



Middle East Water and Livelihoods Initiative (WLI)

Improving Rural Livelihoods through Sustainable Water and Land-use Management in the Middle East: Egypt, Iraq, Jordan, Lebanon, Palestine, Syria & Yemen



WLI Quarterly Progress Report



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Table of contents

1. Executive Summary.....	3
2. The WLI 2 nd Steering Committee.....	3
3. Activities under development.....	4
3.1 Benchmark Site Characterizations.....	4
3.2 Training course on ‘Bio-physical and socio-economic characterizations’ for Iraq & Palestine (Amman, 4-6 August 2010).....	6
3.3 WLI National Workshop in Ramallah (West Bank).....	7
3.4 Partnership with UF to develop education and development of training- activities.....	8
4. Bilateral Mobilization efforts with USAID Country Missions.....	9
4.1) USAID Office Jordan.....	9
4.2) USAID Office Yemen.....	9
5. Planned activities for the 4 th quarter of year 2010.....	10
Annex 1: The WLI 2 nd Steering Committee Agenda.....	12
Annex 2: Agenda of the training course on ‘Bio-Physical & Socio-Economic Characterizations of the WLI Benchmark Sites in Iraq and Palestine’	13
Annex 3: Agenda of the protected agriculture training workshop.....	15
Annex 4: Agenda of the gender training workshop.....	16
Annex 5: Agenda of the extension training workshop.....	19
Annex 6: Agenda of the water management training workshop.....	21
Annex 7: Expected outcomes of the Water and Livelihoods Initiative (WLI) project in Abyan Delta Benchmark site, Yemen.....	24

1. Executive Summary

The third quarter of 2010 witnessed the implementation of a number of WLI activities. This included holding the 2nd Steering Committee at Sheppard Hotel in Cairo, Egypt, on 1 July 2010 to discuss progress that was made in the first half of the year, as well hosting a training course on 'Bio-physical and socio-economic characterizations' for Iraq and Palestine benchmark sites (Amman, 4-6 August 2010). The WLI 2nd Steering Committee was held at the issues of the Educators' Workshop which was held at the American University in Cairo, Egypt, June 28-30, 2010, to discuss areas of collaboration for both short and long-term activities in the areas of distance/e-learning, faculty development, and research linked to the WLI benchmark sites in the region. Based on the outputs of the workshop, a number of activities are now under development, namely the one-week training workshop on 'Integrating gender approaches into research at the WLI benchmark sites', and the two-week training course on 'Effective Extension Approaches in Agriculture in WLI', both being planned for the first quarter of year 2011. On the other hand, and as a part of the 2nd Steering Committee Meeting, Dr. Scott Christiansen provided the WLI management team at ICARDA the completed versions of the Feed the Future M&E indicators (FTF), for further study among the WLI stakeholders with the aim to come up with a pragmatic plan to develop a subset of WLI indicators that track along with the standard indicators for FTF. This also can help in harmonizing the instruments of the socio-economic surveys with the FTF indicators. It is expected that the WLI teams in the seven participating countries achieve a conclusive revision of the FTF indicators by the end of November 2010.

2. The WLI 2nd Steering Committee, July 1, 2010, Cairo, Egypt

The WLI 2nd Steering Committee was held at Sheppard Hotel in Cairo, Egypt, on 1 July 2010 to discuss progress that was made in the first half of the year, as well to set up actions items that would be of benefit to the future WLI activities. Chaired by Dr. Kamel Shideed, Assistant Director General - International Cooperation and Communication, ICARDA, the meeting regrouped representatives of the seven partner countries, as well as representatives of the US and regional Universities. The minutes of the meeting can be retrieved at [http://www.icarda.org/wli/Minutes Second Steering Committee.htm](http://www.icarda.org/wli/Minutes%20Second%20Steering%20Committee.htm). The agenda of the Steering Committee is found in **Annex 1**.

The 2nd steering committee meeting was held at the issue of the three-day WLI workshop took place at the Desert Development Center of the American University in Cairo, Egypt, 27-30 June, 2010. The full report, including the agenda and relevant presentations can be retrieved at [http://www.icarda.org/wli/Educators' Workshop Full Report.htm](http://www.icarda.org/wli/Educators%20Workshop%20Full%20Report.htm)

3. Activities under development

A number of activities are in the planning phases, with the expected dates to be carried out during the fourth quarter of year 2010. This includes continuation of the benchmark characterizations, partnership with UF to develop education and training-related activities and bilateral mobilization efforts with USAID country missions to raise funds for the WLI bilateral proposals.

