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USAID-*Inma* Agribusiness Program Quarterly Report January-March, 2011

April, 2011

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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, 2011

DISCLAIMER

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

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GENERAL INFORMATION

The USAID-*Inma* Agribusiness Program focuses on developing Iraq's private agribusinesses by facilitating the formation of fully-integrated value chains and improving agricultural quality and production. *Inma*, the Arabic word for 'growth,' connects farmers to markets, increases the competitiveness of Iraqi agribusinesses, and facilitates domestic and foreign agricultural partnerships.

This report covers the 15th Quarter (Jan - Mar 2011) 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 Name: USAID-*Inma* Agribusiness Program

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.

Contract No: 267-C-00-07-00500-00

Contract Start Date: May 14, 2007

Contract End Date: August 31, 2011

Program Principals: Charles Bell, Group Vice President. The Louis Berger Group. Inc.
Shehnaz Atcha, Director, The Louis Berger Group, Inc.

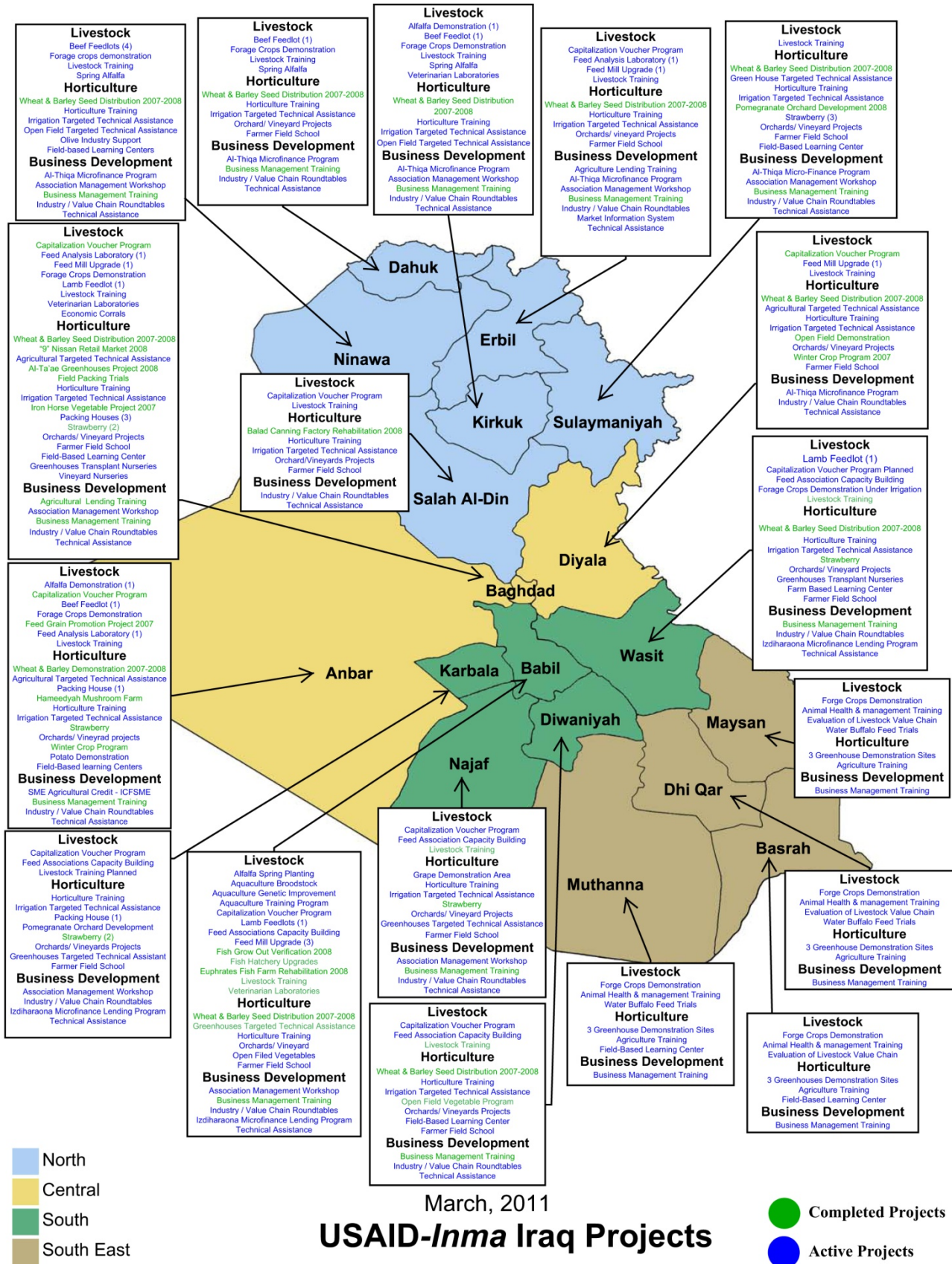
On-Site Leadership: Gerald Turnbull, Chief of Party The Louis Berger Group, Inc.
Tim Kock, Deputy Chief of Party The Louis Berger Group, Inc.

The Cost-Plus-Fixed-Fee (CPFF) contract (No. 267-C-00-07-00500-00) for the USAID-*Inma* Program was signed May 14, 2007. The period of performance of the contract is May 14, 2007 through May 14, 2010 with two option years.

ACRONYMS

BLF	Beef Feedlot
COP	Chief of Party
COTR	USAID Contracts Officer Technical Representative
DEC	USAID Development Experience Clearinghouse
EFF	Euphrates Fish Farm
FADO	Future Agriculture Development Organization
FAR	Federal Acquisition Regulations
FFS	Farm Field Schools
GOI	Government of Iraq
GFA	Geographic Focus Area
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 Management 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

MAP OF USAID-INMA ACTIVITIES BY GEOGRAPHIC FOCUS AREA



Livestock
 Beef Feedlots (4)
 Forage crops demonstration
 Livestock Training
 Spring Alfalfa

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Open Field Targeted Technical Assistance
 Olive Industry Support
 Field-based Learning Centers

Business Development
 Al-Thiqa Microfinance Program
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Beef Feedlot (1)
 Forage Crops Demonstration
 Livestock Training
 Spring Alfalfa

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Orchard/ Vineyard Projects
 Farmer Field School

Business Development
 Al-Thiqa Microfinance Program
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Alfalfa Demonstration (1)
 Beef Feedlot (1)
 Forage Crops Demonstration
 Livestock Training
 Spring Alfalfa
 Veterinarian Laboratories

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Open Field Targeted Technical Assistance

Business Development
 Al-Thiqa Microfinance Program
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Analysis Laboratory (1)
 Feed Mill Upgrade (1)
 Livestock Training

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Orchard/ vineyard Projects
 Farmer Field School

Business Development
 Agriculture Lending Training
 Al-Thiqa Microfinance Program
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Market Information System
 Technical Assistance

Livestock
 Livestock Training

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Green House Targeted Technical Assistance
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Pomegranate Orchard Development 2008
 Strawberry (3)
 Orchard/ Vineyard Projects
 Farmer Field School
 Field-Based Learning Center

Business Development
 Al-Thiqa Microfinance Program
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Analysis Laboratory (1)
 Feed Mill Upgrade (1)
 Forage Crops Demonstration
 Lamb Feedlot (1)
 Livestock Training
 Veterinarian Laboratories
 Economic Correls

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 '09 Nissan Retail Market 2008
 Agricultural Targeted Technical Assistance
 Al-Ta'ae Greenhouses Project 2008
 Field Packing Trials
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Iron Horse Vegetable Project 2007
 Packing Houses (3)
 Strawberry (2)
 Orchard/ Vineyard Projects
 Farmer Field School
 Field-Based Learning Center
 Greenhouses Transplant Nurseries
 Vineyard Nurseries

Business Development
 Agricultural Lending Training
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Livestock Training

Horticulture
 Balad Canning Factory Rehabilitation 2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Orchard/Vineyards Projects
 Farmer Field School

Business Development
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 Grape Demonstration Area
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Strawberry
 Orchard/ Vineyard Projects
 Greenhouses Targeted Technical Assistance
 Farmer Field School

Business Development
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Strawberry
 Orchard/ Vineyard Projects
 Greenhouses Transplant Nurseries
 Farm Based Learning Center
 Farmer Field School

Business Development
 Business Management Training
 Industry / Value Chain Roundtables
 Izdiharaona Microfinance Lending Program
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Mill Upgrade (1)
 Livestock Training

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Agricultural Targeted Technical Assistance
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Open Field Demonstration
 Orchard/ Vineyard Projects
 Winter Crop Program 2007
 Farmer Field School

Business Development
 Al-Thiqa Microfinance Program
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Alfalfa Demonstration (1)
 Capitalization Voucher Program
 Beef Feedlot (1)
 Forage Crops Demonstration
 Feed Grain Promotion Project 2007
 Feed Analysis Laboratory (1)
 Livestock Training

Horticulture
 Wheat & Barley Demonstration 2007-2008
 Agricultural Targeted Technical Assistance
 Packing House (1)
 Hameedyah Mushroom Farm
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Strawberry
 Orchard/ Vineyard projects
 Winter Crop Program
 Potato Demonstration
 Field-Based Learning Centers

Business Development
 SME Agricultural Credit - ICF/SME
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 Alfalfa Spring Planting
 Aquaculture Broodstock
 Aquaculture Genetic Improvement
 Aquaculture Training Program
 Capitalization Voucher Program
 Lamb Feedlots (1)
 Feed Associations Capacity Building
 Feed Mill Upgrade (3)
 Fish Grow Out Verification 2008
 Fish Hatchery Upgrades
 Euphrates Fish Farm Rehabilitation 2008
 Livestock Training
 Veterinarian Laboratories

Business Development
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Izdiharaona Microfinance Lending Program
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 Grape Demonstration Area
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Strawberry
 Orchard/ Vineyard Projects
 Greenhouses Targeted Technical Assistance
 Farmer Field School

Business Development
 Association Management Workshop
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Open Field Vegetable Program
 Orchard/ Vineyards Projects
 Field-Based Learning Center
 Farmer Field School

Business Development
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Lamb Feedlot (1)
 Capitalization Voucher Program
 Planned Feed Association Capacity Building
 Forage Crops Demonstration Under Irrigation
 Livestock Training

Horticulture
 Wheat & Barley Seed Distribution 2007-2008
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Strawberry
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Business Development
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Livestock
 Capitalization Voucher Program
 Feed Associations Capacity Building
 Livestock Training Planned

Horticulture
 Horticulture Training
 Irrigation Targeted Technical Assistance
 Packing House (1)
 Pomegranate Orchard Development
 Strawberry (2)
 Orchard/ Vineyards Projects
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Business Development
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Horticulture
 Wheat & Barley Seed Distribution 2007-2008
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 Irrigation Targeted Technical Assistance

