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USAID-*Inma* Agribusiness Program
Quarterly Report
January-March, 2012

April, 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by USAID-*Inma* Agribusiness team for a consortium led by The Louis Berger Group, Inc.

USAID-*Inma* Agribusiness Program Quarterly Report January-March, 2012

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GENERAL INFORMATION

This report covers the 18th Quarter (January-March, 2012) of the USAID-funded USAID-Inma Agribusiness Program in Iraq. The report provides an update on the planned activities in the Annual Work Plan and on the outputs in the Performance Monitoring Plan (PMP).

Program Objective: The purpose of this contract is to provide agricultural and business development services to USAID beneficiaries in strategic locations in Iraq to promote economic diversification and job generation, with an emphasis on the growth of the agriculture and agribusiness (“agro-food”) sectors in the provincial, regional and sub-regional economies.

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ACRONYMS

BLF	Beef and Lamb Feedlot
COP	Chief of Party
COR	USAID Contracting Officer's Representative
DEC	USAID Development Experience Clearinghouse
EFF	Euphrates Fish Farm
FAO	Food and Agriculture Office (of the United Nations)
FAR	Federal Acquisition Regulations
FFS	Farmer Field School
GOI	Government of Iraq
GFA	Geographic Focus Area
IDP	Internally Displaced People
IPM	Integrated Pest Management
LOP	Life of Project
LTTA	Long-Term Technical Assistance
M&E	Monitoring and Evaluation
MEFF	Middle East Fish Farm
MFI	Microfinance Institution
MNF-I	Multi-National Force - Iraq
MoA	Memorandum of Agreement
MOA	Ministry of Agriculture
MOE	Ministry of Electricity
MOP	Ministry of Planning
MOU	Memorandum of Understanding
MoWR	Ministry of Water Resources
NGO	Non-Governmental Organization
PDS	Public Distribution System
PMP	Performance Monitoring Plan
PO	Purchase Order
PRT	Provincial Reconstruction Team
RFA	Request for Applications
RFP	Request for Proposals
SME	Small and Medium Enterprises
TA	Technical Assistance
TTA	Targeted Technical Assistance
UK	United Kingdom
US	United States
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USG	United States Government

EXECUTIVE SUMMARY

The USAID-*Inma* Agribusiness Program continues to work to increase the productivity and competitiveness of Iraqi agriculture through demonstrations of profitable commercial agribusiness enterprises. To ensure that end, the USAID-*Inma* program works directly with minority groups, entrepreneurs, farmers, agribusinesses, associations, the Ministry of Agriculture and others to demonstrate more effective and profitable technologies in two supply chains – Livestock-Protein and Horticulture – that will strengthen sustainability and competitiveness of the private sector agriculture in Iraq.

Following the USAID-*Inma* Work Plan to ensure the productivity and sustainability of USAID-*Inma* established enterprises, cooperating with the Ministry of Agriculture in private sector development, continued training and providing opportunities for marginalized groups, were the major areas of interest during this reporting period.

Enterprises supported and initiated by the program have recorded \$151.21 million in direct sales with 15,085 employed. Results from this reporting period, January through March, include 3,046 individuals trained in various USAID-*Inma* programs (2,483 men and 571 women). The Horticulture team trained 2,169 beneficiaries, 1,924 men and 245 women. At the Field-Based Learning Centers, 514 beneficiaries, 501 males and 13 women were trained. The livestock team trained 522 beneficiaries, 290 were men and 232 women. Sales between January and March, 2012 totaled \$9.07 million with 56 new jobs created.

The aquaculture industry has also seen improvement, during this quarter the USAID-*Inma* business development team worked with fish producers, MOA and others in the development of the Iraqi Council to Support Fisheries, an umbrella organization for the aquaculture industry. This council will represent fish producers throughout Iraq and address issues with the Iraq government pertaining to licenses, water use issues and policy with regards to aquaculture.

In March, the business development team in conjunction with the horticulture team hosted a water users roundtable in Basrah, working through issues on agriculture water usage, water quality and supply. This program highlighted the development of the Al Shehamiyah Water Users program in Wasit, which is assisting farmers in the refurbishment of canals, scheduling of water and irrigation alternatives that improve water efficiency.

A livestock specialist arrived in March and conducted nutrition and animal evaluation trainings for the recipients of the sheep projects and animal science students at Salahddin Univeristy. This program was a train-the-trainer program for beneficiaries of the sheep production program and an intensive practical program for college students.

USAID-*Inma* entered into a partnership with the Iraq 4-H organization to create opportunities for marginalized people through the development of twelve 4-H sheep production programs during the reporting period. The program is designed to increase the quality and quantity of feeder lambs entering the feedlot system established by USAID-*Inma* in early 2009. These clubs are located in Maysan, Muthanna, Dhi Qar, Wasit, Najaf, Kirkuk, Salah ad Din, and Basrah governorates, as well as two clubs in Anbar and two clubs in Baghdad. The first lamb crop from these flocks of more than three hundred lambs will be sold to the feedlots during late April and May.



Intensive livestock practical program for college students at Saladdin University

USAID-*Inma* is also in the process of creating five other clubs with the assistance of the Iraq 4-H program and USAID-ICAP program in Diyala, Kirkuk, Ninawa and Salahadin. USAID-*Inma* provides the starter inputs

and technical assistance in sheep production while 4-H and USAID-ICAP provide the community development aspect of the activities. By working with widows and youth, USAID-*Inma* is expanding the economic opportunities for marginalized people in the agriculture sector.

The livestock team is also in the process of establishing alfalfa production enterprises with other marginalized people located near the sheep projects, dairy projects and feedlots, as a method of producing forage for the animals. These forage producers will be linked to the sheep projects, widows dairy program and feedlots throughout Iraq to supply forage at a fair market price.

Cattle from the Salam dairy program which was started in collaboration with the Iraqi 4-H program in December 2010 produced eighteen calves and are providing a source of fresh milk to the community. Capitalizing on this success, the USAID-*Inma* has started to establish new dairy programs with marginalized women in Anbar, Baghdad and Ninawa. The first twenty-five dairy cows have been delivered to one hundred widows. The program is expected to add to the quality of life of these widows by providing a sustainable business. The technical staff will provide animal health, nutrition and business management training in dairy production.

The Hussayniah Feedlot was completed and feedlot owner has purchased the first truck load of cattle with hopes of filling the yards soon. This privately owned feedlot was a direct result of the USAID-*Inma* feedlot program that was started in 2009. The Hussayniah Feedlot owner visited many USAID-*Inma* funded feedlots throughout Iraq and adopted the technology for the operation. Minor changes were made to the design of the holding facility for better animal handling and efficiency.

Starting in January 2012 the data from the fall corn seed trials was analyzed indicating the new varieties were beneficial for Iraqi agriculture. Production from two of the new tested varieties was twice the production rate of locally tested varieties. The outstanding performance of the new varieties has resulted in numerous farmers requesting information about where to purchase seed. The production data from the new varieties was provided to MOA. Currently, MOA and the U.S. based private seed company are working through registration requirements regarding seed sales in Iraq. However, as of yet there has been no agreements reached between the seed company and MOA. The program was the first important step in creating public-private partnerships in Iraqi agriculture.

The expansion of the Rabee Transplant Nursery in Baghdad was completed. With technical assistance from USAID-*Inma* staff the nursery employees reconstructed existing greenhouses to develop a nursery to meet the growing demand for vegetable transplants. During February, a technical specialist conducted grafting trainings to Rabee nursery employees and MOA researchers. This advanced technology produces plants that are less susceptible to common plant diseases while adding to the vigor of the plant. This is completed through grafting hybrid vegetable plants onto rootstock of vegetable varieties with a proven resistance to soil-borne diseases and nematodes.



Grafting expert Dr. Richard Hassel shows MoA officials and Al Rabee nursery owner proper vegetable grafting methods

The eight Field-Based Learning Centers have initiated equipment training programs for farmers and MOA staff. Technical staff has designed spring planting schedules for the FBLCs using direct seeding and transplants. The goal is to demonstrate equipment and highlight production benefits and time differences for vegetable production when using transplants as compared to direct seeding.

These centers showcase new irrigation technologies for a variety of crops and new equipment to demonstrate innovative techniques that will increase yields and annual incomes.

During this reporting period, the USAID-*Inma* Business Development team continued the development training program with the MOA officials, regarding private sector investment, human resource management, and program planning and enterprise development. USAID-*Inma* staff conducted eight courses and trained one hundred and thirty-four senior and middle management managers from the ministry, including eighteen female managers. These topics were taught at the request of the MOA, as a means to strengthen the leadership of middle management and directors. USAID-*Inma* will continue trainings with the Ministry of Agriculture throughout 2012.



Zanabiq Al Hazal Association members are being trained on the FBLC equipment

The effort of developing market linkages for producers has paid off. Local vegetable and fruit producers are now supplying product to retail markets in Erbil and Baghdad. A key producer from the strawberry production program implemented by USAID-*Inma* in 2010 has signed a production contract with Carrefour Supermarkets in Erbil. In addition, the Al Basrah Date Company has shipped twenty nine MT of packed pitted dates to a Venezuelan importer.

The date industry is seeing sustainability; during the last quarter the USAID-*Inma* Business Development team initiated a new international market linkage for the Al-Basrah Date Company with traders in the United Arab Emirates (UAE) which ships Iraqi dates to the UAE and Indian markets.



Owner of Sulaymaniyah strawberry farm, Taha Rashed delivers his strawberries to Carrefour

USAID-*Inma* continues with the Iraq Food Shed Assessment. The analysis will be useful in determining government policy interventions to assist future agricultural production and food security. In the next quarter, USAID-*Inma* has plans to work closely with MOA and finish the assessment. The assessment can be used by the Ministries when addressing policies and guide the dialogue for agricultural development and investment.

The USAID-*Inma* program continues to deal with multiple issues throughout Iraq. Security remains a problem and possible project shutdown created a loss in motivation of all staff. The Arab Summit created numerous security issues, local staff dealt with one to three hour commutes to the office, country arrival of expatriate technical specialists was delayed in Baghdad and visa issues are ongoing. In addition, changing weather patterns resulted in delays in planting of vegetables and other crops.

On the administrative side, a number of personnel changes took place in the administration and technical teams. The Project Manager in Washington DC and DCOP/Finance Officer left the project while national staff in both programs and operations was offered positions on new long term projects.

Looking forward to the remaining 2012 program year, the USAID-*Inma* Agribusiness Program will continue to work with both private and public sectors of the agriculture industry, helping minority populations establish income generating enterprises, small medium and large farmers increase production and MOA official build capacity within the Ministry management.

I. LIVESTOCK - PROTEIN VALUE CHAIN

The USAID-*Inma* Livestock-Protein team continued to implement a variety of activities during reporting period and monitored the sales and jobs from the previously implemented projects. The sheep production program has been implemented in twelve governorates and over one hundred lambs have been born throughout the twelve sites. The program continues to be successful and operating with minimal problems. The previous implemented sheep production programs in Ninawa are also operating very well. The spring lambing season is completed and approximately two hundred lambs were born in the Ninawa based operations. Field staff continues to provide technical assistance and training in nutrition, ewe maintenance and general business management. The Hussayniah feedlot has purchased the first lot of forty-two beef cattle for the facility and has started to plant forage for an ongoing feed source.

The water buffalo feed trials implemented in five southern governorates were completed and data is being analyzed. The trials collected daily milk production and general animal health status during the evaluation period. The analyzed data will be available for the next quarterly report. Initial response indicates that the producers are very pleased with the results. Aquaculture production continues to be monitored and information collected concerning production and sales. In addition, a short term consultant was utilized to develop a report concerning water usage in the industry. Additional activities for the livestock team include the first phase of the women Internally Displaced People (IDP) (women) poultry program in Diyala. The first batch of twenty thousand birds has been delivered to two locations. The purpose of the IDP program is to provide the technical assistance and the tools necessary for the development of a sustainable business.

I.1 FEEDLOT PRODUCTION – CONFINED FEEDING

Spring is an exciting season for the livestock industry. Offspring are born providing a preliminary idea of how many livestock will be available for the feeding industry later this year or next. The young stock projects previously implemented has started to produce feeder animals. More than three-hundred lambs and eighteen calves have born on the various operations. However, a continual challenge exists, the lack of forage. This issue will be addressed in the following quarter with the development of new forage sites. USAID-*Inma* program staff, horticulture, livestock and irrigation, have worked closely to create new forage demonstration sites throughout Iraq. These sites will serve the additional livestock production numbers being generated through the support of USAID-*Inma*.

Livestock Producers Use New Forage



In the southeastern region of the country, forage for livestock can be difficult to grow because of the heavy salinity levels in the soil. The USAID-*Inma* agribusiness program initiated a project to find alternative forage for the region. The project involved growing salinity-resistant millet on farms in four southeastern and central governorates, and implementing feeding demonstrations to evaluate the effects the forage on livestock production.

Approximately 100 donums were selected the forage production sites. The USAID-*Inma* program agreed to purchase the forage produced during the first harvest. The harvest forage was distributed directly to local livestock producers adjacent to the production sites. In addition, USAID-*Inma* assisted in the purchase of the MOA approved millet seed, assisted in seed bed preparation and tested the water and soil for mineral and nutrient content.

After the millet was distributed to the livestock producers, USAID-*Inma* field staff evaluated performance by recording changes in weight gains, milk production and milk fat. In addition, organoleptic properties were recorded. During the demonstration period the consumption of the forage by livestock lead to increased weight gains, an average increase in milk production by four percent and an increase in milk fat percentage by two percent.

The USAID-*Inma* Agribusiness program continues to implement forage demonstrations to increase the amount and quality of forage grown in Iraq which in turn can be used to increase the supply of quality meats and dairy products for consumers.

The feedlot system allows producers to feed larger numbers of animals in less space while creating additional value. The livestock team continues to provide technical assistance in basic animal science, nutrition, animal selection training and veterinarian services to USAID-*Inma* beneficiaries, MOA, extension staff and local producers. Following the concept of the feedlot design previously implemented by the livestock team, the sheep production facilities mirror that concept. Moreover, lambing and creep feeding areas were added to increase efficiency.

Of the ten feedlots developed by USAID-*Inma*, seven are currently in operation. Quarterly sales reached \$290,117, and produced more than twenty-nine metric tons of red meat. However, the Al-Juboori feedlot owner is currently working with both the MOA and the agricultural bank to secure a loan for continuing the feeding operation.

The Hussayniah feedlot has been completed and cattle are now being purchased for the feedlot. In addition, the owner has also developed a forage production program to reduce feeding costs and ensure feed availability. The USAID-*Inma* livestock team continues to create linkages between forage producers and livestock producers in all governorates.

In an effort to advance feeding technology, the USAID-*Inma* program implemented a feed demonstration with locally produced forage and high protein feed pellets to provide a complete and balance feed ration. The demonstration allows producers to see the effect of feeding a balance high forage diet on production. The information was shared with the other feedlot owners, livestock producers and feed mill operators with the long-term goal of the addressing identified gaps in the livestock supply chain.

A sheep breeding program was implemented with the assistance of the Iraq 4-H program to address the gaps in the livestock supply chain in Iraq. The livestock team created an assistance program targeting IDPs that supplies feeder lambs to the feedlots. The program was designed to work with women, youth and other marginalized groups, such as displaced minorities. Currently the program has implemented twelve facilities with a capacity of one thousand five hundred ewes. The recipients received flock management, animal selection, nutrition, animal health and basic business management training. In addition, countless hours of direct assistance was provided by the field staff to improve the production skills of the various beneficiaries. These groups are linked with feedlot owners and weaned stock will be available for sale in April and May.

More than two hundred head of lambs will be available for sale in April from the sheep breeding enterprises implemented during late 2010. The USAID-*Inma* livestock team continues to provide technical and business management assistance. The goal of the business management assistance is to assist in the analysis of costs, planning and decision process for sales and sustainable development of the breeding enterprise. The USAID-*Inma* field staff routinely provides technical assistance in animal health to assist in the business recommendations for sustainability. The upcoming sale of the lambs which will create a positive economic impact in the community is encouraging the widows and orphans.