3.1 Benchmark characterizations

Because varying levels of socio-economic data exist at each benchmark site, there is a need to fully develop and homogenize inputs across all benchmark sites. Terms of reference (TORs) for the socio-economic studies were developed and sent to NARES to start collecting secondary level data (Phase I). A series of workshops has been organized at ICARDA HQ to assist the WLI teams in conducting bio-physical characterization and socio-economic surveys. Phase I will be followed by the recruitment of a consultant, who will be responsible for reporting on developments on food security, developing indicators to evaluate human development and gender-related data at the benchmark site.

Dr. Scott Christiansen provided the WLI management team at ICARDA the completed versions of the Feed the Future M&E indicators (FTF), for further study among the WLI stakeholders with the aim to come up with a pragmatic plan to develop a subset of WLI indicators that track along with the standard indicators for FTF. For the specific uses of the WLI, being a regional program, the FTF aims at putting in place a major M&E plan that will assist the WLI in data collection and reporting.

This also can help in harmonizing the instruments of the socio-economic surveys with the FTF indicators. The idea is to select a subset of indicators for the WLI from the FTF list of indicators in order to get these going on in the project. Some indicators can be retrieved (e.g. agricultural GDP, gender perception index ...). Others need to be surveyed at the community/farm level, and those are the program/project level indicators.

The WLI teams reacted promptly to the proposed FTF indicators by launching a series of meetings and discussions at national level to study the “FTF Indicator Inventory” as well as the list of 17 “higher level” indicators, which are shared out as follow (Table 1):

- Goal Level Statement (2 indicators);
- First Level Objectives (6-national level indicators);
- Second Level Objectives (9-program level indicators).

Table 1: List of the 17 FTF indicators retained as “higher level” indicators

Goal Level Statement	Indicators
Sustainably Reduce Global Hunger and Poverty	<ul style="list-style-type: none"> • Prevalence of Poverty: Percent of people living on less than \$1.25/day. • Prevalence of underweight children under 5
First Level Objectives (National)	
Improved Equitable Growth in the Agriculture Sector	<ul style="list-style-type: none"> • Percent growth in agricultural GDP • Expenditures of rural households (proxy for income) • Gender perceptions index
Improved Nutritional Status	<ul style="list-style-type: none"> • Prevalence of wasted children under 5 • Prevalence of stunted children under 5 • Prevalence of underweight women
Second Level Objectives (Program)	
Improved agricultural productivity	<ul style="list-style-type: none"> • Gross margin per unit of land or animal of selected product (crops/animals selected varies by country)
Expanding Markets and Trade	<ul style="list-style-type: none"> • Percent change in value of intra-regional exports of targeted agricultural commodities as a result of USG assistance • Value of incremental sales (collected at farm/firm level) attributed to FTF implementation
Increased private investment in agriculture & nutrition-related activities	<ul style="list-style-type: none"> • Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation
Increased agriculture value-chain productivity leading to greater on and off-farm jobs	<ul style="list-style-type: none"> • Number of jobs attributed to FTF implementation (firm level survey).
Increased resilience of vulnerable communities and households	<ul style="list-style-type: none"> • Change in average score on Household Hunger index
Improved access to diverse and quality foods	<ul style="list-style-type: none"> • Percent of children 6-23 months that received a Minimum Acceptable Diet
Improved nutrition-related behaviors	<ul style="list-style-type: none"> • Prevalence of exclusive breastfeeding of children under six months.
Improved utilization of maternal and child health and nutrition services	<ul style="list-style-type: none"> • Prevalence of maternal anemia

3.2 Training course on 'Bio-physical and socio-economic characterizations' for Iraq and Palestine (Amman, 4-6 August 2010).

A training workshop on Site Selection and Characterization was organized by ICARDA-WLI in collaboration with ICARDA-WARP (West Asia Research Program) and the National Center for Agricultural Research and Extension (NCARE) in Amman, Jordan, during 4 and 5 of August for 12 participants from Palestine and Iraq.

The training is part of the Water Livelihood Initiative (WLI) USAID supported project, which is implemented by ICARDA in seven countries in the region and focused on the conservation of the scarce water resources.

The workshop aimed at training project staff in both Iraq and Palestine on the criteria for selecting the project site, where the project activities will be implemented, and the parameters that need to be considered for the biophysical and socioeconomic characterization of the selected site.