Business Development
 Business Management Training
 Industry / Value Chain Roundtables
 Technical Assistance

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 3 Greenhouse Demonstration Sites
 Agriculture Training

Business Development
 Business Management Training

Livestock
 Forge Crops Demonstration
 Animal Health & management Training
 Evaluation of Livestock Value Chain
 Water Buffalo Feed Trials

Horticulture
 3 Greenhouse Demonstration Sites
 Agriculture Training

Business Development
 Business Management Training

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 Forge Crops Demonstration
 Animal Health & management Training
 Evaluation of Livestock Value Chain
 Water Buffalo Feed Trials

Business Development
 Business Management Training

Livestock
 Capitalization Voucher Program
 Feed Association Capacity Building
 Livestock Training

Horticulture
 Forge Crops Demonstration
 Animal Health & management Training
 Evaluation of Livestock Value Chain
 Water Buffalo Feed Trials

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Horticulture
 Forge Crops Demonstration
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 Water Buffalo Feed Trials

Business Development
 Business Management Training

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 Animal Health & management Training
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 Water Buffalo Feed Trials

Horticulture
 3 Greenhouse Demonstration Sites
 Agriculture Training
 Field-Based Learning Center

Business Development
 Business Management Training

Livestock
 Forge Crops Demonstration
 Animal Health & management Training
 Evaluation of Livestock Value Chain
 Water Buffalo Feed Trials

Horticulture
 3 Greenhouse Demonstration Sites
 Agriculture Training
 Field-Based Learning Center

Business Development
 Business Management Training

EXECUTIVE SUMMARY

USAID-*Inma* Agribusiness Program focuses on sustainable systems – identifying and addressing constraints to profitability and productivity within priority value chains as product moves from production through processing, value adding, packaging, transportation and marketing to the end user for consumption. Specifically USAID-*Inma* supports two critical agricultural commodity clusters in Iraq: **Livestock - Protein** which includes beef, lamb, fish and poultry value chains, and; **Horticulture** which is organized by production system - greenhouse crops (tomato, pepper, cucumber value chains), open field crops (melon, alfalfa, etc. value chains), orchards (a variety of stone fruit), vines (table grapes), olives and other specialty crops (strawberries).

January through March is the winter-cold season in Iraq. In the North geographic focus area it is a season of limited growth and a period when farmers have historically stopped or limited production. In livestock, farmers have typically stopped stocking animals since they don't understand how to maintain animals in cold weather, losing an entire growing cycle. It is also off season for aquaculture so there is less demand for fish feed. Forage is also limited in the north during the winter season as it is a warm season crop. With the limited growth in horticultural products, the winter presents an opportunity for off-season greenhouse production allowing farmers to receive higher returns with vegetables. Off season greenhouse vegetable production is an opportunity for farmers in the Central geographic focus area. Fish growth – directly related to temperature, is limited so the demand for fish feed is low. However, this is counterbalanced by the increased demand for poultry feed as the chickens are brought into chicken houses. In the South and Southeast geographic areas, the season is cooler but the climate is largely subtropical and allows for regular open crop production.

The Livestock-Protein team achieved great results during this quarter. The production goal of 660,000 kilograms of red meat by program-assisted commercial feedlots as well as an increase in sales of \$3,300,000 from program-assisted feedlots was exceeded. This quarter:

- USAID-*Inma* feedlots produced 66,137 kg of red meat with a value of \$618,820.
- Two feedlots adopted vertical integration systems in the red meat industry.
- The alfalfa demonstration plots were producing approximately a month earlier than the local varieties of alfalfa.
- The fish sector sold \$1.335 million of fresh fish into the Iraqi market.
- The USAID-*Inma* supported feed mills produced approximately \$2.875 million of poultry, ruminant and fish feed.
- Ten feedlot specific activity plans were prepared which included recommendations feedlot management, purchase of feeder calves, animal nutrition, health and marketing.
- An owner financed replication feedlot began construction and is approximately sixty-five percent complete.

The Horticulture team was focused on setting up the Field Based Learning Centers for the upcoming growing season as well as a combination of greenhouse, open field, irrigation, and orchard and vineyard activities. During this quarter, USAID-*Inma* packing houses sold over a \$1 million dollars in produce, for a total of over \$9.8 million dollars to date. Activities completed this quarter included:

- Two thousand twenty-two beneficiaries in horticulture and business development activities. Of these beneficiaries, two-hundred twenty-six were women.
- A short term mushroom consultant worked closely with the mushroom growers in Anbar and Erbil to assist the growers in proper growing techniques.
- Field based learning centers were established in all four geographic areas, constructing greenhouses and shade houses, installing flood and drip irrigation systems and making plans for open field demonstrations.
- The packing sheds sorted, graded, packed and sold \$1.01 million worth of produce.
- Progress continues in developing selected export opportunities with Basrah dates.

- A selection of specialty agriculture products were installed in the Baghdad International Airport Duty Free Shops and have been generating rapid sales.

The **Business Development-Cross-Cutting Services** team is critical to ensuring that USAID-*Inma* supported enterprises evolve into sustainable and growing businesses, providing enterprise and association management training, targeted technical assistance, agribusiness financing, and the development of national and value chain specific market information systems.

The Business Development-Crosscutting Services team was active assisting both value chain teams during the quarter:

- Two agribusiness marketing forums were held in Erbil and Hilla linking producers to supermarkets and wholesale buyers to discuss supply requirements.
- The team completed nine feedlot business plans.
- Two-hundred seventy one visits to ninety USAID-*Inma* assisted entities were undertaken.
- Twenty-five seminars were conducted on basic recordkeeping and determining profits which were attended by 534 participants.
- Ten round tables conducted on horticulture marketing, feed production and livestock finance were attended by 207 participants.
- Ten two-day association workshops were conducted for 211 participants from 85 associations representing over 44,000 members.

The USAID-*Inma* team has also continued to produce a prolific number of papers for our Agricultural Policy Dialogue Series and technical reports for specific sectors:

- Iraqi Public Investment Priorities to Accelerate Growth of Agriculture, January 2011
- Market and Welfare Impacts of Foodstuffs Import Tariffs in Iraq, January 2011
- Iraq Input Productivity Gap and Agricultural Competitiveness, January 2011
- Irrigation Efficiency and Agricultural Competitiveness in Iraq, January 2011
- Agricultural Finance & Investment in Iraq, January 2011
- Strengthening Agricultural Input Supply Services in Iraq, January 2011
- Unemployment Threatens Democracy in Iraq, January 2011
- Transforming the Iraqi Public Distribution System (PDS) into a Dynamic Economic Development Tool, January 2011
- A Non-Governmental Agricultural Policy Center for Iraq, January 2011
- Social Capital, Transaction Costs, and Agricultural Competitiveness in Iraq, February 2011
- Iraqi Price Support Policy for Dates, February 2011
- Cost of the Restrictive Policy on the Introduction of New Seed Varieties in Iraq, January 2011
- Meat Processing Opportunities in Iraq, February 2011
- Livestock-Protein Value Chain, Interim Activity Report, February 2011
- The Future of Olive Oil Industry in Iraq, February 2011
- Horticulture Value Chain-Mushroom Technical Activity Report, February 2011



I. LIVESTOCK/PROTEIN VALUE CHAIN

During the Winter/cold season in Iraq, production of animals decreases, particularly in the North where farmers are not trained for cold-weather animal care. USAID-*Inma* is working with farmers to improve their cold-weather animal production and management so that they do not lose an entire growing season. Fish growth, which is directly tied to temperature, is also limited so there is a decrease in demand for fish feed. However, there is an increase in feed demand for poultry as they are brought into chicken houses during the cooler months.

I.1 FEEDLOT PRODUCTION

During the previous quarter the Livestock-Protein team completed business plans for seven feedlots. The plans focus on activities that will allow each yard to become sustainable. A livestock specialist completed ten individualized activity plans for each feedlot which includes both specific recommendations for each feedlot and a general feed lot manual (covering management, buying, transporting, quarantine, animal health and feeding). The team focused on sustainability and adding value to the cattle and sheep industry and continues training on the critical activities of feed formulation and recordkeeping. A livestock harvesting specialist assisted the livestock team during the quarter to develop plans for appropriately sized livestock harvesting facilities, meat processing and retail butcher shops that would allow feedlots to vertically integrate. In addition, a series of meat cutting trainings for feedlots and operating meat markets were conducted.

The USAID-*Inma* staff continued to assist Al-Hussainya Company near Baghdad in Diyala Governate to develop an independent feeding operation based on the existing feedyards. The construction of the feedyard is approximately sixty five percent complete. Technical assistance provided to the owner financed feedlot included: facility engineering design, regular monitoring of project construction, preparing for the purchase of feeder animals and feed ingredients, development of a health plan and bio-security protocols, feed formulation, development of business plans, record keeping and operation management training.

During the quarter the USAID-*Inma* Agribusiness Program continued working with the 4-H program and the women headed households whose 4-H member children received dairy heifers. Regular follow up visits monitored animal health, feed and the reproductive cycle. The recipients of the dairy heifers were chosen based on the desire and ability to care for the animals and the financial need of the families. The Iraq 4-H program is designed to teach young people business management, decision making and life skills through production agriculture and civic responsibility. To date, there are twenty 4-H clubs throughout Iraq, representing multiple project areas and 11 Governates. The USAID-*Inma* staff will continue to assist the Iraq 4-H program by providing technical knowledge.

USAID-*Inma* also began working with women buffalo farmers in Wasit during this season, and is evaluating the current feed provided to the buffalo in order to recommend changes. Work continues with USDA to develop a veterinarian diagnostic training program with the proper equipment. The training date is scheduled to occur during the upcoming quarter in Erbil.