The fifteen sheep breeding projects implemented during the quarter are having limited success as compare to the previous projects. However, it should be mentioned that the program was implemented during a critical phase of the reproduction cycle and the ewes will not lamb until the next prosecution season. Interestingly, sheep normally have two production cycles in Iraq. Similar to the previously implemented sheep breeding program the livestock team provides technical and management assistance to develop feeding, management and marketing programs for sustainability. During the next reporting period the USAID-*Inma* program will cooperate with another implementing partner to establish five sheep breeding projects in the northern Iraq. The program is designed such that the USAID-*Inma* program will assist with the supply the livestock and technical information, the Iraqi 4-H organization will supply volunteers to work with each club and ACDI/VOCA will provide the business and community trainings to the families. The program is designed as an economic productive unit that provides a source of income to the families, a source of feeder lambs to the confined feeding operations and technical training in animal production, nutrition and business related activities including computer skills.

1.1.1 Contribution to Strategic Objectives

Activity 1	Beef and Lamb Feedlots				
SO #	SO	This Quarter	Cumulative As of Sept 2011	To Date	Goal
8.2.3.1(BLF)	Sales of local red meat from program-assisted feedlots	\$290,117	\$7,262,322	\$9,168,477	\$9,300,000
8.2.3.2 (BLF)	Production of red meat by program-assisted commercial feedlots by kilograms per year	50,514	1,135,999	1,395,242	1,500,000 kg

1.1.2 Activities Implemented January - March 2012

1. Provided technical and management assistance to the sheep breeding beneficiaries.
2. Three sheep breeding facilities were completed.
3. The first phase of the Ninawa IDP dairy project was implemented. Twenty-five bred dairy heifers were delivered to the women. These women were previously identified by PRT representatives as persons who received training in animal management and cheese processing.
4. The Water buffalo feed demonstration trial was completed and data is currently being analyzed.
5. On-going collection of production records, ration formulation, daily feed costs, ingredient prices, animal purchase prices and sales activities in the feedlots.
6. Sheep production and small flock management trainings were conducted at sheep breeding program locations.
7. Private sector veterinarian services have been provided to the sheep breeding beneficiaries to ensure good animal health.
8. A qualitative study regarding the sheep projects was completed and the information is being analyzed.
9. Technical and management assistance was provided to the Salam Dairy project located in Baghdad Governorate. During the quarter eighteen calves have been born.
10. Phase one of the Diyala IDP (women) poultry program was implemented; twenty thousand birds have been delivered to two locations.

1.1.3 Challenges Faced

Challenge: The transport of livestock is difficult because of extended delays at road check points which are stressful on animals.

Solution: Movement of animals during early morning or late evening hours.

Challenge: High death loss in new born lambs.

Solution: Provide in-depth assistance for producers prior to lambing season concerning proper management techniques.

Challenge: Lack of quality forage during winter season resulting in the feeding of a grain-based diet.

Solution: Forage production programs are being implemented in areas close to livestock producers that will provide high quality forage for winter feeding.

1.1.4 Activities Planned April - June, 2012

1. Continue the IDP dairy program in Ninawa, Diyala and Anbar Governorates. The program will provide technical assistance and animal procurement for the beneficiaries. In addition, technical training will be provided to extension specialists.
2. Implement livestock projects focused on IDPs in the south and southeast.
3. Collaborate with other USAID implementers to develop sheep breeding program in in Kukurk, Salahadin, Ninawa and Diyala governorates.
4. Develop a sustainable beef feeding program with the national Iraqi 4-H program.
5. Implement phase two of the Diyala IDP women poultry program.
6. Replicate the IDP poultry program in the central and southern Iraq.
7. Implement a water buffalo production program for IDPs located in the southern Iraq.

1.2 FORAGE PRODUCTION

The forage demonstration program continues to be successful throughout Iraq. As livestock producers learn more about proper ruminant nutrition the demand for quality forage has increased. With the extension of the program and clear need for additional forage production, it was decided to increase the number of demonstration areas. Sites have been identified throughout the country and each demonstration will include technical assistance and training in land preparation, seeding, production, harvesting and storage. Moreover, the forage producers will be linked with both the confined feeding operations and the sheep breeding projects. Sales during the reporting period were limited due to the dormant growing phase of the production cycle.

1.2.1 Activities Implemented January - March, 2012

1. Continue forage demonstration, irrigation and fertilization at multiple locations.
2. Monitored production and marketing of previously implemented forage demonstration sites.
3. Completed MOUs with five new farmers for forage production this season.
4. Provided ongoing technical assistance and monitoring of current locations.
5. Forage production equipment delivered to five new locations.
6. Identified and started land preparation in the new forage demonstration sites.

1.2.2 Challenges Faced

Challenge: Proper land preparation for spring planting.

Solution: Delivery of needed production equipment to locations for the production of forage.

Activities Planned April - June, 2012

1. Continue planting new demonstration sites.
2. Implement field days at all locations covering topics of planting, irrigation and harvesting.
3. Implement fifteen new forage demonstration sites.
4. Develop millet demonstration site in Baghdad.

I.3 FISH PRODUCTION

The USAID-*Inma* Livestock-Protein team implemented a cross breeding project in 2009 to produce hybrid fingerlings for the Iraqi fish industry. The program imported broodstock from Hungary to produce fast growing hybrid fingerlings which would help meet consumer demand for fish protein. Thirty-two hatcheries received broodstock and are continuing to produce hybrid fingerlings for the market place. Two fish hatcheries, the Middle East Fish Farm (MEFF) and the Euphrates Fish Farm (EFF) have become dominant producers of hybrid fish. Monitoring reports indicate that the majority of the private sales of fingerlings were produced by these two hatcheries. Continual data collection is being implemented by field staff for the other thirty hatcheries. Staff collect information regarding number of fingerlings produced, sold and harvested fish for the markets. The USAID-*Inma* technical staff continues to provide technical assistance to producers and MOA Extension staff concerning nutrition, fish health and licensing issues. In addition, a comprehensive water assessment was implemented to measure the impact of aquaculture on available water resources. As the aquaculture industry grows, it is becoming difficult to monitor the impact of the industry and impact of the USAID-*Inma* lead program. To address this challenge a comprehensive monitoring plan was designed and implemented to monitor the aquaculture industry. Over the last quarter, data collected indicates that almost 200 million more fingerlings were produced than realized. The new system will allow the program to collect and record information on fish production and sales accurately.

I.3.1. Contributions to Strategic Objectives

Activity 3		Fish Production			
SO #	SO	This Quarter	Cumulative As of Sept 2011	To Date	Goal
8.2.3.3 (FP)	Sales of local fish by program-assisted fish farms	\$3,516,397	\$67,051,799	\$72,961,812	\$80,000,000

I.3.2 Activities Implemented January - March, 2012

1. Completed five trainings on fish cage production in Babil and Baghdad.
2. Continue to monitor market and production of the aquaculture program.
3. Canceled the implementation of aquaculture service centers. It was realized that after extensive discussion with producers and technical staff the current data concerning the needs of aquaculture producers was inconclusive.
4. Provided technical assistance to fish producers in the areas of feeding, aeration, water quality and fish health.

5. Sponsored three Iraqi Aquaculture Council meetings held in Iraq.
6. Completed water quality assessment for fish production.
7. Provided MOA staff trainings relating to hatching and fish health.
8. Delivered five-hundred Hungarian Broodstock females to northern Iraq hatcheries to address local demand.
9. Signed contract with MEFF to supply 87,500 palm fish as part of the technical assistance and training program.
10. A comprehensive water assessment was implemented to assist the Iraqi Aquaculture Council to address government concerns about water usage.

1.3.3. Challenges Faced

Challenge: Farmers lack aquaculture extension services and technical assistance.

Solution: The USAID-*Inma* team has started to provide trainings to MOA Extension staff regarding aquaculture production.

Challenge: The MOA continues to terminate unlicensed fish ponds because of a perceived water shortage, drought and regional water management issues.

Solution: A comprehensive water assessment is in progress to measure the impact aquaculture on water resources. In addition a caged fish training program was also implemented that will allow producers to grow fish in the existing river water ways.

Challenge: The current feed technology results in a high percentage of the feed sinking to the bottom of the cages.

Solution: USAID-*Inma* is recommending a floating feed through the introduction of an advance milling technology that will remain on the water surface allowing fish easier access and eliminating wasted feed that sinks to the bottom of the cage.

Challenge: Water quality issues in small and medium sized production facilities.

Solution: Implemented fish pond water quality assessment to understand the effects of fish pond production on water quality.

Challenge: Lack of transparency in the aquaculture industry.

Solution: Continue to facilitate cooperation and information sharing with all groups, individuals and organizations involved in the aquaculture supply chain.

1.3.4 Activities Planned April – June, 2012

1. Continue caged fish production trainings for local producers.
2. Implement fish production trainings in northern Iraq.
3. Conduct hatching training program in Erbil.
4. Continue to support Iraqi Aquaculture Producer Council.
5. Finalize the aquaculture water assesement.

1.4 FEED PRODUCTION

Successful livestock production depends on proper nutrition. Animal weight gain, milk production and efficiency in sheep, cattle, buffalo, poultry and fish are dependent upon feed quality. The USAID-*Inma* program continues to focus on this sector by providing trainings, introducing new milling and processing technologies, providing equipment and implementing demonstration trials in the livestock sector. In addition, USAID-*Inma* management has implemented trainings to feed producers and livestock owners as a means to enhance business management skills and profitability. During the quarter, the USAID-*Inma* assisted feed mills produced 8,497 tons of feed for an estimated value of more than \$4.6 million.

I.4.1. Contribution to Strategic Objectives

Activity 4					
Feed Mills					
SO #	SO	This Quarter	Cumulative As of Sept 2011	To Date	Goal
8.2.3.4 (FM)	Amount of feed produced per year by program-assisted feed mills in tons	8,497	54,684	73,090	60,000 tons
8.2.3.5 (FM)	Sales of program-assisted enterprises	\$4,693,212	\$26,649,004	\$36,699,905	\$30,000,000

I.4.2. Activities Implemented January - March, 2012

1. The water buffalo feeding demonstration was completed; the data collected and is in the process of being analyzed.
2. Continuing to create market linkages between feed mills and livestock producers.
3. Constant monitoring of feed mills and feed industry.
4. Delivered one hundred sixty tons of feed for the IDP poultry demonstration program.
5. Implemented private sector feed demonstration trials in Kirkuk, Ninawa and central Iraq. This project created linkages between private sector poultry producers and feed producers. As part of the program several displaced and marginalized families received fresh poultry for consumption.
6. Developed a linkage with the IDP dairy program in Ninawa with a local feed mill.
7. Continued to monitor and provide technical assistance to the feed analytical laboratories implemented by the USAID-*Inma* technical team.

I.4.3. Challenges Faced

Challenge: High production costs associated in feed production. Mills use generators to supply the needed power for operation when electrical grid is down.

Solution: Feed mill operations can implement activities based around electricity availability from the grid. Management is continually looking at alternative methods for operation that will reduce costs.

Challenge: High feed costs.

Solution: Ongoing technical training in nutrition about ingredient substitution and cost benefit ratios for animal and bird performance.

Challenge: Producers fail to understand the association with feed cost and quality.

Solution: Ongoing feed demonstrations and technical trainings for producers, MOA, extension staff and association that will effectively compare traditional methods with advanced methods.

I.4.4. Activities Planned April - June, 2012

1. Implement the IDP dairy program and feed demonstration.
2. Implement phase two of the water buffalo feed demonstration.

3. Continue to identify and implement the IDP poultry program.
4. Continue to provide technical training and implement a cattle feeding demonstration with the Iraqi 4-H program.

Mushroom Farm Re-opens after Tragedy



The Hameediyah Mushroom Farm was established in 1984, just west of the city of Ramadi. The company is privately owned by the Khirbit family. During the 1980s, the business flourished, but sales and production slowed dramatically in 1993 at the start of Operation Desert Storm.

Tragedy struck in 2004, when a bomb destroyed a house on the property. The explosion killed one of the Khirbit brothers and forced the family to terminate company operations.

However, in 2008 the family revived the business after receiving an USAID-*Inma* Agribusiness program grant of more than \$600,000 to repair the facility. Production resumed in June 2009, however throughout 2010, the farm was unable to reach full capacity of 9.5 metric tons per month, only managing to reach 75 percent of that goal.

In 2011, the USAID-*Inma* agribusiness program provided technical assistance by providing a mushroom specialist to assist the company on production issues. As a result of the training, the facility surpassed its full capacity goal and was producing 9.8 metric tons per month by the summer of 2011.

The USAID-*Inma* marketing team is now assisting the company to address critical marketing strategies. Out of tragedy has come triumph for the Khirbit family and the Hameediyah Mushroom Farm. The USAID-*Inma* team will continue to work with the company.

2. HORTICULTURE VALUE CHAIN

Value chain development is a major thrust of the horticulture section, linking growers and wholesalers of fruits, vegetables and field crops with the consumer. Implementation techniques include the introduction of new and improved crops and production techniques that will increase yields, reduce water usage, decrease production costs and improve quality that will result in producers receiving higher prices in the markets. To achieve these results, staff implemented various demonstrations and trainings for cooperating farmers associations, wholesalers and MOA Extension staff.

Over the last quarter, the Horticulture team implemented seventy different training programs, including targeted technical assistance, farmer field schools and field days. Trainings were established to demonstrate a variety of issues, including water and pest management, the introduction of advanced equipment for plantings and harvesting open fields and new techniques to improve the quality of production. As part of the work plan new markets were opened for vegetable and contracts were signed with retail markets to increase sales and develop employment opportunities for Iraqis. USAID-*Inma* continued cooperation with MOA regarding *Tuta absoluta* pest management trainings to diminish the severity of the infestation and harm to crops. Numerous trainings and site visits were conducted to address the control of the pest. USAID-*Inma* Horticulture staff members also conducted seventy seminars and demonstrations throughout the country at the USAID-*Inma* Field-Based Learning Centers (FBLC) and Farmer Field Schools (FFS) to educate 1700 farmers. Seminars were conducted to introduce growers and agricultural educators to novel techniques that will improve agricultural production and support economic viability. These included vegetable grafting for transplants, commercialization of tissue culture for potato seed, strawberry, date palm, improved wheat production techniques, appropriate machinery for greenhouse operations and proper beekeeping for improved orchard production.

The results from the corn variety seed trials were collected and USAID-*Inma* staff is continuing to analyze the results. The initial results show that the imported varieties out performed local seed corn by 100%, which will increase yields and profits for farmers. Throughout the growing season USAID-*Inma* staff held six field days to demonstrate to farmers and MOA officials the progress of the corn varieties. Most Iraqi corn varieties are older varieties that are genetically inferior to the imported non-GMO varieties. As of date, the MOA has not approved the imported corn seed that was grown in the trials. Upon the approval from the MOA, farmers will have proven corn seed that will increase yields and thereby increase incomes. These new varieties will have a positive influence for Iraqi agriculture and move the country one step closer to food security.

Success in the greenhouse and nursery program continues to progress. Seven field days were conducted for greenhouse operators, MOA and other interested parties. The trainings reached approximately one

hundred seventy five greenhouse producers. In addition, the business training and TTA activities reached an additional 1600 growers.

Early in the reporting period it was realized that the suggested activities and approach to the rural service centers for the agricultural and aquaculture sectors was not valid. After extensive discussion it was determined that the new strategy for development was needed. Moreover, it was also determined that there was limited accurate information concerning the supply chains and producers demands. Thus, it was determined to complete an assessment of the industry. The rural development centers can then be developed following the collection and analysis of the data. Furthermore, the rural development centers can serve as a linkage between farmers and the markets.

2.1 FARMER FIELD SCHOOLS

The USAID-*Inma* team continues to utilize the FFS approach in training, which has proven to be a valuable method for instruction. The FFS approach combines agroecology, community - rural development and experiential education to create learning opportunities for farmers. The field-based schools combines research, education and extension, marketing and advocacy by using five aspects used throughout Farmer Field Schools, including adult education, facilitation, plant and animal life cycles, group study and farmer group development.

Farmer Field Schools create positive learning environments for participants, allowing farmers to work through problem-based approaches to solve practical problems. It provides farmers hands-on learning opportunities in the field creating a greater understanding of alternative solutions. Activities involve simple experiments, regular field observations and group analysis. The knowledge gained enhances the ability of participants to make locally-specific decisions about crop and livestock management practices. Producers, MOA staff, extension staff and other local agricultural personnel attend and participate in the various Farmer Field Schools.

