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# **FURTHER ADVANCING THE BLUE REVOLUTION INITIATIVE (FABRI)**

**QUARTERLY PROGRESS REPORT NO. 2:  
DECEMBER 15, 2011 – MARCH 14, 2012**

**10 APRIL 2012**

This publication was produced for review by the United States Agency for International Development. It was prepared by DAI Washington.

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## **DISCLAIMER**

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Further Advancing the Blue Revolution Initiative Quarterly Report

USAID – DAI Contract No. AID-EPP-00-04-00023

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# ACRONYMS

AfWA	African Water Association
AMCOW	African Ministers Council on Water
COTR	Cognizant Technical Officer
CSP	Concentrated Solar Power
CSR	Corporate Social Responsibility
EC	Electrical Conductivity
EPA	Environmental Protection Agency
ETIC	Euphrates-Tigris Initiative for Cooperation
FABRI	Further Advancing the Blue Revolution
GIS	Geographical Information System
GPR	Ground Penetrating Radar
GWRI	Grand Water Research Institute, Technion Israel Institute of Technology
IAV	Institute of Agronomy and Veterinary Science Hassan II
ICARDA	International Centers for Agricultural Research in Dry Areas
ICBA	International Center for Biosaline Agriculture
IDA	International Desalination Association
IMU	Interim Management Unit
INGREF	National Institute for Research in Rural Engineering, Water and Forestry
IWMI	International Water Management Institute
IWRM	Integrated Water Resources Management
JICA	Japan International Cooperation Agency
JUST	Jordan University of Science and Technology
MEDRC	Middle East Desalination Research Center
MENA NWC	Middle East and North Africa Water Centers of Excellence
NASA	National Aeronautics and Space Administration
NCARE	National Center for Agricultural Research and Extension
NRW	Non-Revenue Water
NWRC	National Water Research Center
OMEPA	Office of Middle East Programs
ONEP	National Office of Potable Water
ORSAM	Middle Eastern Center for Strategic Studies
PR&D	Policy, Research and Design
PWA	Palestinian Water Authority
QEERI	Qatar Environment and Energy Research Institute
QNFSP	Qatar National Food Security Program
R&D	Research and Development
RFA	Request for Applications
RSS	Royal Scientific Society
SIWI	Stockholm International Water Institute
SQU	Sultan Qaboos University
STC	Scientific and Technical Committee
TAMIS	Technical, Administrative and Management Information System
TAMU	Texas A&M University
TRG	Training Resources Group
UJ	University of Jordan
UNESCO-IHE	UNESCO-Institute for Water Education

USAID	U.S. Agency for International Development
USG	United States Government
USGS	United States Geological Survey
USU	Utah State University
WASH	Water, Sanitation and Hygiene
WATSAN	Water and Sanitation
WESI	Water and Environmental Studies Center, An Najah University
WLI	Water Livelihood Initiative University

# EXECUTIVE SUMMARY

The U. S. Agency for International Development’s (USAID) Further Advancing the Blue Revolution Initiative (FABRI) will address critical water issues that are driving change in the Middle East and Africa, since water plays a key role in the political, economic and social lives of nations and people. FABRI will launch and establish a new regional water network called the Middle East and North Africa Network of Water Centers of Excellence (MENA NWC) to strengthen Integrated Water Resources Management programming, improve the long-term viability of water and sanitation service providers, rationalize water allocations and use, encourage collaboration among riparians in transboundary river basins, and raise USAID staff skills and Agency visibility in water and sanitation.

In June 2009, President Barack Obama delivered a speech in Cairo, Egypt, in which he stressed developing better relations with the Muslim world. He talked about the importance of developing centers of excellence in water, food security, climate change, and other disciplines. MENA NWC is a tangible outcome of that vision. Designed and launched by USAID, initially through the Advancing the Blue Revolution Initiative (ABRI) and now FABRI, the Network will address longstanding water issues in the region through research, policy, and outreach efforts.

Working through research partnerships, universities and research institutions in the Middle East the Network will design and carry out research projects on water use efficiency and productivity, water and energy, non-conventional water, groundwater, and water and sanitation, in concert with governments, the private sector, and civil society organizations. Currently, 18 national research institutions and universities in Bahrain, Egypt, Israel, Jordan, Morocco, Oman, Qatar, Tunisia, and West Bank/ Gaza—and four international research centers in Oman, Sri Lanka, Syria, and the United Arab Emirates—are actively participating. In addition, five major U.S. research universities are partners: Utah State University, the University of Florida, the University of California at Davis, Texas A&M University, and the University of Nebraska.

In addition to the creation of a sustainable water network in MENA, FABRI will also address some of Africa’s most critical water issues. While Africa has some of the world’s greatest river systems, much of the population suffers from limited access to clean water, hygiene and sanitation services. FABRI will provide innovative and tangible support to water and sanitation providers in Africa that improves their financial, economic, and operating efficiency by exposing them to best practices in water and sanitation service provision.

FABRI will create innovative approaches to strengthen water resources programming in the Middle East and in Africa. Over the next three years, FABRI will build relationships with the private sector, between and among the scientific community, governments, universities, and research institutions, the private sector, and civil society. Relationship building and partnerships will be crucial to the success of the project. FABRI’s emphasis on uniting a geographically dispersed group of individuals and institutions working in the water sector will support USAID’s commitment to strengthen regional platforms, foster transboundary water cooperation and improve utility performance and financial viability.

## Program Goals

FABRI has six primary objectives

- **Establish an operational Middle East and North Africa Network of Centers of Excellence (MENA NWC).** FABRI will support the creation of the MENA NWC by acting as the Interim Management Unit until a Secretariat is established. The initiative will establish MENA NWC

organization, leadership, and finances, as well as manage collaborative, technical, and capacity-building activities via Policy, Research, and Development (PR&D) Grants. Through the MENA NWC, FABRI aims to integrate research and development capacity in the member Centers with the development and dissemination of applied technologies and practices for innovative approaches, systems, and technologies to address water issues important to the region. An important piece of this work will be in developing an interactive website and sustainable knowledge management tools to support the sustainability of the Network.