I.1.1 Contribution to Strategic Objectives

Table I.1: Beef and Lamb Value Chain PMP Indicators and Impact to Date				
Activity I	Beef and Lamb Feedlots			
SO #	SO	This Quarter ¹	To Date	Goal
8.2.3.1 (BLF)	Increase in gross sales of local red meat from program-assisted feedlots	\$618,820	\$3,823,132	\$3,300,000
SO #	SO	This Quarter ²	To Date	Goal
8.2.3.2 (BLF)	Production of red meat by program-assisted commercial feedlots by kilograms per year	66,317	663,550	660,000kg
8.2.4.4 (BLF)				
8.2.6.3 (BLF)	Number of jobs created	30	255	350

I.1.2 Activities Implemented January - March 2011

Feedlot Management

- Worked with nine feedlots on record keeping, daily gain, and feed formulation;
- Continued to collect and analyze data from the feedlots on animal and business performance;
- Provided monthly performance reviews for each feedyard;
- Provided oversight on feed inventory and storage;
- Collected market prices on a monthly basis for feeds and livestock;
- The livestock specialist conducted training on nutrition software for the feedlot operators and program staff;

Training

- Meat harvesting specialist conducted meat cutting trainings for the meat section staff of City Center Mall (Majidi Mall) in Erbil;
- Trained the Blann Butcher Shop staff on proper sanitary methods and prospering meat cutting;

Targeted Technical Assistance

- Ongoing monitoring and technical assistance to Fallujah feedlot who recently imported fifty Hereford based steer calves from Paraguay;
- Continued to work with feedlot owners to diversify the feeding facilities to include both cattle and sheep.
- Provided TA to Al-Hussainya Company in feedlot construction and management;

Feedlot Activity Plans Completed:

- Al-Nahreem Association for Agriculture Development, Al-Qosh Beef Cattle Feedlot, February 2011
- Al-Okwa Association, Bartillah Beef Cattle Feedlot, February 2011
- Dhia Al-Nor Agriculture Association, Taji Feedlot, March 2011
- Nimr Al-Jezera Company, Fallujah Beef Cattle Feedlot, March 2011
- Hawks of Iraq Company, Babil Feedlot, March 2011

¹ All values are actual values and have not been adjusted with any correction factor.

² All values are actual values and have not been adjusted with any correction factor.

- Shavin Company, Blann Feedlot, Dahuk, March 2011

1.1.3 Challenges Faced

- **Challenge:** There is a lack of past animal performance data of livestock entering the feedlots, which is needed for proper production modeling.
- **Solution:** Train and assist local feeder calf producers to keep production records.
- **Challenge:** Lack of understanding of the cattle and sheep industry in Iraq.
- **Solution:** Continue to evaluate and document the industry.
- **Challenge:** Often field activity managers of various organizations fail to understand US federal regulations which govern procurements and the decision making process that the program staff undertake prior to implementation of a project.
- **Solution:** Create an information system that openly shares information with producers and other organizations.

1.1.4 Activities Planned April – June, 2011

- Find a suitable method to utilize the veterinary diagnostic equipment.
- Continue to provide technical assistance in animal management and nutrition to the feedyards owners to improve productivity and profitability.
- Plan and implement a veterinarian diagnostic training for June 2011.
- Continue to develop practical flow charts for livestock supply chains.
- Design and implement a small model feeding facility for small to medium size livestock producers referred to as “Economic Corrals”.
- Train feedlot owners and associations owning the newly created economic corrals on formulating rations utilizing alternative feeds such as dates, brewer’s grains, distiller’s grains and urea.
- Continue to collect production data that includes growth performance, ration formulation, daily feed costs, ingredient prices, animal purchase price and sales activities for economic analysis and planning purposes.
- Work with forage producers and feedlot owners to develop a strategic plan to increase forage production and storage.
- Record monthly market prices of livestock and forage.
- Provide livestock marketing, finance, record keeping and business plan technical assistance to livestock producers including the provision of excel data sheets.
- Review and design methods such as misters to cool livestock in the feedlots.
- Provide technical training in feed formulation, ration balancing and practical feeding methodologies to the feedyard owners.
- Review and develop an action plan for association (group) development in the red meat industry.
- Work with the owners of the Blann Butchery Shop to develop a meat processing and marketing demonstration to expand the business by adding value to product.
- Support the feedlot producers with information about the importation of cattle.
- Work with the feedlot operators to procure alfalfa and other forages for adequate yearly forage requirements.
- Finalize and publish the following documents:
 - Feedlot Activity Plans:
 - Al-Juburi Group, Kirkuk Beef Cattle Feedlot
 - Mohalabiya Beef Cattle Feedlot
 - Al Naeem Associaton, Goba Beef Cattle Feedlot
 - Dijat Al-Kheir Company, Saweera Lamb Feedlot

- Feed Mill Operations Guide
- Feed Analytical Laboratory Protocol Guide
- Beef and Lamb Feedlot Management Guides

I.2 FORAGE PRODUCTION

Commercial alfalfa production demonstrations were started in 2009. The cultivation of alfalfa was successful when alfalfa was planted with barley to act as a nurse crop. Alfalfa producers continued to sell and transport hay to feedlot operations. As expected, the production of forage decreased significantly during the quarter due to the cooler temperatures. However, the new variety of alfalfa chosen for the demonstrations is more cold tolerate than local varieties and starts producing earlier in the spring. Production is expected to increase significantly in the next quarter with warmer temperatures.

Land preparations in central and southeast Iraq have started for the forage demonstrations. The demonstration areas will be planted with a millet variety referred to as Nutrifeed. Seeding is expected to start in May. In addition, a new alfalfa demonstration site in Hussainya in Diyala will be implemented. Interestingly, one forage producer has expanded forage planting to better serve the feedyards based on the success during the demonstration period.

I.2.1 Contribution to Strategic Objectives

Table I.2: Beef and Lamb Value Chain PMP Indicators and Impact to date				
Activity 2	Forage Industry			
SO #	SO	This Quarter ³	To Date	Goal
8.2.3.4 (FI)	Increase in total gross sales of program-assisted enterprises	\$34,521	\$726,051	\$2,125,000
8.2.4.4(FI)				
8.2.6.3(FI)	Number of jobs created	19	200	350

I.2.2 Activities Implemented January - March, 2011

Technical Assistance

- Assisted forage producers to maintain the forage stand during the dormant period by scheduling irrigation times.
- Provided technical assistance on weed control in forage programs.
- Maintained a monthly database for forage prices.
- The irrigation team assisted the Livestock team to select forage demonstration sites in the South East and Central areas.

Administrative

- Started disposition of the forage equipment to the grantees.

I.2.3 Challenges Faced

- **Challenge:** The cost of hay transportation is consistently high.

³ All values are actual values and have not been adjusted with any correction factor.

- **Solution:** The program will continue to focus on ‘back hauling’ in identified trucks that are already transporting commodities from the north to the south. These trucks are currently returning to the north with empty beds, thus transportation rates for alfalfa loads are seriously discounted because the trip is already being made and any additional income counts as pure profit for the transporters.
- **Challenge:** Some equipment has been damaged during the dormant season.
- **Solution:** Train equipment operators on how to maintain and repair equipment and where to obtain spare parts.

1.2.4 Activities Planned April - June, 2011

- Continue demonstrations on irrigation and fertilization in forage.
- Provide training to alfalfa producers on storage techniques and marketing of preserved forage.
- Monitor monthly market prices and maintain database.
- Assist selected alfalfa producers with alfalfa seed collection.
- Implement the Hussainiya alfalfa demonstration.
- Implement the four south east Nutrifed millet forage demonstrations.
- Implement the four central Nutrifed forage demonstrations.

1.3 FISH PRODUCTION

The USAID-*Inma* Agribusiness Program began working in aquaculture in November 2007 by conducting a survey and identifying constraints in the aquaculture value chain and systematically began addressing those constraints. Improved brood stock was imported from Hungary. The fish produced from the imported broodstock continue to be sold at area fish markets. These market-ready fish are approximately 1500 grams. The program is focusing on providing business training and marketing assistance to the industry.

1.3.1. Contributions to Strategic Objectives

Table 1.3: Aquaculture and Feed Value Chain PMP Indicators and Impact to Date

Activity 3				
Fish Production				
SO #	SO	This Quarter ⁴	To Date	Goal
8.2.3.3 (FP)	Increase in total gross sales of local fish by program-assisted fish farms	\$1,335,000	\$58,335,000	\$30,000,000
8.2.6.3 (FP)	Number of jobs created	104	4,851	1,750

1.3.2 Activities Implemented January - March, 2011

Monitoring

- Continued to monitor the sale of imported Hungarian broodstock, crossbred fingerlings and palm fish produced during the quarter. The fingerlings ranging from 30 to 60 grams and the palm fish which range up to 150 grams were sold to local farmers for grow-out.

⁴ All values are actual values and have not been adjusted with any correction factor.

- Continued to monitor the sale of market fish (1.5 kg) produced from imported broodstock.
- Market Development
- Reviewed methods to increase consumption of fish in Iraq.
 -

1.3.3. Challenges Faced

- **Challenge:** Limited availability and high cost of mechanical aerators restrict stocking of ponds at higher densities.
- **Solution:** Establishment of Aquaculture Farm Service Centers that will provide mechanical aerators at reasonable prices.
- **Challenge:** Lack of reliable aquaculture extension services to provide technical assistance to fish farmers.
- **Solution:** Establishment of an Aquaculture Farm Service facility.

1.3.4. Activities Planned April – June 2011

- Design and develop an implementation plan for Aquaculture Farm Service Centers.
- Develop and implement a contract farming program for aquaculture that will include both large and small aquaculture producers.
- Continue to provide technical assistance to aquaculture producers.
- Assist producers in marketing strategy and programs.
- Monitoring monthly product and market prices.
- Business training will be provided to the fish producers in Babil.
- Identify and develop an action plan for group and association development in aquaculture.
- Continue to monitor the weight and health of Hungarian mother fish in the hatcheries in preparation for the hatching season.
- Continue working with fish producers to develop an integrated marketing plan which will stabilize prices and allow for the product to be available throughout the year.
- Continue working with fish producers to link producers to the hatcheries to purchase or contract to receive hybrid Hungarian fingerlings.

1.4 FEED PRODUCTION

The USAID-*Inma* Agribusiness Program determined that an important intervention for the Livestock-Protein sector was to address the quality of feed available to Iraqi producers while establishing laboratories to analyze the feed. To address the problem six feed mills were chosen for production improvements. Three feed analysis laboratories have been established and analysis equipment and new software have been provided for these three feed labs as well as training for the laboratory staff. In addition, it was determined that an opportunity may exist by capitalizing associations with a voucher program linked to the feedmills. However, in September 2010 it was brought to the attention of the livestock team that there were several possible problems with the voucher program and that the program may not be achieving the planned goals. The program was suspended after an internal investigation was implemented which determined that the program failed to meet the development objectives and that the best alternative was to terminate the program.

After conducting a survey of water buffalo in the central and southeast of Iraq the livestock team found that there was a need for forage and improved supplements to improve milk production. Working with locally available feeds such as waste dates, urea and grain-by-products a potential supplement program was designed. Multiple formulas are under consideration and feed samples will be analyzed with the feeding trials potentially starting in April.

I.4.1. Contribution to Strategic Objectives

Table I.4: Feed Value Chain PMP Indicators and Impact to Date

Activity 4 Protein Feed Mills				
SO #	SO	This Quarter ⁵	To Date	Goal
8.2.3.4 (FM)	Increase in total gross sales of program-assisted enterprises	\$2,875,978	\$16,645,772	\$7,917,000
8.2.6.3 (FM)	Number of jobs created	17	424	255

I.4.2. Activities Implemented January - March, 2011

Technical Assistance

- Five feed mills have been upgraded and Vano remains under construction.
- New software for the feed analytical equipment was identified and received.
- Sites were chosen for water buffalo feed demonstrations.