During this first quarter, the USAID-*Inma* staff conducted seventeen FFSs. The participants worked through issues in greenhouse management, irrigation, ventilation, weeding, pest management, identification of disease and infections. Total attendance for the quarter was three hundred seventy farmers (354 men, 16 women). Training and technical assistance continued in the control the insect pest – tomato stem borer (*Tuta absoluta*), which has had devastating effects on solanaceous crops throughout the country.

During the reporting period, the USAID-*Inma* Field Based Learning Centers (FBLC) have started to conduct training in new technologies. Participants have completed safe operation of numerous types of equipment and rotation use of equipment. Participants were taught the purpose of the equipment and proper use. The FBLC locations were also hosts for practical demonstrations of traditional and commercial planting methods, showing the differences between the two. Other activities at the FBLCs included demonstrations of the tunneling machine, optimizing wheat production, irrigation technique and the production of cabbage and cauliflower.

2.2 GREENHOUSE CROPS

Greenhouse vegetable production plays an important role in Iraqi agriculture and is a contributor in rural development, poverty reduction and food security. Farmers use the greenhouse system for producing out-of-season or late season crops, which provides additional income for rural families. The technical assistance program for greenhouse operators continues to demonstrate modern technologies and irrigation alternatives to both farmers and MOA officials. The training and assistance program works in cooperation with the FBLCs and FFS implemented throughout the country.

2.2.1. Contribution to Strategic Objectives

Table 2.2: Fruit and Vegetable Value Chain PMP Indicators and Impact to Date					
Activity 1	Greenhouse Crops				
SO #	SO	This Quarter	Cumulative As of Sept 2011	To Date	Goal
8.2.2.1(GH)	Sales of targeted annual vegetables and fruit in program assisted areas	\$7,148	\$111,073	\$124,953	\$150,000

2.2.2. Activities Implemented January -March 2012

1. The USAID-*Inma* Horticulture team provided technical training in vegetable transplant grafting, a unique and modern method for improving vegetable production.
2. Targeted technical assistance was continued for greenhouse operators.
3. In conjunction with USAID-*Inma* communication department, the horticulture team continued to develop training videos focusing on critical crop management, pest management and marketing techniques. This quarter videos were produced on vegetable grafting and two wheel tractor operation and maintenance. The videos will be distributed to the MOA, private sector agriculture extension staff and farmer associations.
4. A short term consultant provided training in the proper maintenance and operation of farm equipment including the smaller two wheel tractors used in smaller operations and greenhouses.
5. A short term consultant provided training in commercialization of tissue culture focusing on potato, date and strawberry tissue culture.
6. Thirty-two individuals, twenty six men and six women from Universities, MOA and commercial tissue culture laboratories participated in the tissue culture commercialization training under the USAID-*Inma* greenhouse training program, eight training sessions were conducted in six governorates, one hundred eighty individuals participated in the four day training program which covered greenhouse production techniques, irrigation and business training focusing on how to manage a greenhouse business
7. Under the USAID-*Inma* greenhouse TTA training program, thirty three training sessions were conducted in thirteen provinces. The TTA assistance reached seven hundred twenty six individuals: six hundred thirty three men and ninety three women greenhouse operators. A one day refresher course was conducted covering greenhouse production techniques and irrigation. Training attendees also received by-weekly individualized on farm TTA from staff.
8. Four field days were held at demonstration greenhouses with ninety eight men participants. Field days were focused on spring vegetable crop production, Integrated Pest Management (IPM) and post-harvest technologies.
9. The greenhouse training program for women was expanded this quarter and sixteen women greenhouse operators in Babil received greenhouse operations training.
10. Five Farmer Field Schools were held on FBLCs for one hundred twenty two male participants covering complete the life cycle of a plant.
11. Three orchard Field Days were held for sixty four male participants.

2.2.3. Challenges Faced

Challenge: Unseasonal cold weather resulted in crop losses.

Solution: The USAID-*Inma* staff recommended floating crop covers and heating systems for greenhouses. Farmers who suffered losses because of cold weather are now more receptive to investing in heating systems for their greenhouses.

2.2.4. Activities Planned April to June, 2012

1. The women greenhouse training and mentoring program in Najaf, Babil and Diwhaniya will continue.
2. The USAID-*Inma* greenhouse training program will continue to implement vegetable production activities throughout Iraq. The four day training program will cover greenhouse production techniques, irrigation and the business training focuses on how to run a greenhouse as a business.
3. Targeted technical assistance will continue for male and female greenhouse operators on a bi-weekly schedule. This assistance will cover best practices for vegetable production.
4. Horticulture department staff will finalize crop production plan for the seven greenhouse demonstration sites. This will include crop rotation, solarization, planting irrigation scheduling for planting season.

2.3 OPEN FIELD CROPS

USAID-*Inma* technical staff provides assistance to open field farmers who produce a variety of vegetables, strawberries, potatoes, corn and other crops. These beneficiaries receive practical (hands-on) trainings in crop rotation, planting, irrigation, and safe equipment operation that generates better farming practices. In addition, assistance is also provided for harvesting, post-harvest packaging, and sales of the open field crops.

2.3.1. Contributions to Strategic Objectives

Table 2.3: Fruit and Vegetable Value Chain PMP Indicators and Impact to Date					
Activity 2	Open Field Crops				
SO #	SO	This Quarter	Cumulative As of Sept 2011	To Date	Goal
8.2.2.1(OFF)	Sales of targeted annual vegetables and fruit in program assisted areas	\$34,632	\$15,155,944	\$15,267,513	\$13,925,000

2.3.2. Activities implemented January – March, 2012

1. Technical assistance focused on vegetable production, cereal grains, irrigation management, harvest management and post-harvest technologies for local farmers and MOA at the FBLCs.
2. Crop rotation was a major element of the training programs. Farmers were shown alternative crops for rotation and the effects on soils. The purpose was to demonstrate viable crop rotation systems and sustainable farming systems utilizing various crops such as beans, vegetables and forage.
3. The FBLCs and FFS training facilities continued to be the primary demonstration facility for horticulture training programs.

2.3.3. Challenges Faced

Challenge: Farmers are not willing to adopt new technologies.

Solution: To reduce the risk and demonstrate new technologies USAID-*Inma* will continue to demonstrate new methods on the FBLCs. The Centers reduce the risk while demonstrating to farmers the value of crop rotation, new seed varieties, alternative irrigation systems, new equipment and advanced technologies.

Challenge: Introduction of improved seed varieties for open field production.

Solution: Partner with MOA to test alternative seed varieties on the FBLCs.

Challenge: There are limited outlets for seed and services available to the farmers.

Solution: Develop rural development centers that will provide goods and services as well as link producers to markets and credit. However, the supply chain must be analyzed before a valid system can be developed.

2.3.4. Activities Planned January to March, 2011

1. Continuation of the training activities for farmers and MOA Extension staff.
2. Develop more educational videos and manuals for producers. This information would be available to farmers and public and private Extension services throughout Iraq.
3. USAID-*Inma* staff will organize additional seminars and field days at the FBLCs, in conjunction with the MOA and private sector agricultural supply dealers, to train farmers and farm store operators on best farming practices.
4. Cooperate with MOA and other agricultural service agencies to control the field and greenhouse based pest, more specifically the *Tuta Absoluta* infestation in Iraq.
5. Focus on marginalized groups in horticulture production through various programs designed to generate income throughout the value chains.
6. A series of roundtable discussions between farmers and produce buyers is planned.

2.4 ORCHARDS, VINES AND OLIVES

Orchards

The orchard program implemented in early in 2010 by the USAID-*Inma* Agribusiness Program distributed more than 126,000 stone fruit trees (apricot, plum, peach and nectarine). The trees were planted in one hundred thirteen sites over approximately seven hundred donums in twelve provinces.

Over the last quarter, USAID-*Inma* staff continued to provide technical assistance and field days for orchard owners. As the trees mature more direct assistance in the form of pruning and tree health is needed. To ensure proper management of the orchards, the remaining time for USAID-*Inma* assistance will be to host quarterly field days and provide farmers and MOA opportunities to discuss lessons learned. The USAID-*Inma* technical staff is ensuring the future support of the beneficiaries by training the MOA extension staff and mentor farmers on a quarterly basis on orchard management through the field days.

Vineyards

The USAID-*Inma* program imported nearly 28,000 grapevines from the United States and added an additional 5,600 Iraqi-produced grapevines for a vineyard project implemented in early 2010. As a means to jumpstart viticulture research, USAID-*Inma* provided 2,400 imported vines to the Extension service and distributed the remaining grapevines to fourteen farmers in four different governorates. The demonstrations involved forty donums in Salah ad Din, forty donums in Najaf, nine donums in Taji, three donums in Abu Graib district of Baghdad and three donums in Diyala governorate. USAID-*Inma* field staff provided technical assistance in soil preparation, planting techniques, pest management and pruning.

The survival rates for imported plants exceeded normal commercial rates, despite initial reports citing the loss of Iraqi-produced grapevines totaled twenty-five percent. Over the past two years USAID-*Inma* staff conducted field days with local producers and MOA Extension officials. Field days during year one covered irrigation of new vines and commercial trellising while the second year focused on pruning of young vines and pest management. Currently the vines are immature and it is estimated to be another year before significant yields are reached. USAID-*Inma* continues to ensure future support to the beneficiaries through the development of the MOA Extension service and cooperating farmers in vineyard and orchard management.

In addition, efforts continue to provide a trellising demonstration program on selected vineyard sites. Approximately seven donums will be trellised. Partially due to delays in the procurement of trellising materials and the reluctance of accepting new techniques, many farmers proceeded to install traditional trellis systems. The original development package for vineyards included commercial trellising with fencing as secondary assistance. The fencing activity was later eliminated and the technical staff realized fencing was not economical. Currently, USAID-*Inma* is considering installing the remaining five donums of trellis at one of the original locations.

Olives

Bashiqa and Ninawa Plain constitute the bulk of olive production in Iraq, local tree grown dates back 500 years. Currently, 450,000 trees of various ages are producing roughly 25 to 42 kilograms of olives per tree per year. The majority of olive production in Bashiqa is used for table olives; however they are multi use olives. The two hundred member strong Al-Zaytoon olive association located in Bashiqa, approached USAID-*Inma* with the objective of establishing an olive oil industry. USAID-*Inma* has supported the association with funding and continues technical assistance to improve the pressing operation and quality of olives produced in the region.

During this reporting quarter no production occurred in the olive sector. However, a drip irrigation specialist supervised the installation of drip irrigation on two demonstration plots and efforts continued to link the association with various markets for olive oil within the country. The association continues to receive technical assistance in association development and management. Production will begin late this year.

2.4.1. Contribution to Strategic Objectives

Activity 1	Fruit Orchards				
SO #	SO	This Quarter	Cumulative As of Sept 2011	To Date	Goal
8.2.1.1(OV)	Sales of perennial products including Forage in program assisted areas	\$26,585	\$2,137,831	\$2,198,725	\$2,500,000

2.4.2. Activities Implemented January – March, 2012

1. Four technical training sessions were held in bee keeping and honey production for one hundred thirty eight producers.
2. Thirty seven individuals, thirty-one men and six women received training in the orchard management and spring pruning programs.
3. Three quarterly field days were conducted at demonstration orchards emphasizing best spring orchard practices including early season pest scouting as part of implementing an IPM plan.
4. Two irrigation systems were installed in the olive demonstration plots in Ninewah and participating farmers received operational training.
5. A two donum commercial vineyard trellising plot demonstration plot was completed in Salahadin and served as a site for the vineyard field day with more than forty farmers participating.
6. More than 8,000 rooted vine cuttings were distributed to forty five field day attendees at the Salahadin grape vineyard nursery established by USAID-*Inma* in 2010.
7. More than 7,000 rooted vine cuttings from the Rabee Grape Nursery were distributed to over one hundred twenty five farms in Iraq. These activities have created strong market linkages between the nurserymen and regional farms to ensure the increased distribution of the seedless grape varieties throughout Iraq. Each of the grape nurseries in Salahadin and Rabee have started the next crop of rooted cuttings, producing 20,000 new cuttings each for sale in spring 2013.

2.4.3. Challenges Faced

Challenge: The Al-Zaytoon olive association processing facility continues to lack sanitary hygiene conditions needed for oil processing. It is vital for improving the quality of the olive oil.

Solution: The USAID-*Inma* staff continues to provide technical assistance and to assist the Al-Zaytoon association develop a plan to improve the cleanliness of the operations, and therefore improve the quality of the products.

Challenge: Farmers hesitate to adopt commercial production technologies being promoted by the USAID-*Inma* program.

Solution: A five donum demonstration plot for olive tree irrigation was implemented and the program was designed to reduce risk of new technologies while showing farmers new methods.

Challenge: Changing traditional trellising methods to advanced commercial standards.

Solution: A two donum site was developed that demonstrates commercial trellising methods. The trellising system uses state of the art technologies that will enhance vineyard management. The horticulture team uses the site for field days and other hands-on learning programs for grape producers. The demonstration size was planned for more donums, but excessive construction costs caused a reduction in size. During the next reporting period, USAID-*Inma* has planned to add five additional donums of trellis at another location.

2.4.4. Activities Planned April - June, 2012

1. USAID-*Inma* Horticulture staff will be conducting a series of field days for farmers emphasizing trainings in pruning, pest management, irrigation and other activities related to the fall season for the management of the grapevines and orchards.
2. USAID-*Inma* staff will continue to provide technical assistance in production, maintenance and operations for the Al-Zaytoon Olive Association in Ninawa governorate.
3. A service provider has been identified to provide the installation of trellises in the last vineyard site.
4. The USAID-*Inma* field staff working under the direction of both horticulture and business development will provide technical assistance and guidance to orchard owners for orchard sustainability and business management.

2.5 POST PRODUCTION, PACKING HOUSE AND SPECIALTY CROPS

The USAID-*Inma* packing house activity was initiated in 2009 under the direction of PRTs. The establishment of the packing houses was to increase freshly packed produce for the local market. Currently, none of the packing facilities are in full operation, minimal produce is processed in the facilities, thereby generating limited sales and employment opportunities. Efforts to reestablish the operation of the facilities continues. Over the last reporting period USAID-*Inma* staff has conducted roundtable discussions with vegetable producers, packing house owners and wholesalers in the areas to create market linkages and encourage processing. The program has had limited results. Packing houses in Fallujah, Radhwaniyah and Taji are operational, but not to full capacity, while the Rabeea and Karbala are closed. There has been no explanation why the Karbala and Rabeea packing houses are closed. Late in the last reporting period a fire destroyed the Balad Canning Factory. Final audits of these activities are being conducted to close out the projects.

2.5.1. Contribution to Strategic Objectives

Table 2.5: Fruit and Vegetable Value Chain PMP Indicators and Impact to Date					
Activity 4	Packing Houses				
SO #	SO	This Quarter	Cumulative As of Sept 2011	To Date	Goal
8.2.2.1(PH)	Sales of targeted annual vegetables and fruit in program assisted areas	\$505,466	\$13,090,789	\$14,256,128	\$13,925,000

2.5.2 Activities Implemented January – March, 2012

1. USAID-*Inma* staff continued to monitor production output and collect monthly sales and volume information.
2. Final closeout of activities.
3. The staff continues to work with producers to find methods to integrate production solutions for farmers and retail sales. The upcoming rural service center assessment may provide useful insight.

2.5.3. Challenges Faced

Challenge: Lack of packing house owners to operate facilities effectively and continuously providing farmers better markets for their produce.

Solution: Provide roundtable discussions with vegetable growers, packing house owners and wholesalers in the region. This activity has had minimal effect on operation of facilities.

Challenge: Fire destroyed canning factory.

Solution: None. Closeout procedures for the grant will be initiated.

2.5.4. Activities Planned April – June, 2012

1. The USAID-*Inma* staff will continue to collect market prices and product volumes and provide the information to associations and various technical groups.
2. The technical staff will continue to provide on-going technical assistance to the operating packing houses and personnel in personnel hygiene, supply chain sanitation and transport.
3. The technical staff will continue to provide technical assistance in packaging and transport of product from the field to the consumer.
4. The USAID-*Inma* staff will continue to plan and implement a simple rural development center strategy to ensure the delivery of inputs to farmers and the potential for consolidation of farmer products. Although there may seem to be minimal progress in the implementation of the centers, the technical staff continues to collect information and hold meetings. It has been discovered the initial thoughts were inaccurate and the early implementation plans would not result in sustainable enterprises.
5. The USAID-*Inma* staff will provide training and technical assistance to associations and farmer groups in budgeting and various association issues.
6. The technical staff will continue to provide targeted technical assistance in marketing and development of linkages with various retail markets within Iraq.