- **Strengthen Integrated Water Resources Management Programming.** FABRI will strengthen the legal and regulatory framework for IWRM and implement methodologies to improve and promote the efficient use of water resources through the MENA NWC IWRM Thematic Partnership.
- **Access to Clean Water and Sanitation Improved in Target African and Middle Eastern Countries.** FABRI aims to strengthen the performance of water and sanitation service providers by working with regional “platforms” and associations. The goal is to provide them with innovative and tangible support to improve financial, economic, and operating efficiency.
- **Strengthen Research and Development Capacities in Irrigation, Groundwater Management, and Drought Risk Assessment and Mitigation.** FABRI will work with a MENA NWC Thematic Partnership to identify the most promising and regionally-relevant technologies and techniques for efficient, productive use of water in agriculture; engage the leading experts in these technologies to transfer knowledge to MENA NWC institutions; and develop and present outreach activities in target countries to encourage government engagement and private sector partnerships around the most successful approaches.
- **Strengthen Transboundary Water Cooperation in Key River Basins.** FABRI will conduct an analysis of transboundary cooperation approaches and apply study findings to the Tigris-Euphrates basin. Results will be used to identify, design and implement one or two pilot projects.
- **Enhance Technical and Outreach Capacity of USAID Staff in Water and Sanitation Programming.** FABRI will strengthen USAID staff capacity in this area by testing and amending the WASH training modules developed and utilized by the USAID Water team and testing and updating the *Programming Guidelines for Water, Sanitation and Hygiene* that has been distributed to missions worldwide.

# 1. INTRODUCTION

Water plays a pivotal role in the political, economic and social lives of nations and people. Many countries, including those in the Middle East and Africa, are facing common water challenges- drought, inefficient agricultural water use, groundwater management, inadequate or poor quality water supply, weak or absent mechanisms for sharing transboundary water, etc. Such challenges can lead to conflict within communities and among countries, as well as have negative health, financial and social impacts on populations.

To help respond to these regional water challenges, FABRI will provide technical support to USAID's Middle East and Africa bureaus, fulfilling all requests at the highest technical standards. In this capacity, FABRI will launch and establish a new regional water network called the Middle East and North Africa Network of Water Centers of Excellence (MENA NWC), strengthen Integrated Water Resources Management programming, improve the long-term viability of water and sanitation service providers, rationalize water allocations and use, encourage collaboration among riparians in transboundary river basins, and raise USAID staff skills and Agency visibility in water and sanitation.

Partnerships will form the foundation of all aspects of this initiative. FABRI will develop partnerships—between and among the scientific community, governments, universities and research institutions, the private sector, and civil society—to achieve the project's goals and to ensure that the water sector in the Middle East and Africa is capable of sustaining, and building on, those achievements after FABRI has closed. We will forge intellectual and financial partnerships among the water sector's major players to create an integrated process that spans the identification and design of new approaches and technologies to their production and adoption. Investments and advances in the water sector will improve economic output, agricultural returns, and public health to ease economic burdens and alleviate human suffering.

FABRI's core result will be the launch of the Middle East and North Africa Network of Water Centers (MENA NWC). This initiative is an outcome of President Obama's call to establish Centers of Excellence in the Muslim World during his June 2009 "New Beginnings" speech in Cairo. It has also been mentioned in Secretary Clinton's speeches for World Water Day in 2010 and 2011. MENA NWC will link technical institutions across the region to work together and with outside counterpart institutions on critical water challenges. The Network will strive to foster partnerships; build and exchange regional science and technology capacity to improve water resources planning and management; and develop and disseminate policy tools and technical and management interventions that expand water supply, manage demand, and dramatically increase its efficient and productive use.

A network of cooperating institutions will facilitate collaborative activities, including competitive grants programs, capacity building, institutional twinings, exchanges, fellowships; communications and knowledge management. The Network will be the vehicle for FABRI's goal to strengthen the water sector in the Middle East and North Africa.

Additionally, FABRI will support innovative WASH activities in Africa, focusing on opportunities for entrepreneurs to provide water and sanitation services where the public sector has been unsuccessful, and encourages sustainability through affordable but profitable services. FABRI will provide institutional support to regional associations ; test and share successful approaches in Non-Revenue Water ; and work on national and local levels to enhance sanitation programs throughout Africa.

FABRI's second quarterly report outlines the initiative's achievements and plans to build regional capacity to address urgent water challenges and develop sound, coordinated actions in partnership with various actors from the water sector in the Middle East and Africa.

This document is FABRI's second quarterly progress report. It highlights the actions since December 15, 2011 through March 14, 2012. Major actions and achievements during this second quarter of implementation include the following:

- **Candidates for Founders Committee Shortlisted.** After a thorough search for candidates from the participating Centers, donor, and the wider community, the Nominating Committee working with FABRI has identified 40 potential experts and shortlisted 14 for 11 positions. These candidates are drawn from the private sector, academia, foundations, utilities, multilateral development banks, government and associations from the Middle East and the U.S. The final list will be sent to the Centers for "no objection." The Founders Committee will hold its first meeting in Washington, D.C. in late spring or early summer when its members will agree on its operating procedures and form subcommittees on legal registration, business planning, and fundraising.
- **Network Profile Created.** The Profile of the MENA NWC defines its essential characteristics: its purpose, structure, legal framework, management structures, financing, and potential sources of funds. The profile is an evolving document that will be discussed, refined and validated by the Founders Committee. It will serve as the basis for developing the legal instruments, policies, strategies and management tools that will guide the deliberations and operations of the Network and as the basis for approaching potential financial contributors. The profile is now in final draft for USAID approval before distribution.
- **Scope of Work for the Five-Year MENA NWC Business Plan Prepared.** The scope, report outline, and schedule for the five-year business plan for MENA NWC are ready in final draft for USAID approval. The business plan will identify revenue streams, core business, anticipated expenditures, and a realistic financial model. The business planning exercise will begin with start-up meetings in Washington, DC and Amman and will require three visits to the region and to potential financial contributors in the region, the U.S., and Europe. The final draft plan will be presented to the Founders Committee for approval.
- **Research Program Rebooted.** To date, participating Centers have submitted nearly 20 Seed Fund applications and Concept Notes on a wide variety of research topics. The submissions have noticeably lacked government, private sector, or civil society engagement. They lacked policy applications or outreach opportunities. They also revealed difficulties faced by the Centers in forging partnerships with other Centers. As a result, the grants program is being revised. We expect a much more active role for FABRI and the five U.S. university partners – Utah State University, University of California at Davis, Texas A&M University, University of Nebraska, and the University of Florida – in setting research priorities and forming research teams.
- **Field Visits to MENA NWC Planned.** During the second quarter FABRI designed the scope of work for field visits to research centers. USAID employees and staff of the USAID Further Advancing the Blue Revolution Initiative will travel to the Middle East in late April to meet with participating Centers to discuss the current status of the competitive grants program and to meet with government, private sector, and civil society partners. They will also identify research strengths within Centers, and relationships among Centers that may form the starting basis for research projects. The team will travel to at least twelve participating Centers in seven countries.
- **Potential Network Contributors in Jordan Mapped.** To produce and flourish, MENA NWC