Monitoring

- Monitored monthly production and sales of the feedmills.
- Monitored the feed market price.
-

I.4.3. Challenges Faced

- **Challenge:** The former voucher program was not designed to demonstrate the effects of a high quality feed.
- **Solution:** The program will develop and implement proper feed demonstrations.
- **Challenge:** Feed mill operators have high production costs when depending on electricity produced from generators.
- **Solution:** Feed mill operations can implement activities based around electricity availability from the grid.
- **Challenge:** The high prices of imported raw materials result in higher complete feed and supplement costs.
- **Solution:** Feed mills and Livestock team need to educate producers about feed formulation and how to reduce nutrient costs.
- **Challenge:** Existing recipient record keeping and financial recording are sometimes incomplete making it difficult to evaluate sales and costs.
- **Solution:** USAID-*Inma* field and business development staff will continue to work with the livestock projects management teams to ensure simplified, effective financial and book-keeping methods are being followed. In addition, simple ledgers are being developed for program beneficiaries.

I.4.4. Activities Planned April – June, 2011

- Complete the upgrades in Vano.
- Assist the feed laboratories to properly calibrate the feed analysis equipment.

⁵ All values are actual values and have not been adjusted with any correction factor.

- Provide feed grinders for standardization of particle size for the feed analysis laboratories.
- Provide technical assistance on cattle, poultry and aquaculture feed formulations.
- Work to create partnerships between feed mills feed laboratories and feed lots.
- Develop linkages were possible between feed mills and feed laboratories to provide the end users with reliable feed analyses.
- Work with feed mills to implement the use of feed tags on every bag of feed sold.
- Monitor monthly production and market prices.
- Implement water buffalo feeding trials.
- Management training will be provided for the feed mills.

2. HORTICULTURE VALUE CHAIN

The horticulture value chain works with growers and marketers of fruits and vegetables to increase productivity, introduce new and improved crops and technologies that improve quality of production, increase yields and produce crops to the market that command higher prices. This is done through a wide variety of demonstrations and trainings open to cooperating farmers and farmer groups as well as the public.

2.1 FARMER FIELD SCHOOLS

Farmer Field Schools and Field Based Learning Centers are a critical sustainable component of the horticulture value chain activities. The FFS and FBLC are group-based hands-on learning processes that combine methods from agro-ecology, rural community development and experiential education. There are five basic aspects used throughout FFS including; adult education, facilitation, plant - animal life cycles, group study and farmer group development. The FFS concept could be described as a method of empowering farmers to work together to solve their problems. It develops the capacity of farmers to generate, adapt, and extend the knowledge to farming communities. Farmer field schools build capacity in farming communities teaching them to address local problems and become less dependent on outside sources of expertise. Each of the schools address research, education/extension, marketing and advocacy.

Farmer Field Schools enhance the abilities of farmers to fully understand the issues they may face in agricultural production and methods for overcoming them. By providing farmers experiential learning (hands-on) opportunities in the field, farmers gain a greater understanding of alternative solutions to the problems they face. These activities involve simple experiments, regular field observations and group analysis. The knowledge gained from these activities enables participants to make their own locally-specific decisions about crop and livestock management practices.

The basic features of a Farmer Field School are as follows:

- FFS is field based and lasts for a full cropping season.
- FFS meets about eight times throughout the growing season, following the different phases of production.
- The curriculum used during a FFS addresses the crop of technology being investigated by the participants.
- FFS educational methods are experiential, participatory, and learner centered.
- Each FFS meeting includes possibly three activities: the growing cycle analysis, a “special topic”, and possibly a group dynamics activity (roundtable).
- In every FFS, participants conduct a study comparing seedbed formation, planting, germination, irrigation, fertilization, cultivation, harvesting, and marketing. Some FFS may be held as a demonstration, comparing difference in production technologies.
- FFS often includes several additional field studies depending on local field problems.
- Between 20 and 50 farmers participate in a FFS. Participants learn together in small groups to maximize participation and understanding.
- FFS could include a Field Day, allowing farmers make presentations about issues they are addressing in their fields and possible corrective actions that could be taken to address the issues.
- FFS facilitators are progressive local farmers and program staff that have gained trust from farming communities.
- FFS will include planning for follow-up activities deemed necessary by participants.

The FFS program is designed to follow the crop life cycle for agricultural production. A seven step program for vegetable production will cover; soil tillage, seed-bed preparation, planting, fertilization, irrigation, weed and pest management (cultivation) and harvesting.

Farmers in groups up to 25 members at each site participated in a total of eighteen FFS trainings this quarter. Topics discussed included: greenhouse management techniques such as appropriate irrigation, adequate ventilation, weeding, avoiding manure usage, common diseases that infect different crops, discussing symptoms, causes and diagnosis.

Field Based Learning Centers FBLCs (demonstration farms) exemplifying the newest methods for commercial mechanical agriculture allows farmers to visit a “working farm” that compares traditional methods to modern methods in row crop production. These farms will produce vegetables, cereal grains and other agricultural crops indicative to Iraq. To create a positive learning environment for farmers, traditional methods and modern commercial methods will be used to plant, cultivate and harvest crops at the same locations. These sites will allow farmers to compare different methods and measure yields and per unit cost. Each location will consist of about 12 donums, using side-by-side comparisons of seedbed sizes, planting methods (direct seeding vs. transplants), irrigation systems, and growing cycles. This method will create a hands-on learning laboratory ideal for educating producers.

Each location will consist of a field layout, crop varieties, planting dates and methods, irrigation methods and yield calculations. Cooperating farmers/associations, government and academia institutions provide good tillable land for the duration of the program. All activities will be centered on educating farmers. The educational plan will follow the cropping cycle. FFS classes that encompass each phase of the growing cycle and issues many of the participants may be facing in their own fields will be taught at the FBLC’s. These Field-Based learning Centers will showcase alternative methodologies for production agriculture while removing the risk for farmers. The centers assume the risk, applying the methods first which will allow farmers to see the results before trying them in their fields.

An important sector for Iraq is irrigation and water management. Within the horticulture team is a qualified group of irrigation specialists. The team focuses on improving water management and works in all sectors of agriculture. More specifically, the activities are as follows:

- Provide technical assistance to farmers involved in orchards and vineyards, potatoes and greenhouses to demonstrate improved water management systems.
- Provide technical assistance to farmers involved forage programs.
- Train project staff, public sector officials and farmers about improved irrigation techniques
- The activities in the field are closely linked to cost saving technologies that are promoted in business management round tables, workshops, conferences and seminars.
- The technologies being demonstrated save water or use water more efficiently.

During the first quarter of 2011, which corresponds to the winter, rainy season in Iraq, the irrigation team conducted only limited field visits. The focus of the irrigation team was in the identification and further selection of the Field Base Learning Centers and preparation for the upcoming planting season.

Table 2.1: Status of Field Based Learning Centers by Province

FBLC Location	Activities					
	Topography	Soil and Water Sampling	Infiltration Test	Advance Test	Irrigation Systems Design	Procurement
Samawa	Complete	Complete	Complete	Complete	Complete	Flumes. Lay flat in process
Basra	Complete	Complete	Complete	Complete	Complete	Flumes. Lay flat in process
Wasit	Complete	Complete	Indirectly	April	Complete	Flumes. Lay flat in process
Diwaniyah	Complete	Complete	Complete	April	Complete	Flumes. Lay flat in process
FBLC Location	Activities					
	Topography	Soil and Water Sampling	Infiltration Test	Advance Test	Irrigation Systems Design	Procurement
Anbar	Complete	Complete	Indirectly	April	Complete	Flumes. Lay flat in process
Abu Graib	Complete	Complete	Indirectly	April	Complete	Flumes. Lay flat in process
Ninawa	Complete	Complete	Indirectly	April	Complete	Flumes. Lay flat in process
Sulaymaniyah	Complete	Complete	Indirectly	April	Complete	Flumes. Sprinkler system in process.

2.2 GREENHOUSE CROPS

The USAID-*Inma* Agribusiness Greenhouse program plays a critical role in horticulture productivity and sustainability. The team identified out-of-season production in tunnels and hoop houses as the best opportunity for farmers to improve incomes and profitability in the short-medium term. The greenhouse technical assistance program that was initiated early in 2010 has continued in selected demonstration sites and expanded into the Southeast provinces. The activities are closely linked to the Farmer Field Schools (FFS) and Field Based Learning Centers (FBLC) discussed above.

2.2.1. Contribution to Strategic Objectives

Table 2.2: Fruit and Vegetable Value Chain PMP Indicators and Impact to Date

Activity I	Greenhouse Crops			
SO #	SO	This Quarter ⁶	To Date	Goal
8.2.2.1 (GH)	Increase in Gross Sales of targeted annual vegetables and fruit in program assisted areas	\$25,035	\$85,174	\$4,500,000
8.2.4.4 (GH)				
8.2.6.3 (GH)	Number of jobs created	35	137	4,500

2.2.2. Activities Implemented January-March, 2011

Technical Assistance

- Greenhouses with anti-virus netting to reduce insect movement and rollup side walls were installed in thirty demonstration sites, including twelve in the southeast.
- Installation of two multi-span transplant greenhouses was initiated in Rabee, Baghdad and Suwera, Wasit. Site preparation was completed for a third multi-span unit in Sulaymaniyah, to be installed next quarter.
- Greenhouse FFSs were initiated at six demonstration sites and included how to maintain drip irrigation systems.
- Greenhouse TTA was initiated for more than four hundred thirty farmers who control more than 3800 greenhouses producing approximately 1500 tons of vegetables monthly. Growers received two days of intensive training focused on improving major crops such as tomatoes, cucumbers, eggplant, and peppers. These same growers received biweekly TTA provided by private extension agents throughout the production season to improve management techniques and how to diagnose problems and devise solutions.
- The irrigation team installed drip irrigation systems and tensiometers in the following areas:
 - Two areas in Babil;
 - Two areas in Diwaniyah;
 - One area in Najaf;
 - One area in Karbala;
 - One area in Baghdad;
 - One area in Diyala;
 - One area in Dahuk;
 - One area in Sulaymaniyah;
 - One area in Erbil.
- Drip irrigation time charts were updated and distributed to farmers.
- Drip Irrigation Systems for the two potato demonstration areas in Fallujah and Ninawa were installed along with tensiometers and watermarks to monitor the soil moisture content.
- Farmers in multiple areas were trained on how to operate and maintain irrigation systems as well as how to record and use the information from the soil moisture monitoring equipment.

⁶ All values are actual values and have not been adjusted with any correction factor.