Dr. Faisal Awawdeh, DG of NCARE and Dr. Nasri Haddad, ICARDA RC for WARP gave statements in the opening and both stressed the importance of water in the region and the urgent need for collaboration among the countries to address this priority problem. The trainers are staff from NCARE and ICARDA , and covered in the training several topics including data collection and analysis, the use of GIS facilities and community characterization. It is worth mentioning that the Jordanian team has gained an excellent experience since Jordan is hosting ICARDA Badia Benchmark site which is part of a regional project started six years ago and still ongoing.

Dr. Fadi Karam gave an introductory presentation during the opening session on the WLI and the plan for baseline studies in the benchmark sites. The agenda of the training course is found in [Annex 2](#).



3.3 WLI National Workshop in Ramallah (West Bank)

Dr. Nasser Sholi, the WLI focal point in Palestine, called the WLI stakeholders for a national workshop to be held on 31/8/2010 in Ramallah. The aims of the workshop were to (i) enhance more corporation and understanding among the WLI stakeholders; (ii) distribute tasks and responsibility among the WLI stakeholders for the related bio-physical characterization and socio-economic surveys; and (iii) assess the progress made for the WLI in Palestine.

The participants evaluated the bio-physical and socio-economic characterizations of the Badia Benchmark (Amman, 4-5 August, 2010). They stated that the training met its objectives, mainly with regard to:

- To learn more about the Jordanian experience in the benchmark characterization;
- To develop indicators for the socio-economic survey at the benchmark site, with a special emphasis on the role of women in the development of Badia;
- To develop measurable tools for the bio-physical characterization, namely (i) water catchments area characterization, (ii) land use/land cover analysis, (iii) measuring vegetation cover dynamic change (RS), (iv) studying rangeland management systems, (v) agro-production systems and (vi) cropping patterns and grazing capacity.

The participants represented the different National WLI stakeholders: Ministry of Agriculture (MoA), Land Resources Center (LRC); Agricultural Research Institute of Jerusalem (ARIJ); National Agricultural Research Center (NARC); Hebron University (HU) and AL-Najjah University (NU).

As well, the workshop attendees discussed the training priorities for the WLI team:

- Genetic resources conservation, rangeland improvement
- Watershed Management: water harvesting structures; training in hydrology.
- Treated wastewater and bio-solids reuse; integrated water resources and water scarcity management
- Most recent irrigation techniques
- Animal health; food science technology
- Organic agriculture production, fair trade capacity building and gender empowerment
- Developing strategies and policies for sustainable uses of water resources
- Horticultural and agronomic training and plant material evaluation
- Drought monitoring and capacity building in recent methodologies for studying crop water requirements.

3.4 Partnership with UF to develop education and training-related activities

ICARDA is working closely with UF to develop training activities benefitting WLI stakeholders. Initial activities will be designed for researchers and extension agents. This will be followed by technically-skilled training courses on water management and high value crops and market chains. UF is taking the lead by contacting US universities to take an inventory of what is available from US institutions. A training needs assessment has already been conducted to assess regional university and NARES priorities (Table 2). The gathered information will be posted onto the Wiki upon availability.

Table 2: List of the training activities emerging from the WLI training needs assessment

Training topic	Lead Institution(s)	Contact person(s)	Suggested time and place
Specialized Training Workshop on Modern Techniques for Protected Agriculture ⁽¹⁾	ICARDA-APRP	Dr. Ahmed Moustafa Dr. Fadi Karam	31 Oct - 4 Nov 2010 Doha, Qatar
Integrating gender approaches into research at the WLI benchmark sites ⁽²⁾	UF ICARDA-SEPRP	Dr. Sandra Russo Dr. Aden-Aw-Hassan	9-13 January, 2011 Cairo, Egypt
Effective Extension Approaches in Agriculture in WLI ⁽³⁾	UC-Davis ICARDA-IWLMP ICARDA-SEPRP	Prof. Jim Hill Dr. Theib Oweis Dr. Aden-Aw-Hassan	February 2011 Aleppo, Syria
High value crops and market chains	Texas A&M	Prof. Bill Payne	March 2011 Aleppo, Syria
Improving Agricultural Water Management: Innovative Tools and Practices ⁽⁴⁾	USU ICARDA-IWLMP	Prof. Jagath Kaluarachchi Dr. Theib Oweis	May 2011 Aleppo Syria

⁽¹⁾ Annex 3

⁽²⁾ Annex 4

⁽³⁾ Annex 5

⁽⁴⁾ Annex 6

4 Bilateral Mobilization efforts with USAID Country Missions

In an effort to mobilize funds for the bilateral components of the WLI, efforts have been made at lobbying USAID country mission offices to promote the work of the WLI. Specifically, meetings were held in Yemen and Jordan with USAID officials to discuss current activities and obtain feedback on potential support for bilateral programs.