requires a financial base to fund an active technical program and cover operating costs. A mapping of potential contributors in the private sector, donor organizations, and foundation is underway in Jordan. The mapping is the first step in identifying targets for meetings, organizing entrepreneurial roundtables, and creating aggressive fundraising campaigns. Information is entered in a database that will eventually be housed in the Network.

- **MENA NWC Website Procurement Ready for Solicitation.** A draft Request for Proposals for the design and installation of a website for MENA NWC is ready for open competitive procurement. Until its completion, the Network will use a temporary portal for internal FABRI use only. This portal, housed on Google sites, is a secure interim website which will serve as a source of information for the FABRI team. The site contains contact data, guidelines for the proposal process, relevant reports and important dates. This site will be used as the primary online storage space for MENA NWC information and updates while the website is being designed.
- **FABRI has begun to move forward on activities under Result 3.** During the second quarter, FABRI was very actively engaged in initial implementation activities under result 3: Strengthen the Performance of Water and Sanitation Providers. The overarching goal of this result is to provide regional water associations in Africa with innovative and tangible support to improve financial, economic, and operating efficiency. FABRI has now met twice with its two regional partners in the field, the Africa Water Association (AfWA) and the African Ministers Council on Water (AMCOW) and is substantially moving forward with its agenda. FABRI has drafted a communications and knowledge management strategy memo for AfWA and has drafted RFPs for the organization's website and promotional videos.

## 2. PROGRESS DURING THE PERIOD

### RESULT 1: MIDDLE EAST AND NORTH AFRICA NETWORK OF CENTERS OF EXCELLENCE ESTABLISHED AND OPERATING

#### Requirement 1.1: Support Establishment of MENA NWC

USAID and the Middle East Desalination Research Center (MEDRC) co-hosted the second regional meeting of the Middle East and North Africa Network of Water Centers of Excellence (MENA NWC) in Muscat, Oman from 5-8 December 2011. In all, nearly 70 water experts attended from 13 national research centers in eight countries in the Middle East and from West Bank/Gaza; four international research institutes; five U.S. major research universities; the U.S. government; and the USAID Further Advancing the Blue Revolution Initiative (FABRI) technical team.

One of the major outcomes of the meeting was the launch of the Network's Thematic Partnerships or technical working groups, including: groundwater; non-conventional water; water/energy/food security nexus; water supply and sanitation; and water use efficiency and productivity. During the meeting, multi-country research teams began to develop concept papers and applications for Seed Funds that would be submitted to the FABRI Interim Management Unit over the next three to six months. Another outcome of the meeting was agreement that FABRI IMU would support centers in developing and launching their approved research programs in the future. Eventually, this support will be the responsibility of the Network Secretariat that will be established over the next year.

In January 2012, Thematic Partnership teams continued their work on the identification of specific research areas for further consideration and possible funding. The teams formed during the Muscat meeting in December began to submit applications to the FABRI IMU for Seed Funds, which they could then use to conceptualize projects. The concept notes are a required first step in the grant application process.

Based on the quality of the research Concept Notes received to date, FABRI is “rebooting” or revamping the process for developing the Network’s research agenda. As of February, participating Centers had submitted nearly 20 Seed Fund applications and Concept Notes on a wide variety of research topics. The submissions unfortunately lacked several key required components that would ensure funding. The missing elements included government, private sector, and/or civil society engagement, policy applications, and outreach opportunities. The submissions also brought to light the difficulties faced by the Centers in forging partnerships with other Centers and entities. As a result, FABRI is revising the approach to the development of the Concept Notes and proposals. FABRI and the five U.S. university partners – Utah State University, University of California at Davis, Texas A&M University, University of Nebraska, and the University of Florida - will work more closely with the Thematic Partnership teams on the development of proposals. The revamped approach will be initiated when a team of USAID and FABRI staff travel to the Middle East for a review of at least twelve participating Centers in seven countries. During the visits, the USAID/FABRI team will assess the research strengths within each Center and begin to identify links to other Centers that could collaborate on innovative and cutting-edge research projects. The team also plans to work with the Centers to identify potential government, private sector, and civil society partners that could work with the Centers on the research projects. The team hopes to travel to the region in the late April.

Work on establishing a Founders Committee for the MENA NWC continued in February 2012. After an intensive search for candidates, the Nominating Committee, supported by FABRI, identified an initial list of 40 potential experts, which was then condensed to a shortlist of 14 candidates who would be vetted to become members of the 11-member Founders Committee. The final list of candidates represents the private sector, academia, foundations, utilities, multilateral development banks, governments, and associations from the Middle East and the U.S. The final list will be sent to the participating Centers for “no objection.” The Founders Committee will hold its start-up meeting in Washington, DC in late spring, 2012 when its members will agree on operating procedures and form subcommittees on legal registration, business planning, and fundraising.