2.6 IRRIGATION

The USAID-*Inma* Irrigation Team activities are divided into: a) providing technical assistance to farmers involved within the horticulture value chain program i.e. orchards and vineyards, row crops, vegetables and greenhouses aimed at improving current water management conditions; and, b) training USAID-*Inma* staff, public sector officials and farmers. The irrigation team conducts field days, round table meetings, conferences and workshops to promote new technology, services and techniques in water efficiency.

The Field Base Learning Centers are fully equipped with irrigation equipment. Therefore, the efforts of the Irrigation Team were devoted to providing technical assistance to farmers as well as monitoring the operation conditions of the irrigation systems, including the estimation of the irrigation uniformity, and conducting farmer field schools. Irrigation Programming and Scheduling was an important topic during the technical assistance activities. The program compared planned irrigation scheduling with actual irrigation scheduling using either tensiometers or granular matrix sensors (Watermark sensors) to demonstrate the importance of proper scheduling which results in improved water efficiency.

2.6.1 Activities Implemented January – March, 2012

1. In the Al Shehaymiyah Water Users Association Command Area, the canal network was rehabilitated, including the gates and regulators along the main canal and the secondary canals in key critical points. The cooperation from the Department of Water Resources from Al Shehaymiyah was vital for the success in this activity. The repair of the canal network is closely linked to the preparation of a Rapid Intervention Program (RIP) (Water Distribution Model), which has already started, for analyzing the distribution network and the on-farm irrigation needs for developing management strategies.
2. The preparation of the Water Distribution Model includes the development of geo-referenced maps and the utilization of satellite images. Thus, Water User Association Members, Water Resources and Agriculture Department staff and USAID-*Inma* staff (22 trainees) received a very comprehensive training on Geographical Information System (GIS). The training included on-the-job training on GIS in Water Resources, Data Base design and preparation, canal rating and flow measurement. The GIS-Data Base training included the creation of the shapefiles structure, identification of missing

data, and data entry quality control. In order to correctly build a GIS project for the Al Sheahmiah Project, a hands-on class “ArcView 9.x GIS software” was used for the trainings.

3. The Water Distribution Model that was developed included the following: a) Inventory of data which was prepared by USAID-*Inma* staff and included a list of missing data; b) Canal and gate rating tool which classifies the types of linings, sets the criteria to choose representative segments/structures to be rated, designed the field rating forms, and conducts a first field rating (USAID-*Inma* personnel); c) Head survey tool which uses the rating form discussed and identified what needs to be revised; d) Training on RIP which outlines, together with selected activities carried out in Texas (canal lining evaluation, GIS applications). The model was presented at the Agriculture Ministry Experimental Farm to the habitual group, personnel from the Water Resources Department, and to the USAID-*Inma* agronomist. Fifteen people attended the presentation which lasted about 1.5 hours.
4. The Water Management Pilot Area (60 donums) located in the Shehamiyah Water User Association (WUA) command area was completed. The irrigation of wheat by surface irrigation was controlled especially in terms of water discharge and irrigation time, more specifically when to cut the input of water in order to avoid losses by deep percolation and excessive runoff. Comparisons were made with the use of water in adjacent fields traditionally irrigated. The drip irrigation system will be used for melons, while the hose-move system will be used for wheat. This demonstration area will be used for training members of the Water User Association as well as Department of Water Resources and Agriculture staff during the next quarter.
5. To complement the above irrigation activities an Automatic Weather Station, current meters and the drain cleaning equipment will be installed.
6. The drip irrigation systems for the two (five- donums each) olives demonstration areas in Baashiq, Ninewa Governorates have been installed in addition to the pumping system and watermark sensors to measure soil moisture conditions. The system will allow farmers to adjust irrigation times and intervals to reach optimal operation of irrigation system. The USAID-*Inma* irrigation team will continue monitoring and provide technical assistance to the project.
7. A Round Table on Water Management was held in Basrah with the participation from the Departments of Water Resources and Agriculture from the Governorates of Basrah, Missam and DhiQar. Approximately forty five participants discussed issues relating to water management problems in the Southern Governorates, water and soil salinity problems in agriculture and water demand management concepts to improve irrigation efficiencies and reduce water losses.
8. Twenty five Ministry of Agriculture staff was trained on irrigation related issues.

2.6.1. Challenges Faced

Challenge: High saline levels in water and soil in Central and Southern governorates.

Solution: USAID-*Inma* staff must work closely with farmers to enhance their understanding of water management, taking into account soil type, water quality, irrigation system being used and crop.

Challenge: Lack of farmers participating in Farmer Field Schools.

Solution: Field staff must organize a series of meetings with farmers to gain a better understanding of farmer’s priorities so they can be addressed in the training programs. USAID-*Inma* staff needs to work more closely with MOA Extension staff to convey the technical information to the farmers.

Challenge: Farmers reluctant to adopt new technologies.

Solution: Field demonstration comparing traditional and best practices techniques.

2.6.2. Activities Planned January – March 2012

1. Continue monitoring the water management pilot area in Shehaymiyah;
2. Provide technical irrigation assistance to the FBLCs , farmers, MOA officials and extension staff;
3. Implement irrigation curriculum in FFS programs;
4. Installation of the Automatic Weather Station;
5. Finalize the preparation of the Rapid Intervention Program for the Al Shehamiyah Water Users Association area.
6. Finalize the agricultural water assessment.

3. BUSINESS DEVELOPMENT AND CROSS-CUTTING SERVICES

The quarterly activities for the cross-cutting USAID-*Inma* Business Development team focused on capacity building with MOA management, assisting with technical trainings for producers and creating stronger market linkages with producers, packers and traders in working in vegetable industry. Multiple trainings guided MOA management through effective business management principles, including managing people, sound investment principles and decision making. Farmers were shown new technologies to enhance production, better livestock management concepts and cost analysis.

3.1 BUSINESS ASSISTANCE

USAID-*Inma* staff implemented numerous trainings to vegetable farmers, MOA management, livestock producers and associations' management in new technologies, financial management, operational management, business planning and investment. This focused assistance provided companies, farmers and associations competence to manage financial resources, develop procedures, policies and systems to effectively conduct business on a day-to-day basis while controlling costs and understanding market decisions. These management tools allow agribusinesses and MOA to respond to competitive conditions, reach sustainability and prepare for future growth.

USAID-*Inma* Supports the Establishments of the Iraqi Fish Union Council

USAID-*Inma* supported the establishment of the Iraqi Council to Support Fisheries, a national umbrella association which incorporates key actors in the aquaculture supply chain, such as associations, producers, fish farms, feed mills, fish hatcheries, wholesale markets, retail markets and other services.

The newly established Council submitted an application to the Directorate of Non-Governmental Organizations to be recognized as the formal entity representing the Iraqi fish industry.

The Council has announced it will address a number of key issues through the government, such as licensing and water management.



3.1.1. Activities Implemented January – March 2012

1. To address MOA Capacity Building the USAID-*Inma* staff implemented two training programs: (a) Better Administration Practices, for senior executive officers, and (b) Better Business Management Practices, for senior executives of seven MOA owned companies. The trainings provided tools to improve management efficiency, decentralization of decision-making processes, strategic planning and effective utilization of available resources.
2. USAID-*Inma* staff conducted three roundtables on “Making Money in Agriculture” for MOA selected small and medium entrepreneurs (SMEs) from fifteen provinces. Given the current conditions foreign direct investment in the agriculture sector is limited; MOA wants to focus on Iraqi SMEs as a means to improve local economy by offering incentives. The MOA “Agriculture Investment Promotion Plan” drafting committee completed its task and presented a copy of the draft plan to USAID-*Inma* staff.
3. USAID-*Inma* staff led two training seminars on “Fish Farming” and “Vegetable Grafting” targeted at MOA technical staff to improve technical skills and abilities.

4. The newly established Iraqi Council to Support Fisheries, which incorporates key actors in the aquaculture supply chain at the national level, submitted an application to the Directorate of Non-Governmental Organizations for recognition as the formal entity representing the Iraqi fish industry. The Council has announced it will address a number of key issues through the government, such as licensing and water management. During the quarter, USAID-*Inma* sponsored one meeting for the Council Board of Directors.
5. As a result of promoting dates through Duty Free and Diplomatic shops which have been supported by the business development team, Basrah Dates signed a contract with a Venezuelan importer for the provision of twenty-nine metric tons of packed pitted dates, shipped during February.
6. The USAID-*Inma* business development team assisted program beneficiaries with suitable packaging, bar codes, logos, quality control forms, delivery notes and electronic invoicing in compliance with the contracts that the beneficiaries signed with Carrefour in Erbil. The contracts were for fresh strawberries, poultry and dates. Three USAID-*Inma* beneficiaries signed contracts with Carrefour.
7. The USAID-*Inma* business development team in combination with horticulture team sponsored a Honey Industry roundtable in Erbil. The event brought key actors of the honey value chain together including twenty three bee-keepers, six small and medium enterprises (SMEs) and officials from the Kurdish MOA. The roundtable provided a platform to identify major constraints facing the industry as well as new market opportunities.
8. The business development staff facilitated a meeting between several Kurdish SMEs interested in exporting honey and dates to the UAE and executives from the Al Bogai Group in Dubai to work on future business deals.
9. The business development staff assisted Livestock technical staff in the implementation of eleven seminars for 4-H club leaders. The leaders were trained in sheep production and small flock management.
10. The business development staff assisted the horticulture and irrigation teams with a roundtable activity in Basrah on Water Use. Sixty-seven participants attended the roundtable which discussed possible solutions to improve current water management policies in the Basrah area.
11. Business development staff cooperated with Irrigation in the implementation of a training course on Geographical Information Systems (GIS) applied to water distribution systems and management.

3.1.2. Challenges Faced

Challenge: Security remained an important issue, USAID-*Inma* training staff could not travel to MOA facilities.

Solution: Trainings for the MOA were held at the USAID-*Inma* offices.

Challenge: Packing sheds have not been operating as planned; some were idle with very little production.

Solution: USAID-*Inma* staff implemented a roundtable activity for packing shed owners, producers and traders to create stronger linkages between the three sectors to focus on developing successful business transactions between producers, packing sheds operators, wholesale and retail markets. The activity focused on two critical gaps within the supply chain: market diversification and contract growing.

3.1.3. Activities Planned April – June 2012

1. The USAID-*Inma* Business Development team in coordination with different colleges from Baghdad University will continue to provide technical training for MOA senior staff to improve technical and managerial skills and abilities.
2. The Business Development team will continue assisting other project components implement activities. Specific direct assistance will include greenhouse management, producer groups, FBLC activities, FFS activities, rural service centers and livestock related activities. Activities will include roundtables, workshops, on-site technical assistance, technical training and management seminars.

3. The Business Development staff will also continue supporting associations and agribusinesses to improve competitiveness at the regional and national level. Activities will include targeted trainings, technical assistance, market intelligence and development of appropriate strategic solutions.

3.2 ASSOCIATION DEVELOPMENT

The current situation in Iraq allows the wholesalers control both the downstream and upstream of the market. Farmers independently have to negotiate prices for crops with multiple actors within the supply chain, thus making them dependent on wholesalers. Often times the prices are dependent on quantity, quality and variety of crops and imports entering the country. This results for poor bargaining power for producers and control at the wholesale level. To address this challenge the business development staff has continued to work with farmer associations and the MOA in creating market linkages in the agricultural supply chain. These groups consist of more than 4,800 members and cover a wide variety of crops. The goal of these activities is to build human capital in the associations and allow farmers to utilize collective bargaining power to market produce and become a key component market pricing.

3.2.1. Activities Implemented January – March 2012

1. The business development staff implemented two refresher courses on Best Management Practices and Record Keeping for managerial staff and selected members of the Board of Directors from eight agricultural associations in four provinces: Anbar, Babil, Maysan and Wasit.
2. The USAID-*Inma* Business development staff assisted with the three training courses on two-wheel tractors in Baghdad and Erbil for farmers, extension staff and MOA officials.

3.2. 2. Challenges Faced

Challenge: For the past twenty years, agricultural production followed a top-down system in which the government provided inputs to producers. Therefore, association management directed production, very few have members had any input into decisions made by the management.

Solution: USAID-*Inma* has provided association members with technical trainings in good governance, empowerment and ownership responsibilities for the members. The USAID-*Inma* business development team will conduct intensive training for the Board of Directors and members of all participating associations.

Challenge: Farmers have not worked as a team to develop a role in pricing and policy issues.

Solution: The USAID-*Inma* team will implement trainings in association management,

3.2.3. Activities Planned January – March 2012

1. The Business Development staff will continue to support the Iraqi Council to Support Fisheries, through roundtables, conferences and seminars in order to ascertain its representatives the interests of the actors in the aquaculture supply chain.
2. The Business Development team will support the Horticulture team in the timely transfer of agricultural equipment to agricultural associations coalesced around the FBLCs in country.
3. Sustainability, good governance, management, empowerment and ownership of associations require informed and educated members that are aware of duties and responsibilities. The Business Development staff will continue to train Board of Directors and members of the nine participating associations.

3.3 RURAL DEVELOPMENT CENTERS

3.3.1. Activities Implemented January – March 2012

Rural Development Center: Activities implemented: January – March 2012

The initial objective of the development of rural development centers was to provide access to agricultural equipment, agricultural inputs, technologies and services to producers. Based on data previously gathered by USAID-*Inma* field staff, the team recommended ten existing farm stores from the following provinces to participate in the program: in the South Dhi Qar and Mayssan (2 stores), Muthana (2 stores) and Basra; in the North Dohuk, Ninawa, Erbil and Kirkuk. These ten stores would make equipment available to nearly 197,000 donums of farm land and more than 10,000 farmers. The information on each store was analyzed by technical staff and equipment inventories were identified for each store and specifically for the crops grown in the service area.

Proposed equipment included tillage, sowing, harvesting, forage production, fertilizer application and post-harvest handling in multiple areas of crop production. Particular attention was given to new technologies such as minimum tillage equipment and practices. During the initial analysis it was determined that local farmers would lack the skills need for the proper use of equipment. Thus potential dealers were contacted based on the willingness and ability to provide an operator for the machinery and the ability to maintain the equipment.

After continued discussions with the dealers and other agricultural input suppliers it was determined that the demands of the producers may differ from the initial analysis. Thus, the focus shifted from a rental to a service enterprise for the farm store. Training materials were created for both dealers and operators. Dealer trainings consisted of accounting, Best Management Practices, marketing, advertising, crop safety, and equipment operator training, which includes tractor and machinery safety, routine maintenance and hands on training in basic farm machinery operation.

Sustainability was anticipated by adoption and expansion of services enabling dealers to finance and expand equipment inventory to serve farmers more efficiently and therefore increase the production and efficiency of customers and employment opportunities by creating additional operator positions.

Deeper analysis of the data indicated that farm store operators and farmers needed (and wanted) information and education in the areas of integrated nutrient management, crop protection, integrated pest management and new concepts and practices in agriculture. Globally, farmers depend more on input dealers for information, recommendations and education than on government agricultural extension agencies; dealers are more than willing to supply these needs and desires simply because it is good for business.

The USAID-*Inma* staff will now shift efforts to education of farm store owners and managers to address customer demand for services and information. Using the methodology and techniques of the “Rapid Participatory Rural Assessment” (RPRA) USAID-*Inma* staff will develop a program, drawing on farm store production and agribusiness education, to provide dealers with tools to research and disseminate information in areas deemed important to customers. These areas include management, finance, marketing, crop nutrition, crop protection, post-harvest handling and other areas.

The proposed assessment will be implemented through interviews, surveys and field observations to create a greater understanding of agricultural issues in rural areas. The program is designed to understand producer demands and utilize the information to develop the rural service center.

3.3. 2. Challenges Faced

Challenge: The initial market assessment conducted by USAID-*Inma* staff did not provide the information needed to make further progress on rural development centers.

Solution: A comprehensive assessment will be completed in the five northern governorates in Iraq. The USAID-*Inma* staff is in the process of designing the instruments that will be used as tools for the collection of field data. The new data will then be used to design the strategy and design for proper rural service centers.

Challenge: Designing and implementation of instrument(s) that will allow USAID-*Inma* technical staff to make proper decisions for development of model.