- Regular periodic visits to the farms allowed irrigation team members to work with the farmer to adjust irrigation timing intervals in order to improve the water management systems.

Marketing

- Activities were undertaken to link the greenhouses with the packing houses and other markets.

2.2.3. Challenges Faced

- **Challenge:** Greenhouse installation vendors faced weather related delays and some partially installed greenhouses were damaged by high wind.
- **Solution:** Staff directed the vendor to reinstall most damaged greenhouses and made repairs as needed.
- **Challenge:** High water salinity levels in Central and South GFAs force farmers to implement better water management practices.
- **Solution:** USAID-*Inma* staff must monitor and continually encourage farmers to closely follow established irrigation and water use protocols in addition to selection salt tolerant crops
- **Challenge:** Farmers are not always willing to follow project recommendations and guidance.
- **Solution 1:** USAID-*Inma* staff must monitor and continually provide technical assistance to farmers to increase the understanding of the long term economic benefits of following recommended procedures.
- **Solution 2:** Work closely with extension agents to provide guidance and trainings that parallel and validate advice provided by the project staff.
- **Challenge:** Delays in the procurement of equipment.
- **Solution:** Working closely with the procurement section to establish a list of acceptable vendors to provide affordable equipment on a timely basis.
-

2.2.4. Activities Planned April - June, 2011

- Field days, FFS and FBLC to demonstrate greenhouse technologies, seed and management techniques.
- Finalize greenhouse and nursery installation.
- Provide training and onsite technical assistance to the greenhouse operators.
- Early planting technique demonstrations.
- Business development trainings.
- Provide irrigation FFS for orchards and vineyards.
- Provide follow-up evaluation of irrigation systems in the potato demonstration sites.

2.3 OPEN FIELD CROPS

The open field vegetable TTA program continued this quarter but was limited due to the winter growing season. Beneficiaries received TTA and advanced practical (hands-on) training in irrigation, planting and equipment maintenance. In addition, assistance was provided with harvesting, post-harvest packaging and sales.

In response to the poor efficiency of existing irrigation infrastructures, USAID-*Inma* has focused on enhancing efficiency through distribution of irrigation calendars to farmers with training on how to use the calendar as a management tool to reduce water waste and targeted TA focused on broader water management issues. In response to high soil and water salinity levels, USAID-*Inma* has conducted general assessments of crop water needs and salinity tolerance from the FAO CLIMWAT database. Through

addressing water management issues and accurately assessing the extent of the salinity issue, producers are positioned to expand yields and improve the quality of products to market. Furthermore, a salinity management protocol in Arabic was distributed to farmers.

Farmers in Sulaymaniyah and Wasit using the information from the strawberry demonstration in 2010 expanded the business by replicating and importing additional strawberry plants. More specifically, the grower in Sulaymaniyah replicated his 98,500 plants and sold the runners to twenty farmers in the area. In addition, two private sector companies imported an additional 250,000 plants and distributed the plants to more than thirty farmers in Sulaymaniyah and Wasit.

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 ⁷	To Date	Goal
8.2.2.1(OFF)	Increase in Gross Sales of targeted annual vegetables and fruit in program assisted areas	\$2,911	\$15,655,607	\$4,500,000
8.2.6.3(OFF)	Number of jobs created	4	7285	447

2.3.2. Activities implemented January – March, 2011

- Two potato demonstration farms were planted in Ninewah and Falluja. These are now active FFS sites to train regional potato farmers on modern mechanized potato production and irrigation techniques.
- The practicality of a potato tissue culture center was evaluated and provided to PRT Endeavor to support a CERP grant request by Date research Institute. It was determined that there is a need for the development of potato tissue culture activity in Iraq. The adoption of tissue culture techniques has the potential to be very profitable to both the potato and date industry by allowing new and improved varieties to be on market sooner.
- With the assistance of a local manufacturing company a water measurement device for the FFS and FBLC sites was built and installation is in progress.
- Provided technical assistance to the spring melon demonstration.
- Provided technical assistance to the producers and businesses replicating the strawberry production program.
- The team focused on land and irrigation preparation for the Fallujah and Ninawa potato demonstration.

2.3.3. Challenges Faced

- **Challenge:** Risk adverse farmers are slow to adapt new technologies and management practices because of perceived crop loss potential.
- **Solution:** To improve the adoption rate and gain the trust of Iraqi farmers USAID-Inma will provide support to farmers to minimize the risk of implementing the new management practices at FBLCs. In addition, USAID-Inma will work very closely with owners of the

⁷ All values are actual values and have not been adjusted with any correction factor.

demonstration farms to reduce the farmer risk. When combined with a FFS that covers the entire growing season, farmers should adopt new technology at a faster rate as compared to limited instruction.

- **Challenge:** Seed varieties available in Iraq are limited and many are outdated genetically. This results in lower crop yield even with advanced management practices. Iraq's MOA certification program is slow to certify and register advanced seed varieties limiting the choice of new seed varieties available to farmers.
- **Solution:** USAID-*Inma* has initiated, in cooperation with the MOA, a program to field test and certify new seed corn varieties in a single crop season. If successful this will serve as a model for introducing, testing and certifying other types of seeds.

2.3.4. Activities Planned April - June, 2011

- Ongoing FFS and FBLC activities will be implemented.
- In cooperation with the Mesopotamia Seed Company owned by the MOA the horticulture team will implement a corn seed variety demonstration with the goal of reducing the time for variety registration from two years to one year.
- Introduce potato farmers to mechanically assisted harvest techniques and proper post harvest handling to maintain quality.
- Link open field producers with the packing houses to develop sustainable markets.
- Provide technical assistance to melon growers.
- Provide technical assistance to strawberry producers.
- Provide technical assistance to demonstration sites in crop rotation, mechanization and new technologies.
- Finalize and publish The Principals of Planting Potato.

2.4 ORCHARDS, VINES AND OLIVES

Model/Demonstration Orchard Establishment

Beginning in January 2010 the USAID-*Inma* Program distributed 126,267 stone fruit trees (apricot, plum, peach and nectarine) in twelve provinces on one hundred thirteen sites for a total area of six hundred ninety five donums. Eight thousand six-hundred twenty five trees were distributed to the Iraqi Ministry of Agriculture.

The provinces and number of sites provided with trees and vines are listed below:

Province	Number of Sites
Sulaymaniyah	13
Dahuk	19
Baghdad	28
	4
Babil	11
Diyala	3
Diwaniyah	2
Karbala	2
Wasit	9
Najaf	3
Erbil	11
Salah Al-Din	8

Model/Demonstration Vineyard Establishment

In January 2010, the USAID-*Inma* Program imported 27,898 grapevines complemented by an additional 5,600 Iraqi produced grapevines with 2,400 imported vines distributed to MOA. The other recipients were eleven farmers who planted ninety donums of vineyards in Salah Al-Din (30 donums), Najaf (40 Donums), and Taji (20 donums). USAID-*Inma* field staff carefully monitored the farmer activities to ensure adherence to best practices. Survival rates of USAID-*Inma* supervised plantings were above those expected for commercial orchards, with only small losses of Iraqi purchased vines, while vines imported from the US are in good condition with mortality rates lower than one percent.

USAID-*Inma* is using these demonstration plots as training centers for neighboring farmers and extension agents. Field staff will continue to monitor the survival rate and advise farmers on technical issues that arise.

Interestingly, farmers have chosen to use the material from the table grape pruning's to start nurseries. The Muthanna FBLC owner received and rooted more than one hundred seventy five cuttings. Another producer in Diwaniyah rooted 1,200 seedless grape cuttings.

Olives

Olive groves in northern Iraq are concentrated in the Bashiqa area of the Ninawa Plain where the trees have been grown for over 500 years. Currently, 450,000 trees of various ages are producing roughly 25-42 kilograms of olives per tree per year. Most of the production in Bashiqa is used for table olives, which are currently processed individually by members of the Al-Zaytoon Olive Association. The Association, with more than 200 members, approached USAID-*Inma* with the objective of establishing an olive oil industry. USAID-*Inma* is supporting the Association with funding and TA to improve the pressing operation and quality of olives produced in the region.

2.4.1 Contribution to Strategic Objectives

Activity I	Fruit Orchards			
SO #	SO	This Quarter ⁸	To Date	Goal
8.2.1.1(OV)	Increase in Gross Sales of perennial products in program assisted areas	\$0	\$6,192	Limited sales until plant maturation
8.2.6.3 (OV)	Number of jobs created	5	445	700

2.4.2. Activities Implemented January – March 2011

- Phase one of the orchard program TTA was completed with thirty growers participating. These growers have established orchards with improved stone fruit tree varieties supplied by the program in 2010. The growers were trained in winter pruning and more than one hundred fifty donums of trees were properly pruned.

⁸ All values are actual values and have not been adjusted with any correction factor.

- Seven greenhouses were installed at vineyard nursery sites in Rabee, Salah Al Din, and Rashdiyah.
- The above nurseries were planted with more than 30,000 cutting from the pruning of the improved variety of table grapes planted in 2009.
- One greenhouse nursery was installed in Muthanna and planted with more than 5,000 pomegranate cuttings of the Wonderful variety derived from 2008 plantings in Halabja and Karbala.
- Eleven orchard and vineyard demonstration sites were selected for ongoing irrigation demonstrations with drip irrigation systems installed on forty-five donums.
- Three hundred ninety nine participants were trained in citrus integrated orchard management of which one hundred three were women.
- USAID-*Inma* field staff provided TTA and FFS in pruning, orchard maintenance and grafting training at the demonstration sites.

2.4.3. Challenges Faced

- **Challenge:** To gain farmer acceptance of modern pruning and trellising development techniques.
- **Solution:** Reward farmers who allow their orchards to be used for demonstration of proper pruning technology by installing a small drip system in the orchard.
- **Challenge:** Vineyards are infested with insects and fungi.
- **Solution:** The USAID-*Inma* program has implemented and will continue to implement TTA in Integrated Pest Management (IPM) and crop protection methodologies.
- **Challenge:** Olive orchards in Ninawa are short of water, which is slowing the growth of the trees and reducing yields.
- **Solution:** Develop and implement an olive irrigation demonstration to show the efficient use of existing water.

2.4.4 Activities Planned April-June, 2011

- Provide TTA at pruned/grafted sites through the initial phase of the fruiting season.
- FFS will focus on all aspects of production in the orchards.
- The program will continue to implement the FBLC and FFS activities.
- Provide bud wood grafting TTA to ten farmers who will receive grafts from USAID-*Inma* provided varieties.
- Assist in the replication of pomegranates, stone fruits and grapes for nursery enterprises.
- Assist in the development of three transplant nurseries in Sulaymaniyah, Baghdad and Wasit.
- Finalize and publish: Multiplication of Grapevines in Nurseries and Pomegranate Planting Guide.