As part of the preparation for the initiation of the Founders Committee, FABRI created a draft Profile of MENA NWC in February. The draft Profile begins to define the purpose, structure, legal framework, management structures, financing options, and potential sources of funds. The Profile is an evolving document that will be discussed, refined and validated by the Founders Committee. When approved, it will serve as the basis for developing the legal instruments, policies, strategies and management tools that will guide the deliberations and operations of the Network and as the basis for approaching potential financial contributors. The draft profile will be shared with USAID for approval before distribution to the Founders Committee.

FABRI also prepared a Scope of Work for the Five-Year MENA NWC Business Plan in February. The scope, report outline, and schedule for the five-year business plan for MENA NWC will be submitted in final draft for USAID approval. The business plan will identify possible revenue streams, a description of the core business, anticipated expenditures, and a realistic financial model. A draft business plan will be discussed during the Founders Committee start-up meeting in Washington in late spring. Following discussions with the Founders Committee, visits are proposed to potential financial contributors in the region, the U.S., and Europe to discuss the plan.

Other highlights:

**Private Sector Partners in Jordan Mapped.** To produce and flourish, MENA NWC requires a financial base to fund an active technical program and cover operating costs. A mapping of potential contributors in the private sector, donor organizations, and foundation is underway in Jordan (see requirement 1.6). The mapping is the first step in identifying targets for meetings, organizing entrepreneurial roundtables, and creating aggressive fundraising campaigns. Information is entered in a database that will eventually be housed in the Network.

**MENA NWC Website Procurement Ready for Solicitation.** A draft Request for Proposals for the design and installation of a website for MENA NWC is ready for open competitive procurement. Until its completion, the internal FABRI team will use a temporary portal. This portal, housed on Google sites, is a secure interim website which we hope will eventually serve as a source of information for the Centers. The site contains contact data, guidelines for the proposal process, relevant reports and important dates. This site will be used as the primary online source for storing Network information while the website is being designed.

Planned Activities for the Third Quarter:

- Memo on long-term communication needs assessment and audience profiling
- Beta MENA NWC portal/website

### **Requirement 1.2: Design a Trust Fund or Endowment to Help Ensure the Sustainability of the Network**

The Endowment Fund will be a priority financing mechanism of the Network and will serve to strengthen its long-term sustainability. Its capital will be invested for the long term with only a portion of its interest available to finance administration and the core activities of the Network's purpose.

Planned Activities for Third Quarter:

Fiduciary and management responsibility for the Endowment Fund will be vested in the governance bodies of the Network, and design of the overall governance structure will be carried out by the Founders' Committee, which will begin its work during the Third Quarter.

FABRI will support the design of the Endowment Fund after the seating of the Founders Committee and will prepare financial projections and an initial fundraising strategy for the business plan.

### **Requirement 1.3: Support Operations of the MENA NWC Secretariat**

During the period, the FABRI COP has also served as Acting Director of the Network's Secretariat. He has been in regular and frequent communication with participating Centers. In addition, FABRI is proceeding with two key components of the Network: the five-year business plan and the selection of a venue for the Interim Management Unit. The business plan will set a course for the Network for financial sustainability by determining its anticipated expenditures and revenue stream. FABRI is preparing the scope of work for the three-month assignment and determining team membership.

Planned Activities for Third Quarter:

- Continue work on the MENA NWC Business plan
- Design monthly Network e-newsletters
- Create Social Media handbook and video guides

### **Requirement 1.4: MENA NWC Founders Committee Established**

The Founders Committee is critical to the establishment and success of MENA NWC. It will design the Network's governance and financial structures, oversee the annual budget and technical program, guide the legal registration of the Network, nominate the Board of Directors and ensure a smooth transition to the operational phase. The Founders Committee will consist of nine to eleven members with diverse skill sets, experiences and nationalities. Its composition is expected to include global/regional water experts, past or present senior government officials, private sector business entrepreneurs or executives, research institution leaders and regional association/civil society organization leaders.

The search for Founding Committee members was launched at the Muscat meeting in December 2011. The period for receipt of Founders Committee nominees closed December 31, 2011 for participating Centers and January 31, 2012 for others. The Nominating Committee, working with FABRI, compiled a shortlist of 14 candidates from the 40 names received. Candidates are drawn from the private sector, academia, foundations, utilities, multilateral development banks, the participating Centers, government and associations from the Middle East and the U.S. The list was submitted to USAID for comment before being sent to the Nominating Committee for selection of nine members and two alternates. The final selection will then be sent to the participating Centers for acceptance on a "no objection" basis.

## Planned Activities for the Third Quarter

- The Founders Committee will hold its first meeting in Washington in June 2012. At that time, it will approve terms of reference; procedures and a work plan for carrying out its activities. It is anticipated that three working committees will be formed to undertake the principle Network design activities: legal registration, business planning and fundraising. FABRI will plan the meeting, prepare briefing books and facilitate orientation sessions and the first working sessions of the Committee.

### **Requirement 1.5: Technical, Demonstration Activities of the Network Launched**

Immediately following the MENA NWC meeting in Muscat, FABRI began accepting Concept Notes and Seed Fund applications. Concept Notes are short (4-6 page) pre-proposals required prior to a full grant application. Seed Funds are in-kind awards up to \$25,000 to encourage Research Teams to meet, develop project concepts, and prepare Concept Notes and grant applications. To date, FABRI has received two formal Concept Notes, thirteen draft Concept Notes, and six Seed Fund applications. FABRI also received informal communication from researchers at several Centers inquiring about the eligibility of specific project concept ideas and partners.

Based on the Seed Fund requests, Concept Notes, and other communication, FABRI deemed that additional intervention is necessary to sharpen the Research Teams' focus on policy and management. FABRI responded to all applicants (and to the points of contact at each Center) indicating that the research concepts need a stronger link to policy and management, and more direct involvement from governments, civil society organizations, and the private sector. FABRI and USAID representatives will conduct field visits to participating Centers to:

- Perform an analysis of individual researchers' strengths and interests, capacity-building needs, and relationships with other researchers and external partners;
- Identify external partners in the private sector, public agencies, and civil society to engage in MENA NWC research activities;
- In consultation with external partners, identify the most pressing, specific water policy and management gaps that can be addressed by MENA NWC;
- Prepare a short list of meaningful applied research topics for initial PR&D Grants, based on input from both water policy makers and the private sector;
- Develop provisional rosters for MENA NWC Research Teams to address each research topic; and
- Identify partnering needs and opportunities between probable MENA NWC Research Teams and U.S. university partners.