Solution: The USAID-*Inma* technical staff management has started to develop the instruments and working with local implementing partners for the assessment.

3.3.3. Activities April – June 2012

Using the methodology and techniques of the “Rapid Participatory Rural Assessment” (RPRA) USAID-*Inma* staff will develop a program to provide dealers with tools to research and disseminate information in areas such as management, finance, marketing, crop nutrition, crop protection, post-harvest care of commodities, and other areas deemed important and vital to farmer demands.

4. ADMINISTRATION AND OPERATIONS

The USAID-*Inma* administration team continues to manage and increase the efficiency of the program, providing oversight and mentoring local nationals for greater responsibility in planning and implementation of activities. Management continues to implement and follow all federal and corporate regulations while meeting the needs of the Iraqi people.

This reporting quarter also saw many personnel changes in many areas of the USAID-*Inma* program. The Deputy Chief of Party – Finance Manager, Communications Officer and Business Specialist chose to depart the program for other opportunities. Likewise, various national staff member departed the program. Key national staff members have taken additional responsibilities with the departure of the above staff.

4.1. Activities Implemented January – March 2012

1. The Procurement Manager is filling the role of DCOP.
2. USAID-*Inma* management has started to implement a closeout plan for the project, over the next six months and approximately ten percent of the manpower will be tasked to closeout activities.
3. To deal with visa and travel issues in Baghdad which is reducing the ability to travel to the office; management has placed one finance staff in the Erbil office allowing payments to be made in the KRG area in a timely fashion.
4. Key responsibilities were changed for the Operations manager in Erbil.

4.2. Challenges Faced

Challenge: Travel is extremely limited in Baghdad, USAID-*Inma* management has limited access to the embassy and other US held facilities.

Solution: Continuing to work with Iraq Government and U.S. government to find solutions.

Challenge: Violence has increased causing deterioration in the security situation.

Solution: Management continues to review security situation reports and revise plans on a daily basis.

Challenge: DCOP and Communications Officer left the project.

Solution: Management has relied on current staff to fill the voids to complete needed work.

4.3. Activities Planned April – June 2012

1. To continue the closeout process for the project.
2. Continue to develop local nationals for senior management roles.
3. Continue to monitor security situation and to ensure staff safety.

5. GENDER - MARGINALIZED GROUPS MAINSTREAMING ACTIVITIES

The USAID-*Inma* Agribusiness Program continues to move forward with underserved populations earning their livelihoods in agriculture production throughout Iraq. Women, youth and marginalized groups play an important role in the development of the agriculture sector. These people provide the labor for livestock, row crop and greenhouse production, while serving as the glue that holds rural families together. The USAID-*Inma* program continues to design and implement projects in all facets of production agriculture that adds to the advancement of women, youth and marginalized groups and create sustainable incomes for the families and add stability to rural communities. During the reporting period, the USAID-*Inma* program provided greenhouse production trainings to widows, implemented safe equipment operation trainings to female farmers, created women and youth-driven livestock production projects which act a supply mechanism to feedlots and business record keeping to female business owners and farmers. More than three hundred women-led families continue to benefit from the USAID-*Inma* and Iraq 4-H partnership, and another one hundred families are gaining stability in a woman owned dairy production program. All of these beneficiaries now have or are gaining the needed skills and physical capital to effectively operate and manage small businesses which will help reduce rural poverty.

Data collection and storage tools disaggregate on the basis of gender for all program activities.

5.1 Activities Implemented January – March, 2012

1. Trained three hundred seventy five women sheep producers in flock management.
2. Created practical livestock production learning opportunities for over three hundred seventy five youth.
3. Trained women farmers on safe equipment operation at the women-owned Field-Based Learning Center in Ninawa Province.
4. Developed two commercial poultry production programs for displaced women in Diyala, benefitting eighty families.
5. Developed a creep feeding program for over six hundred twenty two lambs born on the sheep production projects.
6. Trained twenty youth at the Salam 4-H dairy project proper calving techniques to reduce calf mortality.
7. Continued to monitor and collect data on the water buffalo feed trial operated on twelve women-led farms in Najaf, Muthanna, Basrah, Maysan and Dhi Qar governorates. The technical assistance and demonstration was designed to improve milk production in water buffalo using locally available feeds.
8. Provided Farmer Field School programs for women greenhouse producers throughout Iraq.
9. Provided a vegetable grafting training program for women vegetable in the Baghdad -Rabee area.
10. Provided training to women MOA staff in multiple areas of production and working with marginalized groups.
11. Established a one hundred women dairy program in Ninawa.
12. Opened new commodity market linkages for Al Rawasi Widows & Orphans Association in Kurdish Region.

5.2 Challenges Faced

Challenge: Enhancing live births at all sheep production projects.

Solution: Working closely with women during lambing season and providing technical assistance.

Challenge: Ensuring proper management of sheep flocks and animal growth.

Solution: Train 4-H volunteers and club management in animal production.

Challenge: Cultural issues regarding a woman's inability to travel outside their communities.

Solution: Trainings for women were held within their own communities or if not possible, a male family member accompanied them to the trainings.

Challenge: Security has eroded in Iraq, becoming extremely risky for all staff.

Solution: The USAID-*Inma* agribusiness program has begun to create working relationships with other implementers to reach locations where USAID-*Inma* may not have staff located, thus allowing USAID-*Inma* to reach further into rural communities.

Activities Planned April – June, 2012

1. Design business plans for sheep production enterprises owned by marginalized groups of youth and women producers.
2. Work with Zanabeq Al-Hakel Womens' Association management in designing and implementing the spring planting activities for the Farmer Field School trainings at the site in the Ninawa governorate.
3. Monitor the two women-led poultry operations in Diyala and assist in the marketing of live birds.
4. Monitor the "Salam" 4-H dairy club's newly born calves to ensure healthy growth.
5. Finalize and analyze data from the water buffalo feed demonstration.
6. Provide technical assistance to women greenhouse owners through the plant growth cycle.
7. Continue working with the Najaf women's association in product development.
8. Monitor and provide technical assistance to women farmers who received grafted transplants in the Baghdad and Rabee areas.
9. Provide technical assistance to marginalized groups who were recipients of the dairy cattle production program in Ninawa.
10. Develop forage production programs for marginalized groups in the livestock sector.

6. APPENDICES

APPENDIX A: COMPLETED ACTIVITIES

No	Activity	Type	GFA	Province	Start Date	End Date	Total Number	Male	Fem ale	Budget
1	Vegetable Grafting Training	MOA Staff Training	N	Erbil	15-Jan-12	15-Jan-12	34	26	8	\$800.00
2	Vegetable Grafting Training	MOA Staff Training	N	Erbil	16-Jan-12	16-Jan-12	30	14	16	\$800.00
3	Two Wheel Tractor Training	Greenhouse	C	Diyala	18-Jan-12	18-Jan-12	17	17	0	\$0.00
4	Orchard Pruning Training	Orchard	N	Erbil	22-Jan-12	22-Jan-12	37	31	6	\$1,250.00
5	Agriculture Equipment Training (FBLC)	FFS-FBLC	N	Erbil	23-Jan-12	24-Jan-12	36	36	0	\$0.00
6	Two Wheel Tractor Training	Greenhouse	N	Erbil	25-Jan-12	25-Jan-12	18	18	0	\$830.00
7	Two Wheel Tractor Training	Greenhouse	N	Erbil	26-Jan-12	26-Jan-12	7	7	0	\$830.00
8	Beekeeping Training	Orchard	N	Erbil	26-Jan-12	26-Jan-12	33	20	13	\$5,476.00
9	Vegetable Grafting Training	Greenhouse	C	Baghdad	31-Jan-12	31-Jan-12	15	13	2	\$0.00
10	Two Wheel Tractor Training	Greenhouse	C	Baghdad	31-Jan-12	31-Jan-12	15	13	2	\$0.00
11	Two Wheel Tractor Training	Greenhouse	C	Baghdad	01-Feb-12	01-Feb-12	19	17	2	\$0.00
12	Two Wheel Tractor Training	Greenhouse	C	Baghdad	02-Feb-12	02-Feb-12	21	19	2	\$0.00
13	Grape Seminar with MOA	Seminar	N	Erbil	02-Feb-12	02-Feb-12	4	4	0	\$375.00
14	Vegetable Grafting Training	Greenhouse	N	Erbil	06-Feb-12	07-Feb-12	18	17	1	\$1,923.00

15	Vegetable Grafting Training	Greenhouse	N	Erbil	06-Feb-12	06-Feb-12	37	24	13	\$1,923.00
16	Wheat Seminar	Seminar	N	Erbil	08-Feb-12	08-Feb-12	16	8	8	\$1,390.00
17	Wheat Seminar	Seminar	N	Erbil	09-Feb-12	09-Feb-12	14	14	0	\$1,390.00
18	Two Wheel Tractor Training	Greenhouse	C	Baghdad	28-Jan-12	28-Jan-12	12	12	0	\$1,223.00
19	Two Wheel Tractor Training	Greenhouse	C	Baghdad	29-Jan-12	29-Jan-12	10	10	0	\$1,223.00
20	Two Wheel Tractor Training	Greenhouse	C	Baghdad	30-Jan-12	30-Jan-12	8	8	0	\$1,223.00
21	Two Wheel Tractor Training	Greenhouse	C	Baghdad	05-Feb-12	05-Feb-12	25	25	0	\$2,177.50
22	Two Wheel Tractor Training	Greenhouse	C	Baghdad	06-Feb-12	06-Feb-12	22	22	0	\$2,177.50
23	Agriculture Equipment Training (FBLC)	FFS-FBLC	SE	Muthanna	09-Feb-12	09-Feb-12	24	24	0	\$0.00
24	Agriculture Equipment Training (FBLC)	FFS-FBLC	C	Diyala	09-Feb-12	09-Feb-12	12	12	0	\$0.00
25	4 H Sheep Breeding	Seminar	SE	Basra	11-Feb-12	11-Feb-12	35	15	20	\$625.00
26	4 H Sheep Breeding	Seminar	N	Kirkuk	11-Feb-12	11-Feb-12	26	5	21	\$870.00
27	4 H Sheep Breeding	Seminar	SE	Muthanna	12-Feb-12	12-Feb-12	35	25	10	\$870.00
28	4 H Sheep Breeding	Seminar	SE	Dhi-Qar	12-Feb-12	12-Feb-12	49	20	29	\$870.00
29	4 H Sheep Breeding	Seminar	C	Anbar	12-Feb-12	12-Feb-12	42	8	34	\$870.00
30	Vegetable Grafting Training	Greenhouse	C	Baghdad	12-Feb-12	13-Feb-12	11	7	4	\$0.00
31	Beekeeping Training	Orchard	N	Erbil	15-Feb-12	16-Feb-12	41	38	3	\$5,476.00
32	Agriculture Equipment Training (FBLC)	FFS-FBLC	SE	Muthanna	16-Feb-12	16-Feb-12	23	23	0	\$0.00
33	Agriculture Equipment Training (FBLC)	FFS-FBLC	S	Dewaniya	14-Feb-12	14-Feb-12	22	22	0	\$0.00
34	Arc View / GIS	Irrigation	C	Baghdad	12-Feb-12	16-Feb-12	21	19	2	\$19,830.00
35	Management, Planning, Operation Control & Profit Training	MOA Training	C	Baghdad	25-Jan-12	26-Jan-12	13	8	5	\$0.00

36	Management, Planning, Operation Control & Profit Training	MOA Training	C	Baghdad	01-Feb-12	02-Feb-12	13	8	5	\$0.00
37	Agriculture Investment promotion Plan committee	MOA Training	C	Baghdad	09-Feb-12	09-Feb-12	7	4	3	\$0.00
38	Agriculture Investment promotion Plan committee	MOA Training	C	Baghdad	16-Feb-12	16-Feb-12	6	3	3	\$0.00
39	Vines Cutting	Orchard	SE	Dhi-Qar	15-Mar-12	15-Mar-12	7	7	0	\$0.00
40	4 H Sheep Breeding	Seminar	S	Wasit	08-Feb-12	08-Feb-12	26	8	18	\$870.00
41	Agriculture Equipment Training (FBLC)	FFS-FBLC	SE	Basra	20-Feb-12	20-Feb-12	25	25	0	\$625.00
42	Integrated Management Of Pest	Orchard	N	Erbil	20-Feb-12	20-Feb-12	28	27	1	\$5,326.00
43	Plant Protection & Tuta Absoluta Control	Greenhouse	SE	Muthanna	20-Feb-12	20-Feb-12	10	10	0	\$0.00
44	Tissue Culture Training	Greenhouse & Open Filed	SE	Basra	21-Feb-12	22-Feb-12	22	18	4	\$2,850.00
45	4 H Sheep Breeding	Seminar	SE	Mayssan	20-Feb-12	20-Feb-12	32	24	8	\$530.00
46	Make Money in Agriculture training	Private Sector Training	C	Baghdad	19-Feb-12	20-Feb-12	10	8	2	\$0.00
47	Make Money in Agriculture training	Private Sector Training	C	Baghdad	21-Feb-12	21-Feb-12	11	11	0	\$0.00
48	Fish Farming Training	Aquaculture Training	C	Baghdad	22-Feb-12	22-Feb-12	11	10	1	\$0.00
49	Greenhouse & Open Field Management FBLC	FFS-FBLC	SE	Muthanna	18-Jan-12	18-Jan-12	19	19	0	\$0.00
50	4 H Sheep Breeding	Seminar	N	Salah Ad Din	11-Feb-12	11-Feb-12	30	21	9	\$870.00
51	4 H Sheep Breeding	Seminar	N	Ninawa	21-Feb-12	21-Feb-12	33	14	19	\$870.00
52	Agriculture Equipment Training (FBLC)	FFS-FBLC	SE	Muthanna	22-Feb-12	22-Feb-12	20	20	0	\$0.00
53	4 H Sheep Breeding	Seminar	C	Baghdad	04-Feb-12	04-Feb-12	34	1	33	\$830.00

54	Greenhouse Training	Greenhouse FFS (women)	S	Babal	25-Feb-12	25-Feb-12	20	4	16	\$0.00
55	Potato Tissue Culture Training	Greenhouse & Open Filed	C	Baghdad	16-Feb-12	16-Feb-12	8	6	2	\$0.00
56	Make Money in Agriculture training	Private Sector Training	C	Baghdad	26-Feb-12	27-Feb-12	16	16	0	\$0.00
57	Agriculture Equipment Training (FBLC) - FFS	FFS-FBLC	C	Diyala	26-Feb-12	26-Feb-12	12	12	0	\$0.00
58	Animal Science 101 Training	Animal Production Management	N	Erbil	28-Feb-12	28-Feb-12	27	13	14	\$4,142.00
59	Agriculture Investment promotion Plan committee - Coaching	MOA Training	C	Baghdad	01-Mar-12	01-Mar-12	6	2	4	\$0.00
60	Agriculture Equipment Training (FBLC)	FFS-FBLC	SE	Muthanna	01-Mar-12	01-Mar-12	17	17	0	\$0.00
61	Honey Quality Training	Orchard	N	Erbil	06-Mar-12	06-Mar-12	32	29	3	\$5,196.00
62	Arc View / GIS (Part 2)	Irrigation	C	Baghdad	04-Mar-12	04-Mar-12	15	13	2	\$6,610.00
63	Arc View / GIS (Part 2)	Irrigation	C	Baghdad	05-Mar-12	05-Mar-12	15	13	2	\$6,610.00
64	Arc View / GIS (Part 2)	Irrigation	C	Baghdad	06-Mar-12	06-Mar-12	14	12	2	\$6,610.00
65	Nutrition of Orchard Fruit Trees	Orchard	N	Erbil	07-Mar-12	07-Mar-12	5	5	0	\$0.00
66	Agriculture Investment promotion Plan of Iraq	MOA Training	C	Baghdad	08-Mar-12	08-Mar-12	5	3	2	\$0.00
67	Greenhouse Clusters Training	Advanced Greenhouse Training	C	Diyala	08-Mar-12	08-Mar-12	21	21	0	\$0.00
68	Honey Quality Roundtable	Round Tables	N	Erbil	08-Mar-12	08-Mar-12	32	30	2	\$5,033.00
69	Orchard - Field Day	Orchard	S	Wasit	07-Mar-12	07-Mar-12	16	16	0	\$625.00
70	Greenhouse - Field Day	Greenhouse	SE	Dhi-Qar	10-Mar-12	10-Mar-12	25	25	0	\$625.00
71	FBLC- Filed Day	FBLC	C	Diyala	10-Mar-12	10-Mar-12	25	25	0	\$625.00
72	Strawberry Transplant Criteria	Advanced Greenhouse Training	C	Baghdad	01-Mar-12	01-Mar-12	7	4	3	\$0.00