2.5 POST PRODUCTION, PACKING HOUSE AND SPECIALTY CROPS

Significant progress was made last quarter with the packing houses supported by USAID-*Inma*. The Radhwaniyah, Fallujah and Karbala packing houses are operational and are grading, sorting and packaging fruit and vegetables. The variety of products packed included onion, eggplant, peppers, cucumber, tomato, potatoes, carrots, squash, apples, lemons, mandarins, and oranges. The Radhwaniyah and Taji packing houses, with assistance from USAID-*Inma* were awarded contracts to supply the Iraqi Military. In general, most of the produce provided to the packing houses is sold immediately; however one packing house facility is using cold storage to store dates and potatoes to increase the price received for the product. In general, prices for produce fall during harvest time and by storing for a few months significantly higher prices can be

received during the off-season. The stored dates are now beginning to be sold. The stored potato sales will begin in the next quarter.

The Taji packing house continues to expand business and is running at full capacity. The other packing houses report increased interest for services and are showing valuable increases in sales, despite the normal winter season decline in produce availability.

During the quarter a mushroom specialist provided the USAID-*Inma* staff and various individuals interested and involved in mushroom production. Activities were performed in the Erbil and Baghdad areas.

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 ⁹	To Date	Goal
8.2.2.1(PH)	Increase in Gross Sales of targeted annual vegetables and fruit in program assisted areas	\$1,014,538	\$9,820,896	\$33,840
8.2.6.3 (PH)	Number of jobs created	2	457	250

2.5.2. Activities Implemented January - March, 2011

- USAID-*Inma* continued to develop selected export opportunities such as dates and mushrooms.
- An agricultural marketing forum was held in Erbil to open new lines of communication between producers, supermarkets and the packing shed owners.
- An agriculture marketing forum was held in Babil province. Delegates were introduced to new market concepts and had the opportunity to discuss, market constraints and possible resolutions.
- Six marketing round tables were held to create a better understanding of marketing, market function and the skills and technology required to be an effective marketer.
- The USAID-*Inma* mushroom specialist reviewed production practices, consulted with the farm manager and made recommendations to improve production at the Hameedyah Mushroom Farm. The manager of Hameedyah Mushroom Farm received a copy of the Pennsylvania State University Mushroom Integrated Pest Management Manual, which contains the latest methods to control diseases and insects.
- The mushroom specialist visited the Wade Al-Fter Mushroom Company, building a new fourteen production room growing facility in Erbil, and discussed mushroom growing technology, packaging and marketing with the owner. The facility will produce about 40 metric tons of button mushrooms per month with the first harvest planned for May.
- The Mushroom specialist conducted mushroom growing seminars for growers, program staff, MOA and extension specialists.

⁹ All values are actual values and have not been adjusted with any correction factor.

- The mushroom specialist visited the Najat Ali Mikael Oyster Mushroom Farm and the Abdul Rahmann Ali Oyster Mushroom Farm near Erbil and advised the farms on how to build a modern pasteurization chamber for finishing substrate.
- The mushroom specialist visited the MOA Research Laboratory to provide advice on growing mushroom spawn.
- The mushroom specialist visited the Forestry Research Center to discuss how the facility could be used to prepare mushroom compost.
- New packaging was developed for Basra dates, local honey and Anbar rice to support a marketing initiative with duty free shops in the Baghdad International Airport. Sales for this initiative encouraged the duty free shop owning company to add three point-of-sale displays to other duty free shops.
- With the assistance of USAID-*Inma* the growers of Basra dates were linked with the City Center Mall of Erbil and dates were featured for Nawruz, the New Year festival.

2.5.3. Challenges Faced

- **Challenge:** Existing packing house recipient record keeping and financial recording are often incomplete.
- **Solution:** USAID-*Inma* field and business development staff continue to work with the packing house management teams, and at firm level to promote simplified, effective financial management and book keeping methods. In addition, a standard accounting ledger has been developed.
- **Challenge:** Gaining an understanding of Iraqi markets is extremely difficult; market information is fragmented and the entire marketing process is not fully understood even by those who act in sectors of the market.
- **Solution:** USAID-*Inma* marketing department, working with field staff, are initiating a market research program which will review the movements of marketing information in the wholesale market, processing, packing house and large farmer levels.
- **Challenge:** Farmers (producers) near the packing houses do not understand the business purpose of the packing facilities.
- **Solution:** The USAID-*Inma* program will link local producers within a certain radius to the packing houses. Activities are on-going to form these key suppliers into associations, both formal and informal.
- **Challenge:** The owner of Rabee Packing House has decided to stop production.
- **Solution:** The USAID-*Inma* team is looking at other strategies such as packing houses which are functioning at capacity leasing the packing house.

2.5.4. Activities Planned April - June, 2011

- Targeted technical assistance to the packing houses.
- Ongoing and new training of packing house staff.
- Continue to develop linkages between farmers, farmer groups, packing houses and the market.
- Develop and implement a Good Agricultural Practices program for the packing houses.
- TTA assistance to growers and packing houses with the intraregional trade of fruits and vegetables between key Iraqi areas.
- Assess market demand for local produce at five Iraqi wholesale markets with the objective of better understanding purchasing and supply patterns in the Jumeela, Taji, Rashid, Basrah and Erbil markets.
- Finalize and publish: Olive Oil in Iraq and Hazard Analysis and Critical Control Points (HACCP).

3. BUSINESS DEVELOPMENT-CROSS-CUTTING SERVICES

The goal of USAID-*Inma*'s business development/cross-cutting services team is to create sector-wide opportunities for efficiencies and sustainability. This is done through addressing the management needs of individual enterprises and associations, as well as establishing networks for sharing lessons learned and collective action.

3.1 MARKET DATA PUBLICATIONS

This quarter USAID-*Inma* began to implement a refined market information strategy. This strategy is to support the limited collection of vital market information while also working with industry and producer associations to develop capacity to process, enhance and utilize such information.

3.1.1 Contribution to Strategic Objectives

Table 3.1: Fruit and Vegetable Value Chain PMP Indicators and Impact to Date

Activity I	Market Data Publication			
SO #	SO	This Quarter ¹⁰	To Date	Goal
8.2.4.1	Market Information System providing daily wholesale pricing of major agricultural commodities in 18 wholesale markets across Iraq.	18	18	18 markets

3.1.2. Activities Implemented January – March, 2011

Market Research

- Two private Iraqi companies were awarded contracts to collect specific information for an initial nineteen week period.
- Data collection started the week beginning February 28, 2011.
- During the month of March business development staff worked with each company to refine data collection and reporting. This included working directly with price collectors during visits to local markets to develop standard collection procedures in order to ensure accurate and comparable information is collected.

Association Identification

- Based on discussions held last quarter with several agricultural associations, USAID-*Inma* is seeking industry and producer associations interested in developing and providing market information for the association members. More specifically, the selected associations would receive a small grant to assist in developing the internal capacity to collect and disseminate market information relevant to membership. The information would include pricing, volume and demand data for the various industries.
- An anticipated outcome is to have the associations assign a person to be a marketing information specialist. This person would synthesize price information supplied by USAID-*Inma* with market information gathered from the members and distribute to the

¹⁰ All values are actual values and have not been adjusted with any correction factor.

membership utilizing various communication methodologies such as: web, meetings and newsletters.

3.1.3. Challenges Faced

- **Challenge:** Through the identification process, USAID identified seven associations to participate in the Market Information Capacity Development Program. USAID-*Inma* has been unable to complete the grant package for a significant number of these associations because of out-dated or missing registration documentation. This situation is representative of most of the associations in Iraq.
 - **Solution:** USAID-*Inma* continues to work with these associations (some are key industry associations such as the Iraqi Red Meat Association) to get the required registration documentation in order to complete the grant application package. If appropriate documentation cannot be secured, either an alternative association may be identified or the program will continue with fewer associations than planned. An alternative solution is to develop a more rigorous decision matrix to better identify properly organized farmer organizations.
- **Challenge:** The search for private data collection firms revealed that there are few firms in Iraq with market research experience. The two firms USAID-*Inma* is now working with have varying degrees of experience, but both have limited practical experience collecting information on agricultural products and markets.
 - **Solution:** In order to develop the capacity of Iraqi firms in this area, USAID-*Inma* will need to work closely with each firm to develop an ability to accurately collect and report on agricultural market information.

3.3.4. Activities Planned April - June, 2011

- Finalize grants to associations willing to partner with USAID-*Inma* to build capacity to provide market information to members.
- Provide training to partner associations and groups in the collection and dissemination of market information to their members.
- Continue the collection of basic price and market information by the two private Iraqi companies.
- Provide assistance to the two private collection firms on expanding their customer base. Through firm-level assistance and management training continue to emphasize the importance of utilizing information (internal and market) in making business decisions.

3.2 BUSINESS ASSISTANCE

During the quarter USAID-*Inma* continued efforts to strengthen the management capacity of agribusinesses in Iraq. The Business Development Services (BDS) team focused on continuing firm-level assistance by developing management systems, business planning and building market linkages.

Assistance in management was provided by direct technical assistance, on-site technical assistance and through a series management seminars focusing on record keeping, budgeting, contracting and marketing. In addition to supporting the development of private enterprises, USAID-*Inma* provided assistance to agribusiness associations and organizations interested in developing commercial activities to benefit members by providing association management training workshops addressing the sustainability of agricultural associations and groups.

USAID-*Inma* supported the development of market linkages through industry roundtables, agribusiness forums and through direct technical assistance bringing suppliers together with buyers.

3.2.1. Contribution to Strategic Objectives

Table 3.2: Fruit and Vegetable Value Chain PMP Indicators and Impact to Date				
Activity 2		Business Assistance		
SO #	SO	This Quarter ¹¹	To Date	Goal
8.2.4.2 (BA)	Percentage of program-assisted businesses benefiting from cluster formation		3626 businesses participated	PMP assumes 5% received benefits
8.2.4.3 (BA)	Firms and associations trained to understand markets and farming profitability		157	PMP assumes 5% received benefits

3.2.2. Activities Implemented January - March 2011

Firm Level – Direct Assistance.

Revision of nine feedlot business plans was completed this quarter. This provided firms with a planning tool and produced a balance sheet showing the net value of the operation. An analysis of the performance of the feedlots showed varying degrees of success by operation, but demonstrated that both beef and sheep feedlot operations can be very profitable if effectively managed. The more successful feedlots maintained consistent and appropriate stock levels, provided balanced rations to achieve optimum efficiency and are employing successful procurement and marketing strategies.

- Business Plans: 9 completed; 4 draft copies being finalized with companies; 10 in process.
- 162 site visits to forty-five companies.
- 83 site visits to twenty-nine associations.
- 26 site visits to fifteen growers.