FABRI submitted a travel plan to USAID for approval in early March 2012. We are ready to initiate travel as soon as we receive approval.

In the second quarter, FABRI created and populated an interim website for FABRI team members. This website contains information on participants, how to guides for Google products, Seed fund and Concept guidelines and other important Network related information. FABRI also drafted an RFP the design of a MENA NWC website. Additionally, Google guides have been created on email, Google + and Google documents.

## Planned Activities for Third Quarter:

- FABRI will issue the PR&D Grants RFA.
- FABRI will continue to accept and evaluate Seed Fund Applications and Concept Notes, and invite

- Full Applications where merited.
- FABRI will develop other MENA NWC core technical activities, including training and capacity building in the conduct of applied research, knowledge sharing and management.

Planned Activities for Third Quarter:

- Reviewing concept notes and seed fund applications
- Design of training programs for researchers

### **Requirement 1.6: Network Strengthening through Private Sector Participation**

FABRI's efforts to initiate and strengthen private sector partnerships/alliances continued in the second quarter and can be highlighted with the following:

- **Initial mapping of private sector groups and donors in Jordan.** In December 2012, FABRI identified private sector groups and donors in Jordan. This exercise provided background information on potential partners: companies, donors and foundations. Around twenty-eight private sector groups and fourteen donor agencies were identified in addition to some foundations. The produced initial map of groups included the name of the entity, brief background on the entity and its business activities, the name and position of the contact person, contact information, in addition to highlights of possible general areas of interest relevant to MENA NWC. The groups were identified through general consultations and desktop research, in addition to considering potential partners from multinational corporations, local businesses and corporations that have Corporate Social Responsibility (CSR) that supports sustainability initiatives. Where relevant, FABRI has considered other potential resource partners including philanthropic NGOs and foundations.
- **Interview designed for private sector groups in Jordan** in order to explore and confirm the initial interest of identified private sector groups, and in order to have an organized and well planned interviews, FABRI team member Ms. Quossous prepared some guiding questions to guide the interviews and discussions, and to ensure that required information is captured and well documented. The guiding questions allowed coverage of number of subjects such as regional presence, previous involvement in similar initiatives, existence of CSR strategy and budget, average spending on CSR, interest to participate in MENA NWC activities, current relevant research activities, areas of research interest, business challenges related to water/energy issues, incentives for participation in MENA NWC activities, and willingness to attend upcoming meetings.
- **Interviews convened with private sector groups in Jordan:** After preparing the guiding questions, Ms. Quossous started contacting the identified private sector groups in order to introduce MENA NWC and request to schedule meetings with the senior management of the groups.. Some groups declined the request for meetings and others were not responsive in spite of the continuous follow up. These meetings allowed for the refining of the initial opportunity map that was then developed into a list that confirms interested groups, summarizes their specific areas of interest. This refined opportunity map will guide the discussions and consultations with the Centers in order to try to align their research offerings with the identified demands of the business community.
- **Partnership/alliance opportunity mapping matrix:** After completing the interviews with the private sector groups, Ms. Quossous refined the initially developed mapping list and updated it with the actual areas of interest that were indicated by the groups including specific areas of interest for partnerships. The list also contains contact information of the relevant staff members at the companies and includes requested follow up activities that need to be conducted by FABRI. The refined mapping matrix has

become reflective and informative of the ascertained areas of interest of interviewed private sector groups and identified possible private sector "Champions" that will advance the partnership/alliance opportunity to the next level.

Planned Activities for Third Quarter:

- **Advice to MENA NWC on partnerships:** Some orientation and advice needs to be provided to MENA NWC Centers on how to connect with the private sector, how to build alliances and partnerships, and how to align their offerings along the areas of demand and interests of the business groups. The orientation activities will aim at deepening the centers' understanding of the partnership process, and objectives and the dynamics of the collaborative process. The orientation activity will address the problems and stumbling blocks in selecting, negotiating and managing partnerships/alliances.
- **Outreach activities and Roundtable meetings:** Conduct outreach activities and roundtable meetings to engage potential partners in discussions around identified thematic partnership themes and identify specific research projects' opportunities that can be translated into requests for grants. Private sector firms will be invited to attend those meetings and participate in the discussions around the thematic partnership projects.
- **Complete Private Sector mapping activities:** in the coming months, the mapping exercise for private sector groups and donor foundations will be completed for other countries. We plan to have a focused and targeted mapping exercise that covers Morocco, UAE, Oman and possibly Bahrain. We will use Jordan as the pilot country for the private sector mapping activities in other countries and identify selected groups that may have an interest or a stake in participating in MENA NWC activities, in addition to identifying groups that have allocated funds for CSR and that may support similar initiatives.
- **Private sector knowledge tool:** By the end of March, the private sector mapping exercise will be completed for Jordan and the design of a knowledge tool for private sector firms will be initiated. The knowledge tool will include information on business and research interests of the private firms in the different countries and potential areas of partnership with MENA NWC.

## **RESULT 2: INTEGRATED WATER RESOURCES MANAGEMENT PROGRAMMING STRENGTHENED**

In the second quarter, FABRI submitted three required deliverables FABRI Result 2:

- Plan for Strengthening Legal and Regulatory Framework in Target Countries,
- Plan for Capacity Building in IWRM in Target Institutions, and
- Plan for Evaluating and Testing Methodologies to Promote Efficient Use of Water Resources.