73	Tissue Culture Training	Advanced Greenhouse Training	C	Baghdad	08-Mar-12	08-Mar-12	2	2	0	\$0.00
74	Potato And Pomegranate Production	Advanced Greenhouse Training	C	Baghdad	06-Mar-12	06-Mar-12	3	3	0	\$0.00
75	Greenhouse - Field Day	Greenhouse	SE	Muthanna	11-Mar-12	11-Mar-12	25	25	0	\$625.00
76	MOA-Training on Better Administration practices	MOA Training	C	Baghdad	11-Mar-12	11-Mar-12	6	4	2	\$0.00
77	MOA-Training on Better Administration practices	MOA Training	C	Baghdad	12-Mar-12	12-Mar-12	8	5	3	\$0.00
78	Agriculture Equipment Training (FBLC)	FBLC	S	Babal	10-Mar-12	10-Mar-12	21	21	0	\$625.00
79	Greenhouse Training	Greenhouse	C	Diyala	12-Mar-12	12-Mar-12	23	0	23	\$0.00
80	Greenhouse - Field Day	Greenhouse	N	Sulaymania	10-Mar-12	10-Mar-12	23	23	0	\$625.00
81	FBLC- Filed Day	FBLC	SE	Basra	12-Mar-12	12-Mar-12	25	25	0	\$625.00
82	Grape Rooted Cutting Planting & Management	Orchard FFS	SE	Muthanna	14-Mar-12	14-Mar-12	9	9	0	\$0.00
83	Agriculture Investment promotion Plan of Iraq	MOA Training	C	Baghdad	14-Mar-12	14-Mar-12	2	1	1	\$0.00
84	Fish Cages Training	Aquaculture Training	C	Baghdad	10-Mar-12	11-Mar-12	27	27	0	\$28,150.00
85	Fish Cages Training	Aquaculture Training	C	Baghdad	17-Mar-12	18-Mar-12	27	27	0	\$28,150.00
86	Agriculture Equipment Training (FBLC)	FBLC	N	Ninawa	14-Mar-12	14-Mar-12	25	25	0	\$625.00
87	Agriculture Equipment Training (FBLC)	FFS-FBLC	S	Dewaniya	11-Mar-12	11-Mar-12	30	30	0	\$0.00
88	Vines Cutting	Orchard	SE	Basra	18-Mar-12	18-Mar-12	10	10	0	\$0.00
89	Agriculture Equipment Training (FBLC)	FBLC-Field Day	SE	Muthanna	19-Mar-12	19-Mar-12	25	25	0	\$625.00
90	Greenhouse Management	Greenhouse	SE	Basra	20-Mar-12	20-Mar-12	24	24	0	\$625.00
91	Agriculture Equipment Training (FBLC)	FBLC-Field Day	N	Ninawa	20-Mar-12	20-Mar-12	25	12	13	\$625.00

92	Stone Fruit production	Orchard	S	Dewaniya	18-Mar-12	18-Mar-12	24	24	0	\$625.00
93	FBLC - Field Day	FBLC-Field Day	S	Dewaniya	19-Mar-12	19-Mar-12	16	16	0	\$625.00
94	Fertilization- Packing Grading Products	Advanced Greenhouse Training	S	Najaf	24-Mar-12	24-Mar-12	26	4	22	\$625.00
95	FBLC - Field Day	FBLC-Field Day	C	Diyala	25-Mar-12	25-Mar-12	25	25	0	\$625.00
96	Orchard - Field Day	Orchard	C	Diyala	22-Mar-12	22-Mar-12	19	19	0	\$625.00
97	Water Use I.R.T	Round Tables	SE	Basra	25-Mar-12	25-Mar-12	60	56	4	\$4,091.00
98	Iraqi Council For Aquaculture Resource Support – Meeting	Aquaculture Training	S	Babal	17-Mar-12	17-Mar-12	30	29	1	\$875.00
99	Orchard - Field Day	Orchard	N	Erbil	31-Mar-12	31-Mar-12	29	29	0	\$625.00
100	Agriculture Equipment Training (FBLC)	FFS-FBLC	SE	Basra	31-Mar-12	31-Mar-12	25	25	0	\$0.00
101	FBLC - Field Day	FBLC-Field Day	SE	Muthanna	21-Mar-12	21-Mar-12	31	31	0	\$625.00
102	Fish Cages Training	Aquaculture Training	S	Babal	08-Mar-12	08-Mar-12	34	34	0	\$28,150.00
103	Fish Cages Training	Aquaculture Training	S	Babal	10-Mar-12	10-Mar-12	34	34	0	\$28,150.00
104	Business Planning and Record Keeping Course (1)	Association Training	C	Baghdad	21-Jan-12	23-Jan-12	16	0	16	\$4,930.00
105	Business Planning and Record Keeping Course (2)	Association Training	C	Baghdad	28-Jan-12	30-Jan-12	20	0	20	\$5,800.00
106	Agriculture Investment Promotion Plan	Coaching	C	Baghdad	23-Feb-12	23-Feb-12	3	3	6	\$0.00
107	4 H Sheep Breeding	Seminar	N	Erbil	26-Feb-12	26-Feb-12	20	4	16	\$870.00
108	MOA - Training on Better Administration Practices / DGs of Boards	MOA Training	C	Baghdad	18-Mar-12	18-Mar-12	14	1	15	\$0.00
109	Alfalfa Field Day	FBLC-Field Day	S	Babal	13-Mar-12	13-Mar-12	20	20	0	\$625.00
110	FFS Field Day	FFS	C	Baghdad	17-Mar-12	17-Mar-12	25	25	0	\$625.00
111	Orchard -FFS Field Day	FFS	S	Karbala	17-Mar-12	17-Mar-12	26	26	0	\$625.00

112	Orchard Field Day	FFS	S	Babal	28-Mar-12	28-Mar-12	25	25	0	\$625.00
113	Agriculture Equipment Field Day		C	Baghdad	08-Mar-12	08-Mar-12	25	25	0	\$625.00
114	FBLC - Field Day	FBLC-Field Day	SE	Muthanna	21-Mar-12	21-Mar-12	31	31	0	\$625.00
115	Greenhouse Transplanting Quarterly Field Day	Greenhouse	SE	Mayssan	22-Mar-12	22-Mar-12	25	25	0	\$625.00
116	Greenhouse Training	Greenhouse Service Subcontract	S	Babal	10-Mar-12	13-Mar-12	25	25	0	\$214.30
117	Greenhouse Training	Greenhouse Service Subcontract	S	Babal	17-Mar-12	20-Mar-12	25	25	0	\$214.30
118	Greenhouse Training	Greenhouse Service Subcontract	SE	Basra	11-Mar-12	14-Mar-12	25	25	0	\$214.30
119	Greenhouse Training	Greenhouse Service Subcontract	S	Karbala	11-Mar-12	14-Mar-12	25	25	0	\$214.30
120	Greenhouse Training	Greenhouse Service Subcontract	N	Sulaymania	26-Mar-12	29-Mar-12	24	24	0	\$214.30
121	Greenhouse Training	Greenhouse Service Subcontract	C	Baghdad	19-Mar-12	22-Mar-12	21	21	0	\$214.30
122	Greenhouse Training	Greenhouse Service Subcontract	N	Salah Ad Din	11-Mar-12	14-Mar-12	20	20	0	\$214.30
123	Greenhouse Training	Greenhouse Service Subcontract	N	Sulaymania	11-Mar-12	14-Mar-12	24	23	1	\$214.30
124	Greenhouse Training	Greenhouse Service Subcontract	C	Diyala	12-Mar-12	15-Mar-12	23	0	23	\$214.30
125	Greenhouse Training	Greenhouse Service Subcontract	C	Diyala	17-Mar-12	20-Mar-12	22	5	17	\$214.30
126	Greenhouse Training	Greenhouse Service	N	Erbil	10-Mar-12	13-Mar-12	23	23	0	\$214.30

		Subcontract								
127	Greenhouse Training	Greenhouse Service Subcontract	S	Karbala	05-Mar-12	08-Mar-12	25	25	0	\$214.30
128	Greenhouse Training	Greenhouse Service Subcontract	S	Najaf	05-Mar-12	08-Mar-12	25	0	25	\$214.30
129	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	C	Anbar	08-Mar-12	08-Mar-12	20	20	0	\$136.36
130	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	C	Diyala	08-Mar-12	08-Mar-12	20	20	0	\$136.36
131	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	N	Erbil	19-Mar-12	19-Mar-12	20	20	0	\$136.36
132	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	C	Baghdad	10-Mar-12	10-Mar-12	20	20	0	\$136.36
133	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	C	Baghdad	11-Mar-12	11-Mar-12	18	18	0	\$136.36
134	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	C	Baghdad	10-Mar-12	10-Mar-12	28	28	0	\$136.36
135	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	C	Anbar	10-Mar-12	10-Mar-12	21	21	0	\$136.36
136	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	N	Sulaymania	15-Mar-12	15-Mar-12	16	15	1	\$136.36

137	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	S	Dewaniya	08-Mar-12	08-Mar-12	18	16	2	\$136.36
138	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	S	Karbala	19-Mar-12	19-Mar-12	25	25	0	\$136.36
139	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	S	Najaf	07-Mar-12	07-Mar-12	22	22	0	\$136.36
140	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	S	Karbala	17-Mar-12	17-Mar-12	24	24	0	\$136.36
141	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	S	Babal	15-Mar-12	15-Mar-12	20	20	0	\$136.36
142	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	N	Sulaymania	25-Mar-12	25-Mar-12	18	17	1	\$136.36
143	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	N	Dahuk	17-Mar-12	17-Mar-12	17	17	0	\$136.36
144	Greenhouse Training (TTA)	Greenhouse Service Subcontract (TTA)	C	Baghdad	21-Mar-12	21-Mar-12	25	25	0	\$136.36
Total							3,046	2,483	571	251,152.66

APPENDIX B: SUBCONTRACTS AND PURCHASED ORDERS

Value Chain	Activity Title	Activity Period		Budget	Comment/Status
		Start	End		
Horticulture	Fruits & Vegetables -Basics of Greenhouse Production Training	12/15/2009	4/30/2010	\$487,200	Closeout in Process
Horticulture	Fruits & Vegetables - Irrigation Principles and Applications Training	12/10/2009	4/30/2010	\$403,620	Closeout in Process
Livestock	Beef & Lamb - Small Ruminants Production Management Training	3/3/2010	4/30/2010	\$63,000	Closeout in Process
Horticulture	Fruits & Vegetables - Purchase Order to provide Seed	3/2/2010	4/30/2010	\$87,000	Closeout in Process
Business Development	Business Development – Business Management Technical Assistance North	10/29/2009	4/30/2010	\$99,000	Closeout in Process
Livestock	Beef & Lamb -Training on Vet Lab. Equipment	4/10/2010	6/5/2010	\$16,500	Closeout complete
Horticulture	Fruits & Vegetables - Chinese Two-Wheel Tractor	3/25/2010	5/25/2010	\$5,229.00	Complete
Livestock	Fish and Poultry - Feed Lab Equipment	3/10/2009	5/31/2010	\$350,050	Complete
Horticulture	Fruits & Vegetables - Basic Open Field Production Training	1/5/2010	5/31/2010	\$425,265	Closeout in Process
Horticulture	Fruits & Vegetables - Basic Orchard/Vineyard Management Training	1/20/2010	5/31/2010	\$706,500	Closeout in Process
Business Development	Association Management Workshop	12/2/2009	6/3/2010	\$94,080	Closeout in Process
Horticulture	Fruits & Vegetables – Soil Labs	4/10/2010	6/10/2010	\$10,650.00	Complete
Livestock	Beef & Lamb - Basic Animal Health Management	4/24/2010	6/30/2010	\$77,000	Closeout in Process
Livestock	Beef & Lamb - Ruminants Animal Nutrition	5/22/2010	7/31/2010	\$52,868.00	Closeout in Process

Business Development	Business Development - Roundtable Meetings Service	7/16/2009	8/31/2010	\$325,320.00	Closeout in Process
Business Development	Business Management Technical Assistance Services – Central/South	5/20/2010	8/31/2010	\$152,500.00	Closeout in Process
Horticulture	Fruits & Vegetables - Irrigation Principles and Applications Training-Round Two	6/1/2010	8/31/2010	\$350,000.00	Closeout in Process
Horticulture	Fruits & Vegetables - Basics of Greenhouse Production Training-Round Two	5/10/2010	8/31/2010	\$293,548.00	Closeout in Process
Horticulture	Fruits & Vegetables - Advanced Greenhouse Production Training	5/2/2010	8/31/2010	\$146,000.00	Closeout in Process
Livestock	Fish & Poultry - Fingerlings fish for offspring from Hungarian Carp Broodstock	4/29/2010	8/31/2010	\$71,516	Complete
Livestock	Fish & Poultry - Adult Hungarian Carp Broodstock	4/29/2010	8/31/2010	\$71,516	Complete
Business Development	Business Development-Closeout Financial Audit	8/7/2010	10/31/2010	\$189,053	Final Audits to RIG Office for approval on Dec. 16
Horticulture	Fruits & Vegetables-Greenhouse Supplies and Drip Irrigation	9/12/2010	11/30/2010	\$62,760	PO signed 9/13/2010 - Greenhouse and irrigation supplies to be distributed to farmers; Period of Performance extended to Feb 8; Stop work order issued until Feb. 15, 2011; mod to extend to March 31, 2011.
Business Development	Business Development-Association Management Workshops (BD)	9/20/2010	2/28/2011	\$74,050	Closeout in Process
Business Development	Business Development-Basic Orchard/Vineyard Management Training	9/8/10	3/31/2011	\$231,096	Closeout in Process
Business Development	Business Development-Roundtable Meetings (BD)	8/21/2010	5/31/2011	\$22,130	Closeout in Process
Livestock	Beef & Lamb -Vet lab Equipment and training (additional)	8/7/2010	11/6/2010	\$42,000	Closeout in Process
Livestock	Fish & Poultry - Purchase of live fingerlings offspring of Hungarian Bloodstock (Two Packages)	8/19/2010	2/19/2011	\$180,000	Subcontract terminated for convenience on 1 Dec
Livestock	Fish & Poultry - Basic Aquaculture Training Program (Two Packages)	10/6/2010	4/30/2011	\$186,750	Subcontract terminated for convenience on 1 Dec

Horticulture	Fruits & Vegetables - Supply and Install greenhouses for grape nursery Program and Greenhouses	10/19/2010	2/8/2011	\$53,100	Po signed on October 12, 2010; Period of Performance Extended to Feb 8; Stop work order issued until Further notice
Horticulture	Greenhouse Services Subcontract (North GFA)	1/1/2010	8/31/2011	\$69,849	Awarded. NTP issued on 28 Dec 10. Modified to extend the period of performance till 8, 31, 2011
Horticulture	Fruits & Vegetables - Greenhouse Services Subcontract (Central GFA)	1/1/2010	8/31/2011	\$56,305	Awarded. NTP issued on 29 Dec 10. Modified to extend the period of performance till August 30, 2011
Horticulture	Fruits & Vegetables - Greenhouse Services Subcontract (South GFA)	1/1/2010	6/30/2011	\$62,653	Awarded. NTP issued on 28 Dec 10. Modified to extend the period of performance till 8, 31, 2011 and to modify the total amount of Subcontract
Horticulture	Fruits & Vegetables - Orchard Service Subcontract, North GFA	2/15/2011	6/30/2011	\$42,818	Awarded on 10 Feb 2011, NTP issued on 14Feb.Modified to extend the period of performance till June 30, 2011
Horticulture	Fruits & Vegetables - Orchard Service Subcontract, Central and South GFAs	2/15/2011	6/30/2011	\$114,950	Awarded on 10 Feb 2011,-NTP issued on 15 Feb.Modified to extend the period of performance till June 30, 2011
Horticulture	Fruits & Vegetables - Drip Irrigation for Orchards	5/28/2011	7/28/2011	\$42,860	Awarded on May 28, 2011
Business Development	Business Development-Roundtable meetings / Baghdad	2/1/2011	5/31/2011	\$8,010	RFQ issued on 20-Jan-2011 , Closing on 22-Jan-2011; PO issued on 29 Jan 2011
Business Development	Business Development-Technical Assistance Agribusiness Mgmt, 240 days LOE, in the South and Central	1/15/2011	7/15/2011	\$115,420	Awarded on 08 Jan 2011; NTP issued on 15 Jan 2011 Mod 1 issued to extend the POP till July 15, 2011
Business Development	Business Development-Technical Assistance Agribusiness Mgmt, 120 days LOE in the North	1/15/2011	7/15/2011	\$61,960	Awarded on 08 Jan 2011; NTP issued on 15 Jan 2011.Mod 1 issued to extend the POP till July 15, 2011
Business Development	Business Development-Agribusiness Management Seminars (B.D.)	12/15/2010	06/31/2011	\$137,700	Awarded. NTP issued on 16 Dec 10. Modified to extend POP til June 31,2011
Business Development	Business Development-Animal Products Market Data Collection	2/19/2011	7/19/2011	\$17,556	Awarded on 07 Feb 2011
Business Development	Business Development-Horticulture Products Market Data Collection	2/19/2011	7/19/2011	\$17,556	Awarded on 07 Feb 2011
Horticulture	Fruits & Vegetables - Tractors for Greenhouse Demonstration Plots	10/12/2010	12/12/2010	\$81,070	Po signed on October 12, 2010. PO terminated for convenience on 30 Nov.
Horticulture	Fruits & Vegetables -Olive Oil Washing Machine	10/19/2010	11/23/2010	\$14,750	PO signed on October 19, 2010. Machine arrived on 23 November.

