the Congress session was held on March 17, 2010 in Kampala in front of a large and enthusiastic audience. USAID's Carl Mitchell and the International Water Association's Paul Reiter opened the seminar with words of welcome. Malcolm Farley chaired the technical presentation, launched the NRW Handbook, and introduced speakers from the World Bank's Water and Sanitation Program, RTI, IWA, and Uganda's National Water &

Sewerage Corporation. African utility managers expressed the opinion that the Manual would assist them in making initial changes in their systems to address the NRW issue. Well performing African utilities have opened dialogue with emerging utilities concerning creating NRW-centered WOPs. Finally, AfWA has agreed to continue emphasizing the importance of the NRW issue to its members and to further collaboration with USAID and IWA and others around this topic.

Proposed for the Coming Period:

- Solicit feedback from USAID on the current draft of the NRW manual, make changes as needed, and finalize the Manual.
- Obtain USAID's approval to disseminate the manual once finalized.
- Print hardcopies of the finalized manual and disseminate electronic copies as well.
- Work with local institutions to have the manual translated into French and Portuguese.

TASK 4: OVERARCHING PROGRAM SUPPORT

Activity 4.2: Partnership and Alliance Building

Activity Managers: Kristina Kohler (Public-Private Partnership Specialist, DAI) and Nemat Guenena (Public-Private Partnership Specialist, EQI)

During the reporting period, ABRI funded Dr. Emad Adly's (Executive Director of RAED) participation in the 15th Annual AfWA Congress in Kampala, Uganda where he shared RAED's best practices on civil society engagement at the IWA Urban Disaster Resiliency Forum seminar.

With many of the partnership and alliance building activities coming to a close, ABRI, in consultation with USAID, determined that Nemat Guenena's efforts would be sufficient for the remainder of ABRI. Kristina Kohler, therefore, left the project in mid-January.

Activity 4.3: WASH Training Sessions for USAID Missions in Africa

Activity Manager: Kathy Alison (Training Resources Group)

ABRI was asked by USAID to compile a digital inventory and library containing all documentation generated for the training, a list of logistical needs, and instructions were the training course replicated elsewhere. This was delivered to USAID on USB flash drives in mid-March.

Activity 4.4: USAID Programming Guidelines Manual

Activity Manager: Peter Reiss (ABRI COP)

In January 2010, ABRI submitted a final draft of the Programming Guide for general USAID/Washington review as well as review by selected field missions. ABRI anticipates that this document will be widely used by USAID Missions around the world as they expand their water and sanitation sector programming. ABRI also anticipates that the document will have a significant impact on other donors who have expressed interest in reviewing and adapting it for their own purposes.

Proposed for the Coming Period:

ABRI will solicit feedback from USAID following their review of the January 2010 draft and make any changes as required.

Activity 4.5: Building Awareness through International Outreach and Communications

Activity Managers: Kristina Kohler and Nemat Guenena

ABRI worked with IWA and RAED to draft a document outlining the climate change workshop process. This paper was presented by RAED in the IWA-convened seminar on disaster preparedness for communities. ABRI funded the attendance of Dr. Emad Adly (RAED) and Dr. Malcolm Farley (NRW Handbook) at the AfWA Congress.

With many of the outreach and communications activities coming to a close, ABRI, in consultation with USAID, determined that Nemat Guenena's efforts would be sufficient for the remainder of ABRI. Kristina Kohler, therefore, left the project in mid-January.

Activity 4.7: Middle East Center of Excellence on Water

Activity Manager: Peter Reiss

Following a visit to the Middle East in December to launch the Center of Excellence, ABRI worked with USAID, the State Department and other member entities of the interagency design committee to prepare documents and logistics for a follow-up visit in June. ABRI assisted USAID in the preparation of a design document which circulated through the US government for review, prepared scopes of work for the June visited, and attended many meetings of the design committee.

Proposed for the coming period:

ABRI will be a member of the June team visiting countries in the Middle East, arrange meetings and other logistics, and assist in the preparation of the assessment report.

TASK 5. PROGRAM MANAGEMENT

During the reporting period ABRI worked to finalize a realigned budget that will be submitted to USAID in a request for a budget realignment. ABRI will also request a no-cost extension through September 2010, which was request by USAID/Washington. The request will be submitted in the next quarter.

With ABRI's coming close, the team has begun preparing for closedown and has begun auditing its records. Additionally, Kristina Kohler, Partnership Development Specialist for the US and Europe, left the project in mid-January.

ABRI prepared a list of all project funded travel in order to request retroactive approval from ABRI's CTO. The request will be submitted in the next quarter.

Proposed for the Coming Period:

- ABRI will submit a request for a budget realignment and no-cost extension through September 30, 2010 to the project's contracting officer.
- ABRI will submit a request for retroactive travel approval of project funded travel.

ANNEX: ABRI PUBLICATIONS TO DATE

1. ABRI Quarterly Report: October - December, 2009

2. ABRI Quarterly Report: July - September, 2009

3. Partner Inventory for the Middle East Center of Excellence on Water

4. Projet Pilot: Réutilisation des Eaux Usées Traitées en Agriculture à Meknès, Maroc. Rapport 1: Diagnostic et Analyse de la Situation Actuelle: Janvier/Avril, 2009. (Available in English and French)

5. Pilot Project: Reuse of Treated Wastewater in Agriculture in Meknès, Morocco. Report 2 : Soil, Land Use and Irrigation Network Mapping : January/April 2009. (Available in English and French)

6. Projet Pilot: Réutilisation des Eaux Usées Traitées en Agriculture à Meknès, Maroc. Rapport 3 : Design du System d'irrigation et Cadre Institutionnel : Jan/May 2009. (Available in English and French)

7. Projet Pilot: Réutilisation des Eaux Usées Traitées en Agriculture à Meknès, Maroc. Rapport 4 : Guidelines pour la Réutilisation des Eaux Usées Traitées : Jan/May 2009. (Available in English and French)

8. ABRI Quarterly Report: April – June, 2009

9. Training Report, Future Water Leaders Module 2. January 2009.

10. Training Report, Future Water Leaders Module 1. October 2008.

11. ABRI Quarterly Report 4: April – June 2008. August 2008

12. ABR Year Two Workplan. July 2008

13. Mapping of Alliance and Partnership Opportunities and Implementation Plan. June 2008

14. Water User Associations in the Middle East: Drivers for Commercialization and Improved Water Management? June 2008

15. Quarterly Report 3: January – March 2008. April 2008.

16. Future Water Leaders Program Announcement and Application. April 2008.

17. ABRI Co-investment Strategy. March 2008.

18. Water User Associations in the Middle East: Preliminary Findings and Next Steps. March 2008.

19. ABRI Quarterly Report 2: October – December 2007. January 2008.

20. Assessing Transboundary and Domestic Aquifer Opportunities for Joint Action in Yemen, Jordan, and Saudi Arabia. January 2008.

21. ABRI Quarterly Report 1: May – September 2007. November 2007.