4.1) USAID Office Jordan

Dr. Faisal Awawdeh, Director General of the National Center for Agricultural Research and Extension in Jordan, and Dr. Nasri Haddad, Regional Coordinator of the West Asia Regional Program at ICARDA had a meeting with HE Eng. Saeed Masri, Minister of agriculture in Jordan on July 11, 2010. The scope of the meeting was to brief the Minister on the progress that has been made so far with WLI project, and the need for the support of the Ministry of Planning and International Cooperation (MOPIC) and Ministry of Water and Irrigation (MWI), by requesting USAID in Amman to support the Ministry of Agriculture's efforts to implement the project as a priority area to the government of Jordan.

As a result of this meeting, MOPIC sent out a support letter to USAID Mission in Jordan. The letter was sent directly to the USAID from the MOPIC with a copy to the Ministry of Agriculture. A similar support letter from the Minister of Water and Irrigation (MWI) is also expected to be sent out to the USAID country mission in Amman to seek support to the WLI Jordan.

4.2) USAID Office Yemen

The three institutions involved in the WLI Yemen are the Agricultural Research and Extension Authority (AREA), the National Water Resources Authority (NWRA) and Aden University and all have determinant roles in policy, research and extension in the Abyan Delta benchmark site. NWRA is responsible for water resource development and control, extension is under the control of the Agricultural Office in the Abyan Governorate and AREA has been responsible for the implementation of research activities under the umbrella of the Ministry of Agriculture and Irrigation. Activities and resources include socio economic studies, the initiation of a genetic program, data on crop water requirements and techniques and core extension services. The centre of activities in the delta will be AREA's Elkod Agricultural Research Station.

The WLI team in Yemen is organizing a national workshop in December 2010 to disseminate the initiative to broader national and international audiences, namely USAID mission in Sanaa, concerned Ministries, decision makers, researchers, academicians, extension agents and farmers' and women associations (Annex 7).

5. Planned activities for the 4th quarter of year 2010

- Visit to ICARDA (Aleppo) and AUB (Beirut) of the University of Florida team (Drs. Sandra Russo, Samira Daroub & Kathleen Colverson) (10-15 October 2010)
- Specialized Training Workshop on Modern Techniques for Protected Agriculture (31 Oct. to 4 Nov. 2010, Doha, Qatar)
- Regional Coordination Meeting of the CWANA Water Benchmark Project (Phase II) (Amman, 1-3 December, 2010) – and coordination with the WLI project
- The WLI National Workshop for Yemen (Eden, 7 December 2010)

Annex 1: The WLI 2nd Steering Committee Agenda

Middle East Water and Livelihoods (WLI) First Educators' Workshop,

Meeting of the Steering Committee, Thursday July 1st, 2010

Shepherd Hotel – Cairo, Egypt

Program

- 14:30 – 14:45 Opening of the WLI Steering Committee - Dr. Kamel Shideed, ICARDA
- ICARDA's Opening Statement: Dr. M. Solh, ICARDA Director General
- USAID Opening Statement: Dr. Scott Christiansen, USAID
- NARS Opening Statement: Dr. Ayman Abou Hadid, President, ARC, Egypt
- 14:45 – 15:30 The WLI progress (January - June 2010) and proposed July – December 2010 plan - Dr. Fadi Karam - ICARDA
- 15:30-15:45 Outcomes of the Educators Workshop- Dr. Sandra Russo, UF
- 15:45 – 16:00 Budgetary report (January – June 2010) – Dr. Theib Oweis, ICARDA
- 16:00 – 16:15 Resource Mobilization - Progress made with WLI bilateral proposals– Mr. Tareq Bremer - ICARDA
- 16:15 – 17:00 Open discussion (topics may further include the below listed points)
- Amendment of the 2010 work plan (including consultancies, MoUs with partner institutions, etc...)
 - WLI participation in USA events in Fall 2010
 - Dissemination of information to partner institutions
 - Complementarities between WLI and the Benchmark Project.
 - Resource mobilization (action plan)
 - Opportunities for students' involvement in field characterization
 - Visits of ICARDA Regional Coordinators and WLI Country Teams to USAID country offices.
 - The WLI M & E plan
- 17:00 Closing and final recommendations

Annex 2: Agenda of the Training course on 'Bio-Physical & Socio-Economic Characterizations of the WLI Benchmark Sites in Iraq and Palestine'

Tuesday 3 August 2010: Arrival of participants to Amman and accommodation in hotel IBIS