On-Site Technical Assistance.

This quarter USAID-*Inma* initiated a new round of on-site Technical Assistance. The initial visits assessed the needs of the company and started the implementation process. The on-site technical assistance focuses on the implementation and utilization of record keeping systems and the development of operational plans (budgets, marketing, and procurement plans) to ensure long-term sustainability through proper planning and risk management.

- Continued to assist firms by revising business plans to account for operational realities and building market linkages.
- BDS staff continued working with feedlots, feed mills and packing houses to review the current business status and develop reasonable strategic plans for the future.
- North - Initial meetings with 12 companies and 4 associations.
- Central – Initial meetings with 17 companies and 3 associations.
- South – Initial meetings with 16 companies and 2 associations.
- Southeast – 2 companies and 1 association confirmed as TA recipients.

Management Seminars

¹¹ The values this quarter are actual values and have not been adjusted with any correction factor.

The seminars completed this quarter were mainly the Basic Recording Keeping and Determining Profits Seminars. Most participants attend 3 to 4 from the series depending on the level and nature of their operations. The seminars were well received by the participants, but due to their skill level, many requested additional training, especially in record keeping.

- North – 3 Seminars, 83 participants.
- Central – 7 Seminars, 153 participants.
- South – 9 Seminars, 160 participants.
- Southeast - 6 Seminars, 138 participants.
- A basic farm record book was developed as for the Record Keeping Seminars and to demonstrate real world examples. The record books will also be distributed and utilized at FFS and greenhouse TTA sessions.

Industry Roundtable Meetings

USAID-*Inma* has supported the development of agribusinesses through Industry Roundtables. Roundtables provide a forum for agribusiness to develop business relationships, share best practices, learn of new business opportunities and work together to identify, prioritize and discuss solutions for issues facing the industry.

- North – 3 Roundtables , 67 participants
- Central – 4 Roundtables, 78 participants
- South – 3 Roundtables, 62 participants
- A total of 10 roundtable meetings were held in the SBDCs supported under the Tijara Program this quarter: two feed production, six horticultural marketing and two livestock financing roundtables. The Horticultural Roundtables (Baghdad, Erbil, Anbar, Karbala and Najaf) brought together packing houses, brokers, buyers and retailers as well as growers. Topics discussed were: buyer communication concerning produce specifications, quantities required and delivery timing; producer communication concerning produce availability; suggested methods to improve and coordinate buyer and producer communications.
- The Livestock Sector Roundtables held in Erbil and Baghdad focused on how to move the sector forward through finance. Expansion limited due to a lack of traditional credit products, such as using animals as collateral. Producers in attendance in these roundtables discussed how the sector can educate both the financial and livestock industry to improve access to capital. Producers talked about educating other producers on the need to keep records and to repay current loans. Industry participants took steps to gather information about the sector so they could educate banks about opportunities within the sector.

Association Development

This quarter USAID-*Inma* continued Association Management Training workshops focused on addressing the sustainability of agricultural associations. Ten two-day workshops were held throughout Iraq that covered management practices and business planning techniques.

- North – 2 two-day workshops, 53 participants
- Central – 3 two-day workshops, 55 participants
- South – 2 two-day workshops, 38 participants
- Southeast - 3 two-day workshops, 65 participants
- The BDS team and regional staff met with the owners of one of the largest Iraqi food and dairy product manufacturers and distributors in Iraq in Erbil, to discuss the feasibility of jointly organizing a milk collection center and dairy farmer cooperative near Abu Graib. The company owns industrial land near Abu Graib, which could be utilized to build a milk collection center. USAID-*Inma* will assist with the feasibility study, provide cooperative training, survey farmer willingness to organize a cooperative and assist with organization if feasible.
- USAID-*Inma* has been utilizing service providers to assist in the delivery of program and training activities. This quarter BDS provided training and consultations to seventeen private Iraqi firms and organizations to ensure effective management. This included outreach to thirteen current and one former USAID supported Small Business

Development Centers on responding to procurement requirements and the implementation of program activities targeting private businesses.

- The BDS team and irrigation specialists met with the Al Shihimia Water Users Association and Farmer Union representatives in Wasit to discuss assistance to the association, which could benefit from irrigation programming and improved management of association costs and collection of fees.

Agribusiness Forums

With the success of the linking producers to the City Center Market in Erbil, USAID-*Inma* undertook additional research on the market and infrastructure to identify other opportunities. This research conducted at the markets in the north and central areas lead to the conclusion that the retail market is rapidly changing and Iraqi producers need to be more aware of the requirements of the retail market. For instance, most Iraqi products cannot meet the packaging requirements of supermarket buyers. This changing marketing environment was discussed at the two Agribusiness Forums on the Future of Marketing.

- Agribusiness Marketing Forum – Erbil, 80 participants
- Agribusiness Marketing Forum – Babil, 65 participants
- Market tested Iraqi agricultural specialty products in Duty Free Shops in the Baghdad International Airport. The response was excellent and was followed by the opening of more stands in additional terminals.

3.2.3 Challenges Faced

- **Challenge:** State intervention into the economy has left the agribusiness sector facing a large gap in knowledge concerning operations and management of a private enterprise.
 - **Solution:** The development of viable private agribusinesses in Iraq will require the introduction of modern production technologies, adoption and utilization of sound management and business practices. USAID-*Inma* will continue assisting firms and associations in management and operations. Assistance is provided in the three core Business Management areas of financial management, operational management and business planning. This assistance gives companies the competence to manage financial resources, develop the procedures, policies and systems to effectively run a business, and the ability to control unit costs, predict cash flows and evaluate market opportunities. The objective of this assistance is to help agribusinesses manage the day-to-day aspects of business operations, respond to competitive conditions and prepare for future growth.

USAID-*Inma* has also been supporting firm-level development through industry roundtable meetings. These meetings provide an opportunity for companies involved in the same value-chain to gather regularly in order to discuss on an informal basis the issues, trends and opportunities in their sector and to seek advice on business issues that are confronted during the day-to-day operation of their businesses. These roundtable meetings foster the development of business linkages and new business opportunities between Iraqi agribusinesses and lay a foundation to formulate and prioritize issues of the sector. This collaboration can be the basis for improved public-private dialogue.

- **Challenge:** The planning horizon for Iraqi-agribusinesses is very short-term.
 - **Solution:** USAID-*Inma* will continue working closely with Iraqi agribusinesses to change to change the planning horizon to meet product buyer requirements. As USAID-*Inma* develops new market linkages between suppliers and buyers, producers will begin to realize the benefits of planning the procurement of raw materials, production and sales.
- **Challenge:** Many agricultural associations - groups in Iraq were created as benefit organizations to receive grants or donations. Many are organized along family or tribal

lines and may not be engaged in continuous activities. Very few have record keeping systems in place and, except for one, do not have long range plans.

- **Solution:** Upgrade the capacity of existing agricultural associations - groups to handle commercial activities. Continue to provide most of the identified agricultural associations in Iraq with basic training in association management and planning while promoting the need for services and benefits to members.

3.2.4. Activities Planned April - June

- Complete business plan revisions;
- Continued management consultations with firms and associations with an emphasis on building market linkages;
- Firm Level – On-site Technical Assistance to support firms and associations – completed 120 days in the North, Central and South and Southeast areas;
- Management Seminars – approximately thirty five seminars;
- Roundtables – 8-10 per month;
- Association Management Workshops – complete the round of 18 two-day workshops with a final session in Wasit;
- Three agribusiness forums: Agricultural Technology – Horticulture; Agricultural Technology – Livestock; and Associations in Agriculture;
- Continue to work with packing houses on market linkages;
- Strengthening the relationships developed with the City Center Market to develop long-term supply agreements;
- Roll-out test of graded and packaged products to Baghdad Supermarkets;
- Develop sales opportunities with foodservice providers;
- Follow-up with the management issues faced with the Al Shihimia Water Users Association;
- Producer group development – as market opportunities are identified, develop the capacity of producers to meet buyer requirements
- Association assessment – identify existing associations that would be capable of developing commercial activities as a response to market opportunities
- Develop potential new identified market opportunities
- Planning for roll-out of packaged products to Baghdad supermarket. USAID-*Inma* this quarter identified an opportunity to supply a Baghdad supermarket with graded and packaged fruits and vegetables.
- Planning to supply products to Sallyport compound in Mansour.

3.3 AGRICULTURAL LENDING

A critical factor that negatively impacts the overall development of agribusiness in Iraq is the inability of a majority of Iraqi agribusiness to access capital. Currently, farmers must rely on cash from savings and or family members and supplier credit for capital needs. With limited financial resources available, farmers are unlikely to invest in more efficient production technologies, deviate from current production cycles or innovate with different crop types. Thus, the growth and diversification of agriculture in Iraq is hindered through a lack of capital or the inability to access capital.

Access to capital is constrained for a variety of reasons including the inability of agribusinesses to identify capital sources, the lack of appropriate records required to complete loan applications, insufficient collateral, lack of capital targeted to the agricultural sector and the inexperience of financial institutions in agricultural lending. Previously USAID-*Inma* has addressed several of these deficiencies by providing \$5 million in loan capital to Micro-Finance Institutions (MFIs) and Private Commercial Banks to target Small to Medium Enterprises (SMEs). USAID-*Inma* will continue to assist agribusiness in accessing capital, concentrating on developing supplier credit mechanisms and working with financial institutions to create new products.

3.3.1. Contribution to Strategic Objectives

Table 3.3: Fruit and Vegetable Value Chain PMP Indicators and Impact to Date

Activity 3				
Microloans				
SO #	SO	This Quarter ¹²	To Date	Goal
8.2.6.2	Number and value of loans provided by micro-finance institutions receiving USAID- <i>Inma</i> grant assistance to recipients		2324:\$5,425,000	\$5,000,000
8.2.6.3	Number of Jobs created through USAID- <i>Inma</i> grant supported private bank loans to agribusiness	0	3,228	3,400

3.3.2. Activities Implemented January – March, 2011

- Monitoring performance of previous assistance;
- Work on improving credit products available to agribusinesses;
- BDS participated in the USAID-Iraq Financial Sector Development meeting to advocate lending to the agricultural sector. The meeting was attended by 16 private sector banks, including Bank of Baghdad and North Bank and recipients of the ICF-SME grant funded by USAID-*Inma*;
- USAID-*Inma* sponsored roundtables in Erbil and Baghdad on the expansion of the livestock sector. The purpose of the roundtable was to highlight performance and current trends in the industry and to explore options for expanding the industry. Feedlots have proven to be profitable and now the producers wish to develop relationships with financial institutions that will allow them access to financing to expand operations.