These three plans were combined into a single document because FABRI and participating Centers will integrate capacity-building activities into policy research and development projects, and IWRM methodologies will be selected to complement legal and regulatory approaches. As described in these plans, FABRI will integrate the activities and outputs of Result 2 into the applied research supported by MENA NWC PR&D Grants (see Requirement 1.5). Potential topical areas in which this can be done include non-conventional water resources, especially with respect to reuse of treated wastewater, groundwater, and water use efficiency.

FABRI received a number of draft Concept Notes in the past quarter in these subject areas that, while

lacking sufficient detail and direction, could be tailored to include a significant IWRM focus in ways that address the required outputs of this Result. Future efforts will involve active participation by FABRI staff, in coordination with participating Centers, to craft Concept Notes and, later, applications for research funds that include these required components.

Planned Activities for Third Quarter:

- FABRI staff will visit member Centers, meet to plan specific PR&D Grants and research capacity building activities, and accept and evaluate Concept Notes pertaining to IWRM (see Requirement 1.5 for planned FABRI PR&D Grants activities).

### **RESULT 3: ACCESS TO CLEAN WATER AND SANITATION IMPROVED IN TARGET COUNTRIES**

#### **Requirement 3.1: Strengthen the Performance of Water and Sanitation Providers**

During the second quarter, FABRI was very actively engaged in initial implementation activities under result 3 meeting twice with its two regional partners in the field and substantially moving forward with its agenda.

In late January the COP, Africa Regional Coordinator and the PSD Expert traveled to Abidjan, Cote d'Ivoire, to meet with senior members of the Secretariat of the Africa Water Association (AfWA) and members of its Scientific and Technical Committee (STC). The parties had also invited the Africa Minister Council on Water (AMCOW) to attend, and AMCOW sent its Program Coordinator and one of the two USAID -funded members of his staff.

FABRI had initially identified the following three areas of possible collaboration with the regional organizations under requirement 3.1: (1) focused activities directed towards the problem of Non-Revenue Water (NRW) with AfWA, (2) an initiative on service provider "corporatization" with AfWA and (3) interventions on sanitation at both the national plan level (with AMCOW) and local implementation (with AfWA). Following general discussion, while all three areas were agreed to be priority needs of the service providers, AfWA and FABRI decided to focus on NRW initiatives and to incorporate other themes, such as corporatization and finance, as ancillary topics under the general NRW rubric. The AMCOW representatives were supportive of collaborating with FABRI on the production of national sanitation plans. It was agreed that the COP would meet with the AMCOW Executive Secretary at an early opportunity, possibly at the AfWA Congress in February, and discuss programming options.

AfWA and FABRI agreed on a number of general principles for the NRW program: it should reach as many utilities as possible, should include a mix of utilities with both group activities and individual field events, and the program should start as quickly as possible. It was also agreed that the program would be an AfWA program with FABRI in support. AfWA Secretary General and the STC officers gave their wholehearted support to the effort. It was further decided that AfWA and FABRI would co-sponsor an informational session on the NRW collaboration at AfWA's Congress in Marrakech from February 20-24, 2012. Finally, it was agreed that FABRI would also work to strengthen AfWA in the areas of business planning and communications and knowledge management. This understanding was cemented with, the subsequent visit to Abidjan by the FABRI Information Management Specialist, Stacy Whittle, who will lead this effort in Africa by working with AfWA on capacity building activities such as website redesign and knowledge management tools.

During the intervening period, FABRI personnel worked closely with AfWA staff and the STC to plan the two-hour joint meeting at the Congress. The COP led the FABRI delegation to the Congress joined by the Africa Program Manager, a NRW specialist and consultant to FABRI who had edited the NRW Manual for Africa produced under the earlier Advancing the Blue Revolution Initiative program, the former General Manager of Uganda's National Water and Sewerage Corporation who was also a consultant to FABRI, a faculty member of the Hassan II Agriculture and Veterinary Institute of Morocco, a final consultant and member of the FABRI team. The Congress attracted approximately 800 delegates from all parts of the continent.

The COP convened an all-day planning session with the joint FABRI – AfWA team in Marrakech immediately prior to the event. The group concluded that since getting feedback from the AfWA membership was of critical importance, the meeting room should be set up with round tables to foster interaction for about 60 participants. The program design consisted of two main segments: an initial hour devoted to a series of short presentations about the AfWA-FABRI NRW program and a second hour emphasizing participant interactions by table groupings with plenary report outs.

It was agreed that the new AfWA President, Duduzile Myeni, Chairperson of the South African Association of Water Utilities (SAAWU) would open the session to be followed by brief remarks from AfWA Secretary General and the STC's First-President. FABRI personnel would then describe the overall FABRI program with an emphasis on the AfWA NRW initiative designed to reach a broad number of utilities while having an impact on the ground. The design of the FABRI NRW program would consist of three steps: (1) a diagnostic phase lasting from 4 -6 months, (2) an implementation phase, and (3) a monitoring and evaluation phase which would run throughout the life of the project.

The FABRI approach would be described as follows: (1) a partnership with AfWA, as represented by the STC, in coordination with other AfWA initiatives, such as the Water Operator Partnership Africa (WOP-A) program; (2) a balanced NRW program emphasizing both technical and commercial losses; (3) the agenda of the technical program to be driven by the priorities of the service providers. Participating service providers would be drawn from throughout the continent and represent public and private, large and small, Anglophone and Francophone utilities; (4) program implementation would be scaled to involve as many utilities as possible in successive phases with an initial roll out including approximately 15 utilities; and (5) the program would start immediately.

Attendance greatly exceeded the estimates, and the final count was 92 people from approximately 30 African water utilities who remained throughout the full two-hour session. The meeting achieved a number of significant decisions and outputs and these next steps were agreed upon: (1) Utilities interested in participating must complete the NRW "Self-Assessment" form and send it to AfWA together with a Letter of Program Commitment signed by the Managing Director, or other appropriate authority; (2) AfWA would prepare a list of those utilities who responded along with a summary of their NRW self-assessment; (3) AfWA and FABRI would select an initial group of 15 – 20 utilities; (4) AfWA and FABRI would organize an initial launch meeting of selected utilities in East Africa o/a April 23, 2012.