Wednesday 4 August 2010

8:00 Buses leave from Hotel to NCARE

9:00-9:30 Opening ceremony

Welcome and statement of NCARE Director General, Dr. Faisal Awawdeh

Statement of ICARDA Regional Coordinator for West Africa Regional Program, Dr. Nasri Haddad

Statement of the representation of SBAR, Iraq, Dr. Ahmad Al Falahi

Statement of the representative of ARC, Palestine,

9:30-10:00 Introduction and plan of the training (Dr. Fadi Karam, WLI Project Coordinator, ICARDA)

10:00-10:30 Introduction to the GIS data base (Dr. Firas Ziadat, ICARDA)

10:30-11:00 Coffee break

11:00-11:30 Bio-physical characterization – Experience learned from the Badia benchmark site in Jordan (Eng. Safa Mazahreh, NCARE-Jordan)

11:30-12:00 Discussion

12:00-12:30 Socio-economic characterization – Experience learned from the Badia benchmark site in Jordan (Dr. Samia Akroush, NCARE-Jordan)

12:30-13:00 Discussion

13:00-14:00 Lunch break

14:00-16:00 Session breakout on (i) biophysical and (ii) socio-economic characterizations

Session I: Bio-physical characterization (moderated by Dr. Feras Ziadat & Eng. Safa Mazahreh, with participation of soil, water, rangeland and animal team leaders from NCARE)

Session II: Socio-economic characterization (moderated by Dr. Esmat Karadsheh & Dr. Samia Akroush)

16:00-17:00 Plenary discussion on the bio-physical and socio-economic characterization templates

Thursday 5 August 2010

8:00 Buses leave from Hotel to NCARE

8:30-10:30 Session breakout for the preparation of bio-physical characterization work plan per site

Working Group I: Iraq irrigated benchmark site of Abu Gharib – Baghdad

Working Group II: Iraq rainfed benchmark site of Mosul

Working group III: Palestine rangeland site

10:30-11:00 Coffee break

11:00-13:00 Session breakout for the preparation of the socio-economic characterization work plan per site

13:00-14:00 Lunch break

14:00-15:00 Plenary discussion and approval of work plan per site. Task distribution among the WLI team members in Iraq and Palestine

15:00-16:00 Final recommendations and closing (Dr. Faisal Awawdeh & Dr. Nasri Haddad)

Annex 3: Agenda of the specialized training workshop on 'Modern Techniques for Protected Agriculture'

Date/Time	31-Oct Day 1	1-Nov Day 2	2-Nov Day 3	3-Nov Day 4	4-Nov Day 5
08:30-09:30	Opening, Ministry of Environment, Qatar	1) Development of tomato seedling grafted with tomato and eggplant rootstocks for grafting technology at AVRDC (25 Min) 2) PRO & CON of implemental operation on grafting tomato technology (10Min) 3) Tomato tone solution spraying for increasing tomato fruit setting and qualities in hot-wet season (20Min) 4) Field management of tomato production lowland in summer production at AVRDC (25 Min) 5) Effect of rain shelter, grafting and tolerance scion varieties on tomato yield in summer (20Min) <i>Mr. Wu Deng-Lin</i>	Presentation on Water use Efficiency (45 Min) <i>Dr Fadi Karam</i>	practicum- Collection insects and spiders in the field <i>Dr Greg Luther</i>	General discussion, evaluation & Closing
09:30-10:30			Presentation Nutrition solution development and Management in Soilless culture (45 Min) <i>Dr Ahmed Moustafa</i>		
10:30-10:45	Coffee Break				
10:45-11:45	Travel to SAIC	6) Control ToLCV through the management of both greenhouse seedlings and in open field (30 Min) 7) Managing soil borne pathogen of bitter melon and watermelon through grafting techniques (35 Min) 8) Progress and achievement of grafting sweet pepper technology at AVRDC (40 Min) <i>Mr. Wu Deng-Lin</i>	practicum- Visit SAIC hydroponics system, Practice on Nutrition solution Management <i>Dr Ahmed Moustafa</i> <i>Eng. Tareq Ouda</i> <i>Eng. Arash Nejatian</i>	practicum- Difference between pests, natural enemies, and others for the insects/spiders collection (generate report in small group) <i>Dr Greg Luther</i>	Field Visit Otoria Agricultural Research station
11:45-12:45	Introduction to Protected Agriculture and soilless production systems (45 Min) <i>Dr Ahmed Moustafa</i>				
12:45-13:45	Lunch Break				
13:45-14:45	practicum - Est. of Soilless Production System <i>Dr Ahmed Moustafa</i> <i>Eng. Tareq Ouda</i> <i>Eng. Arash Nejatian</i>	practicum- different grafting techniques <i>Mr. Wu Deng-Lin</i>	Introduction to IPM <i>Dr Greg Luther</i>	practicum- Groups reporting <i>Dr Greg Luther</i>	Field Visit Arab Qatari Agricultural Production Company
14:45-15:45					
15:45-16:00	Coffee Break				
16:00-16:45	practicum- Est. of Soilless Production System <i>Dr Ahmed Moustafa</i> <i>Eng. Tareq Ouda</i> <i>Eng. Arash Nejatian</i>	practicum- different grafting techniques <i>Mr. Wu Deng-Lin</i>	Biological Control <i>Dr Greg Luther</i>	practicum- Est. of Soilless Production System (planting) <i>Dr Ahmed Moustafa</i> <i>Eng. Tareq Ouda</i> <i>Eng. Arash Nejatian</i>	
16:45-17:30					