Horticulture	Fruits & Vegetables -Iron Cutthroat Flumes	12/06/2010	12/25/2010	\$8,460	Po signed on Dec 06, 2010. Cutthroat Flumes are Delivered within the period of performance
Livestock	Beef & Lamb -Dairy Heifers in support of Iraq 4-H Program	12/02/2010	12/21/2010	\$31,250	PO signed on Dec 01, 2010.
Horticulture	Fruits & Vegetables -Agriculture Equipment for Potato Demonstration Program in Fallujah and Ninawa, Iraq	3/15/2011	4/28/2011	\$17,140	PO awarded on Mar. 14
Horticulture	Fruits & Vegetables – Supplying 2-Wheel Tractors	3/11/2011	5/31/2011	\$68,200	PO issued on 10 Mar. 2011. Modified to extend POP till May 31, 2011.
Horticulture	Fruits & Vegetables –Drip Irrigation with One day Training-Vineyards	10/24/2010	03/15/2011	\$57,421	PO signed on October 24, 2010; No-cost extension issued due to Technical's decision on remaining locations
Horticulture	Fruits & Vegetables – Greenhouse Supplies and Drip Irrigation	10/12/2010	02/08/2011	\$53,100	Completed
Horticulture	Fruits & Vegetables – Multi Span Greenhouses	2/09/2010	05/31/2011	\$104,970	Po signed on Dec 09, 2010; To modification to extend the period of performance till May 31.
Business Development	Roundtable Meetings at the SBDC in Thi Qar, Province	2/22/2011	05/31/2011	\$3,780	Completed
Business Development	Roundtable Meetings at the SBDC in Basra Province	2/22/2011	05/31/2011	\$3,855	Completed
Business Development	Roundtable meetings / Babil	02/01/2011	05/31/2011	\$5,000	Terminated
Business Development	Roundtable meetings /Najaf	02/01/2011	05/31/2011	\$2,870	Terminated
Business Development	Roundtable meetings / Anbar	12/3/2011	5/31/2011	\$3,630	Completed
Business Development	Business Development -Roundtable meetings / Erbil	02/01/2011	5/31/2011	\$7,560	Completed
Livestock	Beef & Lamb-Feed Lab Software and Additional Equipment	3/7/2011	4/7/2011	\$19,500	Completed
Livestock	Beef & Lamb-Feedlot	6/14/2009	4/30/2011	\$318,455	Complete
Livestock	Beef & Lamb-Millet seed	4/16/2011	5/15/2011	\$67,500	Completed
Livestock	Supplying Sheep	7/19/2011	9/05/2011	\$124,263.75	Completed

Livestock	Corral in Alqush Village in Ninawah	8/21/2011	09/05/2011	\$7,000.00	Completed
Livestock	Corral in Al-Hamadaniya/Qas Faqra Village in Ninawa.	8/21/2011	09/09/2011	\$9,000.00	Completed
Horticulture	Plastic Rolls	8/13/2011	29/9/2011	\$79,550.00	Completed
Horticulture	Tractor spreader	9/13/2011	09/14/2011	\$8,000.00	Completed
Horticulture	Greenhouse Service Subcontract-Central	01/01/2011	11/01/2011	\$56,305	Within the Period of Performance
Horticulture	Greenhouse Service Subcontract-North	01/01/2011	11/01/2011	\$69,849	Within the Period of Performance
Horticulture	Greenhouse Service Subcontract-South	01/01/2011	11/01/2011	\$62,653	Within the Period of Performance
Horticulture	Supplying 2 row Bedshapers	07/09/2011	08/30/2011	\$30,400	Completed
Horticulture	New Holland Tractors and Tractor Equipment	07/10/2011	10/30/2011	\$585,680	Within the Period of performance
Horticulture	Supply and Installation of Drip Irrigation System for Orchards	05/28/2011	07/28/2011	\$42,860.05	Completed
Livestock	Purchasing Feed Grinders	07/25/2011	08/15/2011	\$15,595.40	Completed
Business Development	Technical Assistance Agribusiness Mgmt, 240 days LOE, in the South and Central	01/15/2011	07/15/2011	\$115,420	Completed
Business Development	Technical Assistance Agribusiness Mgmt, 120 days LOE in the North	01/15/2011	07/15/2011	\$61,960	Completed
Business Development	Animal Products Market Data Collection	2/19/2011	7/09/2011	\$17,556	Completed
Business Development	Horticulture Products Market Data Collection	2/19/2011	7/09/2011	\$16,872	Completed
Horticulture	Spring tooth harrow	9/12/2011	9/13/2011	\$9,600.00	Completed
Horticulture	Pheromones	9/21/2011	10/08/2011	\$21,582.50	Completed
Horticulture	Cabbage and Cauliflower Transplants	9/28/2011	10/01/2011	\$19,600.00	Completed

Horticulture	Drip irrigation system (5 FBLC locations)	9/25/2011	12/31/2011	\$113,681.00	Completed
Horticulture	Sprinkler and Lay flats Irrigation Systems	10/25/2011	12/31/2011	\$110,495.00	Completed
Horticulture	Drip Irrigation Materials	09/12/2011	26/09/2011	\$5,200.00	Completed
Livestock	375 Breeding Sheep for South	10/25/2011	11/05/2011	\$143,381.25	Completed
Livestock	375 Breeding Sheep for Central	10/25/2011	11/05/2011	\$143,381.25	Completed
Livestock	375 Breeding Sheep for Mayasn & Najaf	10/25/2011	1/30/2012	\$143,381.25	Completed
Livestock	375 Breeding Sheep for North	10/25/2011	12/06/2011	\$143,381.25	Completed
Livestock	Poultry Feed North	11/20/2011	05/13/2012	\$116,000.00	Completed
Livestock	Poultry Feed Central	11/23/2011	05/13/2012	\$108,000.00	Completed
Horticulture	Vegetable Grafting Room in Baghdad	11/23/2011	12/23/2011	\$78,980.00	Completed
Livestock	Water buffalo trial in South and Southeast of Iraq	11/16/2011	05/13/2012	\$17,976.00	Completed
Livestock	Cattle Feed for Al-Husseiniya replication	11/16/2011	05/13/2012	\$44,100.00	Completed
Livestock	Corrals for the Sheep in 15 different locations	11/16/2011	01/21/2012	\$144,000.00	Completed
Livestock	Feed for the Sheep Breeding	11/14/2011	01/10/2012	\$119,850.00	Completed
Livestock	Hay Baler	12/20/2011	02/18/2012	\$95,000.00	Completed
Livestock	Alfalfa Seed for the Central Shipment	12/19/2011	02/15/2012	\$120,000.00	Completed
Livestock	Alfalfa Hay for Sheep breeding	12/22/2012	1/16/2012	\$78,000.00	Completed
Livestock	Alfalfa Equipment "Mower"	12/19/2011	03/18/2012	\$55,000.00	Completed
Livestock	Alfalfa Seed for the North Shipment	12/21/2011	02/15/2012	\$120,000.00	Completed
Livestock	375 Breeding Sheep for Mahmodia, Anbar and Wasit	12/24/2011	01/15/2012	\$143,381.25	Completed

Horticulture	Green houses Technical assistance Services for North	2/5/2012	5/13/2012	\$148,600.00	In Process
Horticulture	Green houses Technical assistance Services for Central	1/25/2012	5/13/2012	\$135,750.00	In Process
Horticulture	Green houses Technical assistance Services for Southern	2/5/2012	5/13/2012	\$148,600.00	In Process
Horticulture	Supplying Styrofoam transplant flats and peat moss	1/19/2012	1/29/2012	\$35,000.00	Completed
Horticulture	Satellite Images for Al-Shehamiyah-Wasit	1/21/2012	2/10/2012	\$12,720.00	Completed
Livestock	Purchasing 500 hungarain mother fish	2/19/2012	3/1/2012	\$15,000.00	Completed
Horticulture	Satellite Images for Al-Shehamiyah-Wasit (ArcView 10)& Training for ArcView 10	2/4/2012	5/13/2012	\$45,000.00	In Process
Horticulture	Green Houses Business for South Provinces	2/5/2012	5/13/2012	\$135,905.00	In Process
Horticulture	Vegetable Seed	3/22/2012	4/20/2012	\$115,200.00	In Process
Horticulture	Repair works in the Pumping station in Al-Shehamyia -Wasit (Gear Boxes)	1/25/2012	2/29/2012	\$54,000.00	Completed
Horticulture	Universal Current meter	1/14/2012	2/25/2012	\$12,856.50	In Process
Horticulture	Rehabilitate of Al-Kumait Pumping Station	2/1/2012	3/9/2012	\$133,400.00	Completed
Horticulture	Green Houses Business for North Provinces	2/5/2012	5/13/2012	\$135,905.00	In Process
Horticulture	Green Houses Business for Central Provinces	2/5/2012	5/13/2012	\$135,905.00	In Process
Horticulture	T55 Tractors	1/23/2012	1/23/2012	\$29,000.00	Completed
Livestock	Poultry Feed and Meat Chicks	2/3/2012	2/15/2012	\$133,600.00	In Process
Livestock	Tractor in Ninewa, Babil & Salah Al Deen	2/6/2012	3/1/2012	\$111,000.00	Completed
Livestock	Tractor in Anbar	2/8/2012	3/1/2012	\$74,000.00	Completed

Horticulture	Rooted Seedless Grape Cuttings for Baghdad	3/8/2012	3/10/2012	\$24,000.00	Completed
Horticulture	Rooted Seedless Grape Cuttings for Salah Al Deen	3/8/2012	3/10/2012	\$21,000.00	Completed
Livestock	Purchasing 75 claves for 4-H Program	3/27/2012	5/13/2012	\$146,250.00	In Process

APPENDIX C: GRANTS (PROJECTS AWARDED)

Grant #	Name of Grantee	Project Title	Project Location	Project Period		Project Budget (Inma)	Cost Share	Current Status
				Start	End			
09-2008-FD800-G-1	Balad Canning Factory	Balad Canning Factory Revitalization Project	Salah Ad Din, Balad	17-Apr-08	31-Mar-09	5,057,631	-	Closeout completed
09-2008-FD800-G-2	Hameedyah Mushroom Farm	Hameedyah Mushroom Farm Project	Ramadi, Anbar	17-Apr-08	1-Sep-09	623,287	-	Closeout completed
09-2008-FD800-G-3	9 Nissan Market Agriculture Association (NINMA)	New Baghdad Market Revitalization Project	Baghdad	20-May-08	20-May-09	291,534	-	Grant Closed
10-2008-FD800-G-4	ANKA Company for Agriculture Development	Monitoring Wholesale Prices of Agricultural Products and Inputs in Iraq	Iraq (Erbil)	1-Oct-08	31-Aug-10	890,094	-	Closeout In Process
10-2008-FD800-G-5	Women Empowerment Organization (WEO)	Voucher For Small Business Management	North of Iraq	15-Nov-08	15-Feb-10	96,520	-	Grant Closed
10-2008-FD800-G-6	Al-Waqt Al Jadeed	Fresh Fruit & Vegetable Packing Sheds	Baghdad	1-Dec-08	30-Jun-09	459,048	-	Closeout completed
10-2008-FD800-G-7	Al-Thiqa Organization	Micro-Finance	Iraq	1-Feb-09	30-Jun-10	4,068,912	-	Closeout completed
01-2009-FD800-G-8	Al-Amal Al-Waeed Co.	Fresh Fruit & Vegetable Packing Sheds	Baghdad	15-Jan-09	30-Oct-09	459,300	-	Closeout completed
01-2009-FD800-G-9	Izdiharona	Micro-Finance	Iraq	1-Feb-09	31-Jan-10	1,271,742	-	Closeout completed
03-2009-FD-800-G-13	Shavin Co.	Feedlot Program	Dahuk	1-May-09	31-Aug-11	593,517	294,164	Closeout In Process
03-2009-FD-800-G-14	Farmer Association	Feedlot Program	Ninawa	1-May-09	31-Aug-11	565,279	212,080	Closeout In Process
03-2009-FD-800-G-15	Brotherhood Association	Feedlot Program	Ninawa	1-May-09	31-Aug-11	565,279	201,488	Closeout In Process
03-2009-FD-800-G-16	Al Nahreen Association	Feedlot Program	Ninawa	1-May-09	31-Aug-11	565,279	203,088	Closeout In Process
04-2009-FD800-G-17	Middle East Company	Aquaculture Training program	Babil	27-May-09	31-Aug-10	189,784	-	Closeout In Process
04-2009-FD800-G-18	Al Furat Fish Farm	Aquaculture Training program	Babil	27-May-09	31-Aug-10	189,784	-	Closeout In Process
04-2009-FD-800-G-19	Dejlat Alkair for General Trading & Contracting Co., Ltd	Feedlot Program	Wasit	14-Jun-09	30-April-11	318,455	183,392	Closeout In Process

04-2009-FD-800-G-20	Hawks of Iraq for General Contracting, Co.	Feedlot Program	Babil	14-Jun-09	31-Aug-11	328,665	271,720	Close Out In Process
04-2009-FD-800-G-21	Dheaa Al-Noor Association for Development	Feedlot Program	Baghdad	14-Jun-09	31-Aug-11	318,455	183,392	Close Out In Process
06-2009-FD800-G-22	Al Juboori Group	Feedlot Program	Kirkuk	8-Aug-09	31-Aug-11	631,859	238,579	Closeout In Process
06-2009-FD800-G-23	Nimar Al Jazeera Co.	Feedlot Program	Anbar	8-Aug-09	31-Aug-11	631,859	229,079	Closeout In Process
06-2009-FD800-G-24	Al Naiim Organization	Feedlot Program	Ninawa	8-Aug-09	31-Aug-11	631,859	250,979	Closeout In Process
07-2009-FD800-G-25	Mabain Al Nahreen	Packing shed Program	Baghdad	18-Aug-09	31-Jul-10	464,641	46,615	Closeout In Process
07-2009-FD800-G-26	Western Al Jazeera	Packing shed Program	Anbar	18-Aug-09	31-Jul-10	464,641	143,696	Closeout In Process
07-2009-FD800-G-27	Dejlat Al Kair	Packing shed Program	Karbala	18-Aug-09	31-Jul-10	464,641	58,815	Closeout In Process
08-2009-FD800-G-28	Iraq Grandparents	Feed Mill	Dyiala	19-Nov-09	30-April-11	769,590	1,035,831	Closeout In Process
08-2009-FD800-G-29	Al Furat Fish Farm	Feed Mill	South Babil	19-Nov-09	30-April-11	1,139,590	607,108	Closeout In Process
08-2009-FD800-G-30	Middle East Co.	Feed Mill	South Baghdad	19-Nov-09	30-April-11	969,590	761,250	Closeout In Process
08-2009-FD800-G-31	VANO Group	Feed Mill	Erbil	19-Nov-09	30-April-11	1,032,290	1,116,919	Closeout In Process
10-2009-FD800-G-32	ICF	Micro-Finance	Anbar	15-Dec-09	15-May-10	1,050,000	11,666	Closeout In Process
10-2009-FD800-G-33	Al Zaytoon Association	Olive Oil	Ninawa	16-Nov-09	30-Mar-10	95,000	-	Closeout In Process
11-2009-FD800-G-34	Najim Al Belad	Poultry Feed mill	South Baghdad	1-Feb-10	30-April-11	842,540	1,224,086	Closeout In Process
11-2009-FD800-G-35	Dur Al Furat	Poultry Feed mill	North Babil	1-Feb-10	30-April-11	1,161,040	1,292,711	Closeout In Process
12-2011-FD-800-G-36	Al-Kumait Agro-Association,	Refurbish of Al-Kumait pump station	Maysan	20-Dec-11	01-Feb.-11	145,920	330,830.00	Second Payment in Process
						27,347,625	8,897,488	

APPENDIX J: QUARTERLY SALES AND JOBS

The two program indicators, sales and jobs, can be found in the following table. Sales are provided in \$US millions. The information in the table is actual data and has not been adjusted with any correction factor.