Planned Activities for Third Quarter:

- Meet with AfWA STC members to select phase one utility participants in the NRW program

- Meet in East Africa with representatives of approximately 20 phase one utilities for program launch of the NRW program
- Begin diagnostic field surveys of 20 phase one African water utilities
- Design performance indicators and monitoring plan
- Contract with a digital media company for the redesign of AfWA website and promotional videos

### **Requirement 3.2: Improve the Operating Environment for Water and Sanitation Service Providers**

While at the AfWA Congress in Marrakech, the COP met with AMCOW's Executive Secretary to discuss the next steps in the FABRI-AMCOW partnership. AMCOW was established by the African Union and has, as one of its responsibilities, the planning of the annual Africa Water Week program. In 2012, Africa Water Week will be held in Cairo in mid-May. During the course of their discussions, the Executive Secretary informed the COP that he wished to nominate USAID (FABRI) to be the "convener" of track one, "Water & Sanitation," at the Cairo summit. The two parties agreed that while FABRI would take on the job of convening the eleven sessions, it would do so in partnership with a number of the major stakeholders in the sector as "co-conveners", such as the Gates Foundation, Water and Sanitation for Africa (the former "CREPA"), WaterAid, and others. FABRI discussed the possibility of devoting a session at Cairo to support for the drafting and implementation of national sanitation plans.

The COP convened a meeting of major stakeholders who were present at the Congress, including Doulaye Kone, Senior Program Officer (Technology) at the Bill and Melinda Gates Foundation, Idrissa Doucoure, Chief Executive Officer, and Lucia Henry, Head, Policy and Partnerships, at Water and Sanitation for Africa (WSA), based in Ouagadougou, Burkina Faso, the Acting Director of WaterAid, Nigeria with the Executive Secretary, AMCOW. The Secretary General of AfWA later joined the meeting. The group was supportive of collaborating on the Cairo agenda and recommended a mix of presentations, panels and hands-on workshops possibly resulting in the creation of draft sanitation action plans.

The Gates Foundation representative proposed a major sub-theme of "enhancing private sector capacity in sanitation," and all the other parties endorsed this suggestion. The representatives also agreed that the goal of the two-day session was to "make action happen" and thus supported the FABRI idea of one or two, afternoon length, "structured workshops" which could be devoted to a practical topic in which participants would create an action plan or strategy, which then could be used in their respective country.

The WSA representatives reminded the group that they were deeply involved and supportive of the AfricaSan process (AfricaSan 3 was held in July 2011 in Kigali, Rwanda with over 600 delegates in attendance, and would urge that Water Week activities also support the general goals and approach of this initiative. AfricaSan 4 will not be held until 2013, and the venue has not yet been decided upon. The parties agreed that the sanitation track at Africa Water Week, May 2012, could both build on the recommendations from AfricaSan3 and set the stage for AfricaSan4 in 2013.

As a next step, the COP urged a meeting if possible in April to review plans and strategies for the sessions. WSA stated that its representatives planned to be in Washington during the week of April 16, 2012 and other members agreed to try to participate. The COP agreed to circulate information to all members, which would describe in general the themes for different sessions and assign tentative roles to the co-conveners. The co-conveners would then make detailed plans for their sessions inviting speakers and deciding upon formats etc. The COP reminded that there was a potential financial responsibility on

the co-conveners to cover travel costs of speakers they specifically invited to their sessions. Upon return to the United States, the FABRI team began consultations with USAID on the many tasks involved in this new responsibility.

FABRI's relationship with AMCOW constitutes one of the foundations upon which the program is built. AMCOW's vote of confidence in FABRI, as shown by its designation of FABRI as the convener in Track One for Africa Water Week, is an important confirmation of the program's direction and emphasis. FABRI's new role changed the emphasis of the program in requirement 3.2 from an initial emphasis on gathering internal analysis to an external role of negotiating and interacting with virtually all the global players in water and sanitation in Africa. These developments have led to a re-orientation of the third quarter activities while not deviating from FABRI's commitment to the support of the creation and implementation of national sanitation plans with local implementation support.

Planned Activities for Third Quarter:

- At the request of AMCOW, convene Track One (11 sessions): Water and Sanitation at the Africa Water Week in Cairo with a number of major "co-conveners"
- At Cairo's Africa Water Week, emphasize the importance of drafting and implementing national sanitation plans
- Continue negotiations with AMCOW on direct support for the production and implementation of national sanitation plans and strategies

### **Requirement 3.3: Improve the Financial Sustainability of the Water and Sanitation Sector**

During the quarter's discussions with AfWA's STC, African utility managers stated that it was essential to create a parallel investment plan while pursuing a program of NRW interventions. Past experience has shown that while some NRW reduction program elements can be pursued at modest expense, others may require substantial investment for materials, equipment and training. While Malcolm Farley's NRW Manual reminds the reader "utility NRW programs involve everyone in a utility and every department," FABRI has concluded that a component of its NRW interventions will be an investment plan tailored to a utility's NRW intervention plan. Part of this activity will include an active FABRI dialogue with other donors who are potentially investment partners of the participating utilities. FABRI will continue to monitor the progress of the USAID-JICA Memorandum of Understanding, especially in the water sector, for potential application.

Planned Activities for Third Quarter:

- Monitor USAID-JICA water investment partnership for Africa for potential application to FABRI partners
- Work with an initial participating utility to identify the necessary elements of a NRW investment plan and the range of potential funding organizations that might be contacted

## **RESULT 4: RESEARCH AND DEVELOPMENT CAPACITIES IN IRRIGATION, GROUNDWATER MANAGEMENT, AND DROUGHT RISK ASSESSMENT AND MITIGATION STRENGTHENED**

**Requirement 4.1: Conduct Identification and Analysis of U.S., Regional, and International Water Programs Aimed at Promoting Efficient, Productive Use of Water in Agriculture in the MENA Region**

As described in the Draft Plan for Requirement 4.1 (Conduct Analysis of U.S., Regional, and International Programs Promoting Efficient, Productive Use of Water in Agriculture), delivered on October 14, 2011, FABRI will integrate activities and outputs of Result 4 into the applied research supported by MENA NWC PR&D Grants (see Requirement 1.5).