Annex 4: Agenda of the gender training workshop

Suggested Title: Integrating gender approaches into research at the WLI benchmark sites

Purpose

- Train researchers of different disciplines in the benchmark sites on integrating gender dimensions into the WLI, while ensuring gender integration into research outputs.

Expected outputs:

- 20-25 researchers trained on integrating gender approaches into research at the benchmark sites;
- Research plans modified to integrate a gender dimension;
- Identify key collaborators at each benchmark site for gender integration and follow up.

Expected outcomes

- Establish a gender team to share learning between ICARDA and other institutions with gender expertise
- Integration of gender approaches in future research of trainees and participating institutions;
- More researchers to have access to gender learning through distributed e-learning;
- Creation of a network of researchers working on gender issues.

Duration: One week (9-13 January, 2011)

Venue: Egypt (Desert Development Centre, American University in Cairo, Al Gouna – Red Sea, ICARDA office in Cairo)

Number of hours: 35 including a visit to the benchmark site (to be decided later)

Learning materials

- Trainer manual
- Presentations
- Visual aids, handouts, etc...

Learning content

Day One:

- Welcome/Introductions
- Expectations of participants
- Overview of Workshop – Finalizing the Agenda
- **Session 1:** Overview of livelihoods framework and participatory approaches with a gender dimension (10:00- 11:30)
- **Session 2:** Key Issues in Gender in the WLI Research Projects/Sites (11:30 – 1:00)
- *Lunch* (1:00 -2:00)
- **Session 3:** Elements of a Gender Integrated Research Program (2:00 – 3:15)
- Coffee Break (3:15 – 3:30)
- **Session 4:** – Introduction to Gender Analysis in Research –Gender sensitive approaches (3:30 – 5:30)
- Summary of the day (5:30 – 6:00)

Day Two:

- Review of Day One (9:00-9:30)
- **Session 5** – Applications of integrating gender in the different phases of research (9:30 – 11:15)
- Coffee Break (11:15 – 11:30)
- **Session 6** – Sector-specific Gender Approaches(11:30 -1:00)
 - Subsistence crops
 - High value crops
- *Lunch* (1:00 – 2:00)
- **Session 6** (continued) (2.00 – 5:30)
 - Climate and Environmental Changes
 - Livestock
- Coffee break (3:15-3:30)
- Summary of the day (5:30-6:00)

Day Three:

- Review of Day Two (9:00-9:30)
- **Session 7** – Gender and Value Chains (9:30-11:15)
- Coffee break (11:15-11:30)
- **Session 8** – Gender and Water (11:30-1:00)
 - Water management
 - Irrigation management
- *Lunch* (1:00 – 2:00)
- **Session 9:** Monitoring and Evaluation (2.00 – 5.30)
- Coffee break: (3:15-3:30)
- Summary of the day and logistics (5:30 – 6:00)

Day Four: Field Trip

Day Five:

- Reports on the visit (9:00-10:00)
- **Session 10:** Participants' Action Plans: Integrating Gender into Research and Extension at the Benchmark Sites (10:00 – 1:00)
- Coffee Break (11:15 – 11:30)
- Lunch (1:00-2:00)
- **Session 11:** Presentations of the Action Plans (2:00 – 5:00)
- Coffee break: (3:15-3:30)
- **Session 12:** Summary and Next Steps (5:00-5:30)
- Workshop closing and distribution of Certificates (5:30 – 6:00)

Recommended trainers names, specializations and short bios

Targeted audience

- Mid level researchers (3 candidates per benchmark, 2 bio-physical and 1 socio-economist, including women and men)

Funding Sources: WLI

Expected cost

- Economy round trip air ticket to/from Egypt; hotel accommodation, meals, transportation, per diem, trainers' fees, material reproductions, conference room cost, equipment rental, field visit, etc...