Program Total	Year V 2011-12 Q2 (Jan- Mar12)	Year V 2011-12 Q1 (Oct- Dec11)	Year IV 2011 (Oct10 to Sept 2011)	Year III 2010 (As of Sept 2010)	Year II 2009	Year I 2008	Indicator
\$151.21	\$9.07	\$10.14	\$40.05	\$41.93	\$30.16	\$19.41	Sales
15,085	56	100	1,635	61	11,360	1,873	Employment

Site Specific Environmental Impact Assessments

Project Title: FBLC in Babil

Date Visited: 14 March 12

Assessor Name(s): Hassan S. Boadam

Location: Babil province

Type of Project: Field Base Learning Center

Project Status: complete

Impacts: Ongoing

Operation Related Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Process	Maintenance and cleaning	-	✓					✓					
	Chemical storage and handling	-	✓					✓					
Inputs	Water use	-		✓				✓					
	Energy/fuel use	-	✓					✓					
Outputs	Solid Waste	-	✓					✓					
	Wastewater	-	✓					✓					
	Animal waste	-	✓										✓
	Human Waste	-	✓					✓					
	Fuel emissions (e.g. generators)	-											✓
	Vehicular emissions	-	✓					✓					
	Odors	-	✓					✓					
	Noise	-	✓					✓					
	Dust and particulate material	-	✓					✓					
Social and Cultural	Health risks (e.g. accidents)	-											✓
	Daily activity interference (e.g. work)	-											✓
	Cultural changes	-											✓
Environ-mental	Water quality	-											✓
	Attraction of pests	-	✓						✓				
	Soil quality	-											✓

Positive Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Operation	Employment	+	√					√					
	Demand for goods and services	+	√					√					

Project Title: Orchards and Vines in Babil

Date Visited: 15 March 12

Assessor Name(s): Hassan S. Boadam

Location: Babil province

Type of Project: Orchards and Vines

Project Status: complete

Impacts: Ongoing

Operation Related Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Process	Maintenance and cleaning	-	√										√
	Chemical storage and handling	-	√					√					
Inputs	Water use	-		√				√					
	Energy/fuel use	-											√
Outputs	Solid Waste	-	√					√					
	Wastewater	-	√					√					
	Animal waste	-	√					√					
	Human Waste	-	√					√					
	Fuel emissions (e.g. generators)	-	√						√				
	Vehicular emissions	-	√						√				
	Odors	-	√						√				
	Noise	-	√						√				
Social and Cultural	Dust and particulate material	-	√						√				
	Health risks (e.g. accidents)	-											√
	Daily activity interference (e.g. work)	-											√

Social and Cultural	Health risks (e.g. accidents)	-												√
	Daily activity interference (e.g. work)	-												√
	Cultural changes	-												√
Environmental	Water quality	-												√
	Attraction of pests	-	√						√					
	Soil quality	-												√

Positive Impacts		Nature (+/-)	Intensity					Extension					N/A	
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical		
Operation	Employment	+	√						√					
	Demand for goods and services	+	√						√					

Project Title: Babil Feed lot

Date Visited: 18 March 12

Assessor Name(s): Hassan S. Boadam

Location: Babil province

Type of Project: Sheep Feedlot

Project Status: complete

Impacts: Ongoing

Operation Related Impacts		Nature (+/-)	Intensity					Extension					N/A	
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical		
Process	Maintenance and cleaning	-	√						√					
	Chemical storage and handling	-	√					√						
Inputs	Water use	-	√					√						
	Energy/fuel use	-	√					√						
Outputs	Solid Waste	-	√					√						
	Wastewater	-	√					√						
	Animal waste	-	√					√						
	Human Waste	-	√					√						
	Fuel emissions (e.g. generators)	-	√						√					
	Vehicular emissions	-	√						√					
	Odors	-	√						√					
	Noise	-	√						√					

	Dust and particulate material	-	√						√				
Social and Cultural	Health risks (e.g. accidents)	-											√
	Daily activity interference (e.g. work)	-											√
	Cultural changes	-											√
Environmental	Water quality	-											√
	Attraction of pests	-	√						√				
	Soil quality	-											√

Positive Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Operation	Employment	+	√						√				
	Demand for goods and services	+	√						√				

Project Title: ZamZam Feed Mill

Date Visited: 19 March 12

Assessor Name(s): Hassan S. Boadam

Location: Babil Province

Type of Project: Feed Mill

Project Status: completed

Impacts: Ongoing

Operation Related Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Process	Maintenance and cleaning	-	√					√					
	Chemical storage and handling	-	√					√					
Inputs	Water use	-	√					√					
	Energy/fuel use	-	√					√					
Outputs	Solid Waste	-	√					√					
	Wastewater	-	√						√				
	Animal waste	-	√						√				

	Human Waste	-	√					√					
	Fuel emissions (e.g. generators)	-	√						√				
	Vehicular emissions	-	√						√				
	Odors	-	√						√				
	Noise	-	√						√				
	Dust and particulate material	-	√						√				
Social and Cultural	Health risks (e.g. accidents)	-											√
	Daily activity interference (e.g. work)	-											√
	Cultural changes	-											√
Environmental	Water quality	-											√
	Attraction of pests	-	√						√				
	Soil quality	-											√

Project Title: Al-Najaf Greenhouse

Date Visited: 20 March 12

Assessor Name(s): Hassan S. Boadam

Location: Najaf Province

Type of Project: Greenhouse

Project Status: completed

Impacts: Ongoing

Operation Related Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Process	Maintenance and cleaning	-	√						√				
	Chemical storage and handling	-											√
Inputs	Water use	-	√								√		
	Energy/fuel use	-	√						√				
Outputs	Solid Waste	-	√						√				
	Wastewater	-											√
	Human Waste	-	√					√					
	Fuel emissions (e.g. generators)	-	√						√				
	Vehicular emissions	-											√
	Odors	-											√

	Noise	-	√								√		
Social and Cultural	Health risks (e.g. accidents)	-											√
	Daily activity interference (e.g. work)	-											√
	Cultural changes	-											√
Environmental	Water quality	-											√
	Attraction of pests	-	√					√					
	Soil quality	-											√

Positive Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Operation	Lighting, water supply, wastewater conveyance	+		√							√		
	Employment	+		√						√			
	Demand for goods and services	+		√						√			

Project Title: FBLC in Diwaniya

Date Visited: 21 March 12

Assessor Name(s): Hassan S. Boadam

Location: Diwaniya Province

Type of Project: FBLC field base learning Center

Project Status: completed

Impacts: Ongoing

Operation Related Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Process	Maintenance and cleaning	-	√						√				
	Chemical storage and handling	-											√
Inputs	Water use	-				√			√				
	Energy/fuel use	-	√					√					
Outputs	Solid Waste	-	√						√				
	Wastewater	-											√
	Human Waste	-	√					√					
	Fuel emissions (e.g.	-	√						√				

	Animal waste	-	√					√				
	Human Waste	-	√				√					
	Fuel emissions (e.g. generators)	-	√					√				
	Vehicular emissions	-	√					√				
	Odors	-	√					√				
	Noise	-	√					√				
	Dust and particulate material	-	√					√				
Social and Cultural	Health risks (e.g. accidents)	-										√
	Daily activity interference (e.g. work)	-										√
	Cultural changes	-										√
Environmental	Water quality	-										√
	Attraction of pests	-	√					√				
	Soil quality	-										√

Positive Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Partial	Partial	Extended	Total	Critical	
Operation	Employment	+	√						√				
	Demand for goods and services	+	√						√				

APPENDIX M: PERFORMANCE MANAGEMENT PLAN (PMP)

Performance Management Plan PMP Inma Agribusiness													COTR: Ubaidullo Mirvaidulloev Project M&E Contact	
Results	Indicators	Baseline Year	Baseline Value	Year 2008		Year 2009		Year 2010		Year 2011		Year 2012		Notes
				Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
SO8—Private Sector Economic Opportunities Expanded														
IR 8.2—Increased Capacity of the Private Sector	1. Sales of program assisted enterprises (in US\$ millions)	2007	\$0	\$50	\$19.4	\$200	\$49.5	\$300	\$90.8	\$300	\$ 132	\$300	\$ 151	1. TBD means we don't know the value, but will be obtaining or determining it. 2. N/A means not available/applicable and we will not be obtaining or determining it. 3. 0 means you've obtained or determined this value and it is indeed zero.
	2. Employment in program supported farms agribusinesses	2007	0	5,000	1,873	10,000	13,233	15,000	13,294	15,500	14,929	15,500	15,085	
Sub-IR 8.2.1—Increased Perennial Horticulture Production and Marketing	8.2.1.1— Sales of perennial products in program assisted areas (in US\$ millions)	2007	\$0	\$1	\$0	\$1	\$0.14	\$1	\$1.86	\$2.50	\$ 2.14	\$2.50	\$ 2.19	
Sub-IR: 8.2.2—Increased annual horticultural production and marketing	8.2.2.1—Sales of targeted annual vegetables and fruit in program assisted areas. Sales given (in US\$ millions).	2007	\$0	\$1	\$14.27	\$14	\$19.42	\$17.6	\$23.96	\$28	\$ 28.36	\$28	\$ 29.65	
Sub-IR: 8.2.3—Increased livestock and feed grains production and marketing	8.2.3.1—Sales of local red meat from program assisted feedlots	2007	\$0	\$0	\$0	\$1.6	\$0	\$3.6	\$2.2	\$9.3	\$7.26	\$9.3	\$9.17	
	8.2.3.2—Production of red meat by program assisted commercial feedlots by kilograms per year	2007	0	0	0	114,000	0	814,000	438,386	1,500,000	1,135,999	1,500,000	1,395,242	
	8.2.3.3—Sales of local fish by program assisted fish farms (in US\$ millions)	2007	\$0	\$5	\$5.14	\$20	29.94	\$30	54.64	\$80	\$67.10	\$80	\$72.96	
	8.2.3.4—Amount of feed produced per year by program assisted feed mills in tons	2007	0	0	0	20,000	0	40,000	20,509	60,000	54,684	60,000	73,090	
	8.2.3.5—Sales of produced feed per year by program assisted feed mills (in US\$)	2007	\$0	\$0	\$0	\$7	\$0	\$14	\$9.66	\$30	\$26.65	\$30	\$36.70	
Sub-IR: 8.2.4— Increase Agribusiness Access to Finance	8.2.4.1—Percentage of program-assisted farmers who use improved technology and can document that they are getting more income from their crops.	2007	0	5%	N/A	5%	N/A	5%	N/A	5%	TBD	5%	TBD	
	8.2.4.2 Value of loans to agribusiness by private banks receiving USAID-Inma grant assistance (in US\$ millions)	2007	\$0	\$0	\$0	\$20	\$0	\$15	\$1	\$1	\$1	\$1	\$1	
	8.2.4.3 Value of loans to SME agribusiness by MFIs receiving USAID-Inma grant assistance (in US\$ millions)	2007	N/A	\$0	\$0	\$6.0	\$2.74	\$7.5	\$1.95	\$4.69	\$4.690	\$4.69	\$4.690	
	8.2.4.4 Number of jobs created through USAID-Inma supported bank and MFI agriculture related lending activities	2007	N/A	0	0	600	798	1200	816	800	TBD	800	TBD	

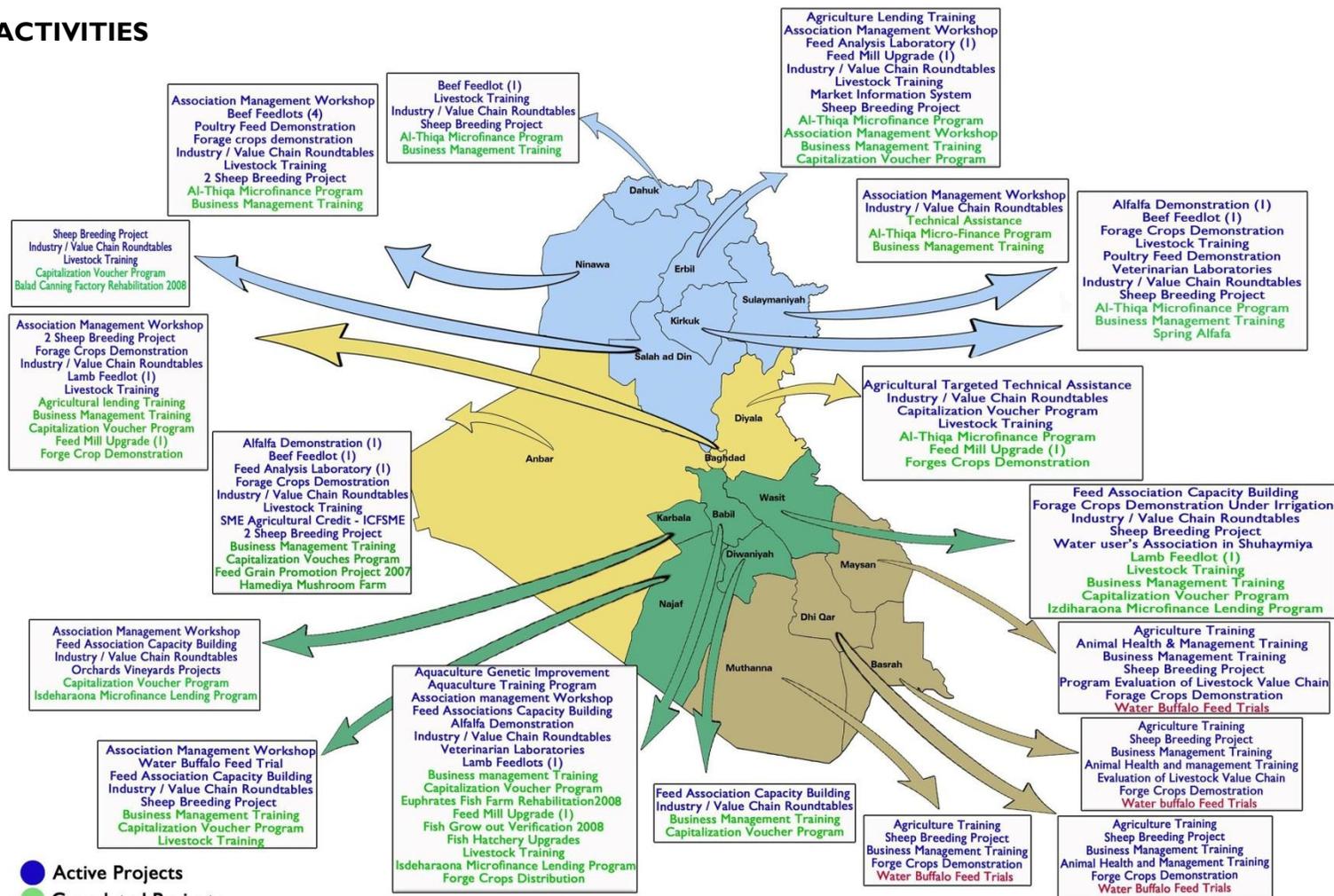
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Version Date: May 17, 2011

COTR: Ubaidullo Mirvaidulloev

APPENDIX N: MAPS

A: LIVESTOCK ACTIVITIES



USAID-Inma Livestock Projects