FABRI received several Concept Notes in the past quarter that provide potential opportunities to address water use efficiency and productivity. These were all draft Concept Notes in the general areas of improved irrigation efficiency or groundwater management. FABRI staff will work with the authors of these Concept Notes to help them address deficiencies in their general lack of involvement of policy makers, water managers, and/or the private sector and to more tightly integrate in their proposed applied research activities the products and deliverables required by Result 4.

Planned Activities for Third Quarter:

- FABRI staff will visit member Centers, meet to plan specific PR&D Grants and research capacity building activities, and accept and evaluate Concept Notes pertaining to IWRM (see Requirement 1.5 for planned FABRI PR&D Grants activities).

**RESULT 5: TRANSBOUNDARY WATER COOPERATION STRENGTHENED IN KEY RIVER BASINS**

**Requirement 5.1: Conduct analysis of U.S. and regional transboundary water cooperation programs, with a focus on the Euphrates, Tigris, and Nile basins**

FABRI compiled a list of relevant transboundary water projects and programs, based on the database maintained by the Program in Water Conflict Management at Oregon State University. This list catalogs transboundary water cooperation interventions worldwide since 1970. Each entry includes a description and website for further information.

Planned Activities for Third Quarter:

FABRI will condense the list to highlight ten to twelve approaches offering the most promise for the Tigris-Euphrates Basin.

**Requirement 5.2: Produce report on U.S. and regional transboundary water cooperation programming**

Planned Activities for Third Quarter:

FABRI will prepare a report on ten to twelve historical transboundary water cooperation approaches that may be considered as models for FABRI's efforts in the Tigris-Euphrates Basin, expanding on the list of approaches developed for Requirement 5.1.

**Requirement 5.5: Launch pilot project in key river basin**

The FABRI team, led by Aaron Wolf of Oregon State University, met to outline the approach to designing FABRI's Tigris-Euphrates transboundary water cooperation activities. This approach includes

identifying the important players in the basin, defining the constraints, and defining success within the context of the constraints. One of the major constraints is that there is virtually no explicit communication or interaction among the governments in the basin. Therefore, the pilot project will focus on activities that can be done in parallel, but which can be linked if governments agree to cooperate in the future. Examples include data collection, modeling, sediment and pollution control, and environmental protection and rehabilitation.

Planned Activities for Third Quarter:

- FABRI will write the pilot project plan, identifying one or two pilot projects in the Tigris-Euphrates Basin feasible within the funding and time constraints of FABRI. The report will also target potential implementing partners.

## **RESULT 6: TECHNICAL AND OUTREACH CAPACITY OF USAID STAFF IN WATER AND SANITATION PROGRAMMING ENHANCED**

### **Requirement 6.2: Increase USAID's visibility and outreach on water issues**

FABRI proposed a side session at the August 2012 World Water Week in Stockholm. The session was accepted by the Stockholm International Water Institute.

Planned Activities for Third Quarter:

- Design the August session at World Water Week

### **3. PROJECT MANAGEMENT**

The period of performance for the FABRI task order is September 15, 2011 through September 29, 2014. FABRI has received \$10,003,067 in obligated funds (\$7,998,067 from the Middle East Bureau and \$2,005,000 from the Africa Bureau). This constitutes 50% of the \$20,000,000 contract ceiling. FABRI has spent \$1,008,020, which represents 10% of the current obligation.

In this second period of operation, FABRI is ramping up its technical and administrative capacity. The team identified an Operations Manager and submitted her documentation to USAID for approval. FABRI is actively recruiting a full time Private Sector Development Specialist and an Africa Program Manager.

Also in this period, FABRI issued subcontracts to ECO Consult and Planet Partnerships, two firms that support private sector development and business planning for the MENA NWC. FABRI finalized a subcontract to Utah State University, an organization that will captain the university partner program supporting research and development. FABRI requested USAID consent to issue subcontracts to University of Florida, UC/Davis, and University of Nebraska.

In the coming period, FABRI plans to issue subcontracts to ValuAdd, for supporting business planning in the Africa Program; to Malcolm Farley Associates, for design of the non-revenue water program; and to Oregon State, for consultation on transboundary water activities.

## **4. PROBLEMS AND REMEDIES**

### **Rate Approvals**

There was no language in the FABRI Task Order requiring FABRI to seek rate approval for LTTA staff. FABRI requested clarification, and USAID indicated that rate approvals are required.

Remedy: FABRI has submitted rate approval for all LTTA staff that were not named in the project proposal, and for new additional staff that will be added.

### **FABRI Team Internal Organization**

FABRI's full time LTTA staff of four individuals has been extremely busy, and technical staff have been burdened with significant administrative work.

Remedy: FABRI plans to add a full time LTTA Operations Manager, as well as an Africa Program Manager, and a Private Sector Development Specialist.

## 5. STANDARDS AND DELIVERABLES COMPLETED DURING THE PERIOD

Contract Reference	Standard or Deliverable	Date of Completion
Requirement 1.1	<ul style="list-style-type: none"> <li>• Acceptance letter from Sultan Qaboos University</li> </ul>	1/19/2012
Requirement 1.4	<ul style="list-style-type: none"> <li>• List of candidates for Founders' Committee prepared</li> </ul>	2/21/12
Requirement 1.4	<ul style="list-style-type: none"> <li>• CVs compiled for each candidate and shared with nominating committee</li> </ul>	2/21/12
Requirement 2.1	<ul style="list-style-type: none"> <li>• Draft plan for strengthening legal and regulatory framework for IWRM in target countries</li> </ul>	3/14/12
Requirement 2.2	<ul style="list-style-type: none"> <li>• Draft plan for evaluating and testing methodologies to promote efficient use of water resources</li> </ul>	3/14/12
Requirement 3.2	<ul style="list-style-type: none"> <li>• Trip Reports-Stacy Whittle/Peter Reiss, Jeremy Hagger</li> </ul>	2/13/12 and 2/29/12