Annex 5: Agenda of the extension training workshop

Suggested Title: Effective Extension Approaches in Agriculture in WLI

Purpose

- To train key extension agents in the WLI benchmark sites in the latest and most appropriate extension methodologies to improve their effectiveness in working with farmers and stakeholders

Expected outputs

By the end of the course participants will be able to:

- Describe the international modern extension approaches
- Express understanding of participatory approaches
- Show awareness of new extension tools
- Prepare farmer friendly communication material
- Express how to communicate with farmers and women farmers
- Develop plans of how to build bridges with researchers and policy makers
- Develop a plan on working with farmer groups with limited resources

Expected outcomes

- Participatory approach applied in extension practices
- Friendly material developed and effectively communicated to farmers
- Better communication with farmers and women farmers
- Better communication with researchers and policy-makers
- More efficiency in working with limited resources

Duration: Two weeks in February-March 2011

Venue: ICARDA HQ, Aleppo, Syria

Number of hours: 70 hours including field work

Learning materials

- Trainer manual
- Presentations
- Visual aids, handouts, etc...

Learning content

First Week:

- Current challenges and opportunities in extension in the BM sites (1/2 day)
- International and modern extension methodologies, tools and experiences (examples of tools: videos, mobile sms, TV, Radio, reprints) (1 day)
- Appropriate methodologies and tools in extension in the BM sites (1/2 day)
- Participatory approaches (1/2 day)
- Skills needed (communication, methodologies, translating research into applications, extension material development, human resources, working with women farmers, communication skills, getting to yes, management of change, social marketing, behavioral change, answering the question “what is in it for me,” team work) (2 1/2 days)

Second Week:

- Train the trainers (2 days)
- Field trip (1 day)
- Mechanisms for improving linkages with policy makers and researchers (1 day)
- Action plans (1 day)

Recommended trainers names, specializations and short bios

Targeted audience

- Mid-level extension agents with interest/experience in training
- Men and women from each site
- Required to provide a description of the interest in attending, relevance to current responsibilities and the expected learning benefits

Funding Sources: WLI

Expected cost

- Economy round trip air ticket to/from Syria; hotel accommodation, meals, transportation, per diem, trainers’ fees, material reproductions, conference room cost, equipment rental, field visit, etc...

Annex 6: Agenda of the water management training workshop

Suggested Title: Improving Agricultural Water Management: Innovative Tools and Practices

Purpose

- To deliver an overview course related to agricultural water management, agricultural hydrology and water quality issues. This will be a core course leading to more advanced knowledge related to water and irrigation at farm to watershed scale.

Expected outputs

- 20-25 researchers trained in tools of on-farm hydrology and irrigation, agricultural pollutants and water quality;
- Apply knowledge gained in the formulation of possible research activities at the benchmark sites.
- Presentation of case studies; application of acquired knowledge

Expected outcomes

- Development of an integrated water resources management (IWRM) plan at the benchmark site;
- Collection of appropriate data at each benchmark site that contribute to the development of a database for WLI.

Duration: Two weeks in April-May 2011

Venue: ICARDA-HQ

Number of hours: 70 (35 hours per week), plus a field visit at the end of the first week

Learning materials

- CDs
- Presentations
- Visual aids, handouts, etc...

Suggested learning contents

First Week:

Innovative approaches to water management

- Overview of dryland agro-ecosystems

- Introduction to watersheds
- Water and the Environment
- Hydrologic cycle and water balance
- Soil water characteristics
- Crop water requirements
- Modern irrigation systems
- Hydrologic measurements
- Water quality for agricultural uses
- Agricultural pollutants
 - Sources and types of pollutants
 - Non point sources pollution
 - Aquifer vulnerability assessment
 - Water quality impairments and public health impacts
 - Best management practices in pollutant mitigation
 - Water quality measurements and analysis
- Field Day for observation and sampling

Second Week

Modeling in water management

- River basin accounting and allocation models
- Watershed modeling
- Crop modeling (point scale)
- Groundwater modeling
- Group presentation of case studies

Recommended trainers names, specializations and short bios

Prof. Jagath Kaluarachchi – USU*

Prof. Mac McKee – USU

Prof. Wynn Walker – USU

Dr. Theib Oweis – IWLMP-ICARDA

Dr. Francois Molle – IWMI/ICARDA

Dr. Qadir Manzoor – IWMI/ICARDA

Dr. Rolf Sommer – IWLMP-ICARDA

Dr. Feras Ziadat, IWLMP-ICARDA

Dr. Ahmed Al Wadaey, IWLMP-ICARDA

Dr. Fadi Karam, IWLMP-ICARDA

* USU representative comes each week to participate in training

Targeted audience

- People working within the WLI benchmark sites with a minimum of BS degree in irrigation, water engineering, hydrology, soil sciences or a similar discipline. Prior work experience in water and irrigation will be advantageous.
- Proficiency in the English is required.
- Recommended that both men and women attend.

Funding Sources: WLI

Expected cost

- Economy round trip air ticket to/from Syria; hotel accommodation, meals, transportation, per diem, trainers' fees, material reproductions, conference room cost, equipment rental, field visit, etc...

Annex 7: Draft program of the proposed National Workshop of the Water and Livelihoods Initiative (WLI) in Yemen (Benchmark site of Abyan Delta)



The Middle East Water and Livelihood Initiative (WLI) is a regional initiative involving seven countries; Egypt, Iraq, Jordan, Lebanon, Palestine, Syria and Yemen, thirteen NARES institutions across those countries, three international agricultural research centers, a group of regional hub universities, national universities and five US university systems.

In the seven countries of the initiative; Egypt, Iraq, Jordan, Lebanon, Palestine, Syria and Yemen, water scarcity is the key constraint to the improvement of rural livelihoods that are mainly dependent on land productivity. It is the fundamental issue threatening economic development, food security and stability in many parts of the region and must be addressed for improvements to take place.

The planning phase of the WLI which has encompassed the WLI Inception workshop in June 2008 and the series of workshops based on agro-ecosystems in 2009¹ has capitalized on this recognition. The WLI builds upon the impulse to mobilize resources and effect change through mutual cooperation across national boundaries and has begun the development of the framework, through which change will be achieved. The tree key NARES for the WLI Yemen the Agricultural Research and Extension Authority (AREA), the National Water Resources Authority (NWRA) and Aden University and between them have the remit for policy, research and extension in the Abyan Delta benchmark site. NWRA is responsible for water resource development and control, extension is under the control of the Agricultural Office in the Abyan Governorate and AREA has been responsible for the implementation of research activities under the umbrella of the Ministry of Agriculture and Irrigation. Activities and resources include socio economic studies, the initiation of a genetic program, data on crop water requirements and techniques and core extension services. The centre of activities in the delta will be AREA's Elkod Agricultural Research Station.²

In Yemen, the Abyan Delta benchmark site offers an opportunity to engage with stakeholders for the formulation of a strategy to combat the policy, technical and livelihood concerns in a predominantly spate irrigated system. The main issues are groundwater depletion and over-extraction of water for cash cropping, inequitable water distribution of flood water and the technical constraints connected with the spate

¹ 6-9 April 2009 Cairo -- Irrigated: Egypt, Iraq and Yemen. 5-7 May 2009 Aleppo -- Rainfed: Lebanon and Syria. 10-12 May 2009 Amman -- Rangelands: Jordan and Palestine.

² Elkod Agricultural Research Station was the first agricultural research institution established in the Arabian Peninsula in 1955.

system itself such as the annual deterioration of irrigation infrastructure by the flood waters and livelihood constraints which include a need for improved fodder resources and knowledge of improved land and water management, processing and marketing of livestock products, post-harvest production and a gender-sensitization of the work. This pilot strategy will then be available for scaling-up.

The goal of the WLI is to improve the livelihoods of rural households and communities in areas where water scarcity, land degradation, water quality deterioration, food security and health problems are prevalent in the seven participating countries, focusing initially on specific benchmark sites.

Objective: The aim of the workshop is to definite the project and identify the required work plan for the respective year 2010 accordingly to the priorities mentioned in the project document.

Attendances: decision maker, benefits, researchers from AREA, Extensions, Aden University, NARA, farmer association and women association .

Proposed date: 7 December 2010

Place: Mercury Hotel, Eden

Organization Agency: AREA, Elkod Agricultural Research Station

Sponsor: WLI-USAID

Technical Support: ICARDA

Participating agencies

1. ICARDA - Technical support of the meddle east WLI project
2. USAID – Financial support of the WLI project
3. AREA – Work plan of 2010
4. NWRA – Work plan of 2010
5. Aden University – Work plan of 2010
6. Experiences of water use association in the Abyan Delta
7. Role of women on the land & water resources management in the Abyan Delta

Methodology of the workshop: Presentations, discussions, grouping for developing the work plans as the following:

1. Group for field studies and implementations.
2. Group for training and qualifications.
3. Group for polices and institution building.

Language: Arabic and English