3.3.3. Activities Planned

- Investigate and develop methods to provide or increase supplier credit for producers.
- USAID-*Inma* will support the development of Farm Service Centers. These centers will be a critical link for farmers to purchase quality inputs and receive technical assistance. To help facilitate the development of such centers it will be critical to be able to extend credit to farmers for input purchases. This will encourage farmers to purchase quality inputs and receive technical assistance concerning proper use of those inputs. USAID-*Inma* will reach out to Iraqi Banks with the assistance of Tijara to discuss developing credit products and mechanisms for supplier credit through these Farm Service Centers.
- Provide additional agricultural lending training.
- The USAID-*Inma* Agribusiness Lending Training Program was implemented in 2009 to improve the capacity of Iraqi financial institutions (microfinance institutions and commercial banks) to lend to farmers and agribusinesses. The objective of the training was to increase the number of financial institutions making loans to agribusinesses and increase the overall number of loans to the agricultural sector. The focus of the training was to assist financial institutions to develop appropriate agricultural credit products and to access and make loans to the sector. This training will be repeated to train additional loan officers and those participating in Supplier Credit Programs.

¹² The values this quarter are actual values and have not been adjusted with any correction factor.

- Work on improving credit products available to agribusinesses.
- Several roundtables are planned to bring agribusiness together with bank officials to discuss lending needs and requirements in the hope that alternative credit products, such as special products available to agricultural supply companies and livestock operations, can be made available.

4. ADMINISTRATION AND OPERATIONS

To accomplish the multiple tasks assigned to each of the value chains and deliver the expected results to the people of Iraq a functional operational and administrative program must be in place. As an ongoing effort to improve performance and efficiency changes are required with new and refined processes to meet all federal and corporate regulations.

During the quarter several activities and changes were implemented to assist the value chain teams accomplish their activities while meeting the contractual obligations to USAID.

4.1. Activities implemented Jan – March, 2011

Data and Document Management

- A short term data management and documentation specialist was utilized during the quarter to evaluate and reconfigure the former monitoring and evaluation team. The primary purpose was to develop, reorganize and formalize processes for data management and storage. This included integrating program and financial information. The consultant worked closely with the former monitoring and evaluation team to refocus efforts to capture and store program data. The consultant worked closely with the staff to validate data from previous years and standardize reporting methodologies and formats.
- During the quarter the Summative and Formative assessment was revised and finalized for publication.
- After consultation with USAID the Performance Monitoring Plan and Data Quality Self Assessment was revised and submitted.
- The following documents and reports were approved and published:

Improving Monitoring & Evaluation Functions for USAID-Inma, March 2011

- The staffing review was finalized and the staffing structure was reorganized to focus on performance and accountability.
- The new staffing structure allows for more transparency and accountability when traveling in the field. In addition, it allows a mechanism to link travel expenses to actual value chain activities.

Staffing Updates

- Vincent Nasir joined the Inma team as Grants Manager
- Sergio Delgado, Association Development Specialist arrived and started to develop an evaluation tool for associations and agricultural groups in Iraq.

4.2. Challenges Faced

- **Challenge:** The program has collected data since implementation and has not developed a systematic method of data storage.
 - **Solution:** A data management and storage system is under development.
- **Challenge:** Lack of qualified vendors for agricultural equipment

- **Solution:** A system between Procurement and Programs to coordinate activities to develop a list of qualify vendors for agricultural equipment is in progress.
- **Challenge:** Often times the field activity managers of various organizations fail to understand the federal regulations and decision process that the program staff undertake to prior to implementation of a project.
 - **Solution:** The activity managers should become familiar with the federal regulations and investigate methodologies prior to making decisions about project activity implementation.

4.3. Activities Planned April - June 2011

- The Association Specialist will be extended.
- Close coordination between procurement and program teams and methods to increase communication between the groups will continue.

5. ENVIRONMENTAL ISSUES

During the past quarter, the USAID-*Inma* Environmental Team performed several screening assessments to ensure that USAID-*Inma* projects fall within the nine categories of project types eligible for funding under USAID-*Inma* and that the implementation of those projects did not result in significant environmental impacts. The screening analyses were conducted in conformance with procedures developed for the USAID-*Inma* Program Environmental Assessment (EA), using the methodology and forms presented in the Environmental Management System (EMS). These procedures were approved by USAID in September 2009. The site-specific environmental impact screening form was completed using the USAID-*Inma* EA as a guide in combination with the 1990 Iraqi Environmental Law. The site-specific environmental impact screening form quantitatively describes the impacts of the proposed project during both the construction and operational period and indicates whether a particular project could pose significant risk to the surrounding environment.

The USAID-*Inma* Environmental Team visited a total of ten USAID-*Inma* project sites to assess the overall environmental conditions and evaluate whether Best Management Practices (BMPs) prescribed in the USAID-*Inma* Program EA and detailed in the accompanying Environmental Management System (EMS) were properly implemented.

5.1. Activities implemented January – April, 2011

The projects reviewed were as follows:

1. Al Husienyia Feedlot;
2. Fallujah Feedlot;
3. Al-Rebee Packing House;
4. Mohalabia Feedlot;
5. Kirkuk Feedlot;
6. Gubba Feedlot;
7. Radhwaniyah Packing House;
8. VANO Feed Mill;
9. Al Zaytoona Olive oil production lines;
10. Diyala Feed Mill.

The monitoring assessments provide information on issues identified at each site and, where applicable, discuss recommended mitigation measures to address impacts that were observed and to ensure that environmental requirements prescribed in the grant approval and further detailed in the EA and EMS are

properly implemented. Annex L contains the site specific environmental compliance reports and the site specific environmental impact assessments.

6. GENDER MAINSTREAMING ACTIVITIES

The USAID-*Inma* Agribusiness Program recognizes the contribution of women to agriculture and continuously strives to include women in agricultural activities. Field activities include women at all levels and also accommodates activities exclusively for women. During the past quarter women throughout Iraq participated in technical trainings for both the horticulture and livestock-protein sector and attended cross cutting activities with the business development group. Two hundred twenty women were trained this quarter. In particular, the program continued to work closely with a core group of approximately 200 women farmers in Najaf to provide training in dairy production, greenhouse vegetable production and citrus orchard training.

Data collection and storage tools now allow disaggregation on the basis of gender for all program activities.

6.1. Activities implemented January - March, 2011

- Monitoring of twenty-five dairy heifers distributed to 4-H member children of twenty-five women headed households in cooperation with USDA.
- Worked closely with the Al Rawasi Widows and Orphans Association in Baghdad, to assist the organization to establish a small rice packaging business.
- Continued to work closely with women producers in Najaf to develop sustainable horticulture and livestock businesses.

6.2. Challenges Faced

- **Challenge:** It is difficult to identify women participants in agricultural programs.
 - **Solution:** Work closely with communities and associations to identify women participants and contact district agriculture offices to obtain lists of all registered women owned businesses.
- **Challenge:** Women do 74% of the physical agriculture work in Iraq¹³ (planting, tending and harvesting crops by hand, feeding, milking, making cheese) but predominantly male family members attend trainings.
 - **Solution:** Worker safety training, employee hygiene training and practical agriculture worker skill training should be designed to include the female workers and not rely on owners and managers to pass on information.
- **Challenge:** It is difficult or unacceptable for female trainees to travel alone in rural areas. (They should be accompanied by male staff or male family members).
 - **Solution:** Provide transportation options for women trainees. Provide training to localized groups of women in their own neighborhoods where they can walk to the training unaccompanied.
- **Challenge:** From a security standpoint women are afraid to be associated with programs funded by the USA since development projects are sometimes mistaken for military activities.
 - **Solution:** Develop trust and always ask permission before taking photographs at women's trainings.

¹³ [Iraqi household Social Economic Survey](#), World Bank, 2007

6.3. Activities Planned April - June 2011

- Work with women water buffalo owners in the South East area to participate in the feeding demonstration.
- Provide training to the women greenhouse owners in Najaf which are beneficiaries of a PRT grant.
- The Horticulture team will provide greenhouse FFS training for women only groups in Karbala and Basrah.
- Continue to include women in business development targeted activities.
- Continue to monitor and assist the twenty five female headed households whose 4-H member children received dairy heifers.

7. APPENDICES

APPNDIX A: COPLETED ACTIVITIES

No	Activity	Type	GFA	Province	No of Trainees			Date	Days	Month
					Male	Female	Total			
1	FFS Melon	Training	Two Rivers	Wasit	25		25	11/ Oct/2010	1	Oct
2	Association Workshop	Workshop	Golden crescent	Baghdad	12		12	03/Nov/2010	2	November
3	Association Workshop	Workshop	Two Rivers	Babil	14	1	15	13/Nov/2010	2	November
4	Orchards Citrus	Training	North	Salah Alden	25		25	20/Nov/2010	5	November
5	Orchards Citrus	Training	Two Rivers	Babil	30		30	20/Nov/2010	5	November
6	Orchards Citrus	Training	Golden crescent	Baghdad	20		20	20/Nov/2010	5	November
7	TOT Marketing	Training	North	Sulaimanya	19	1	20	22/Nov/2010	3	November
8	Farmers Field schools (FFS Orchard)	Training	Golden crescent	Baghdad	25		25	25/Nov/2010	1	November
9	Farmers Field schools (FFS Orchard)	Training	Golden crescent	Dayala	25		25	27/Nov/2010	1	November
10	Farmers Field schools (FFS Orchard)	Training	Two Rivers	Wasit	25		25	27/Nov/2010	1	November
11	Farmers Field schools (FFS Orchard)	Training	Two Rivers	Babil	25		25	27/Nov/2010	1	November
12	Farmers Field schools (FFS Orchard)	Training	Two Rivers	Dewanya	22		22	27/Nov/2010	1	November
13	Farmers Field schools (FFS G.H)	Training	Two Rivers	Najaf		28	28	27/Nov/2010	1	November
14	Orchards Citrus	Training	North	Salah Alden	25		25	27/Nov/2010	5	November
15	Orchards Citrus	Training	Two Rivers	Babil	25		25	27/Nov/2010	5	November
16	Orchards Citrus	Training	Golden crescent	Baghdad	23		23	28/Nov/2010	5	November
17	Vineyard FFS	Training	North	Salah Alden	21		21	28/Nov/2010	1	November
18	Association Workshop	Workshop	Two Rivers	Najaf	26	1	27	29/Nov/2010	2	November
19	Orchards FFS	Training	Two Rivers	Karbala	25		25	30/Nov/2010	1	November
20	Farmers Field schools (FFS G.H)	Training	North	Kirkuk	25		25	01/Dec/2010	1	December
21	Orchards Citrus	Training	North	Salah Aldeen	25		25	04/Dec/2010	5	December

22	Orchards Citrus	Training	Two Rivers	Diwaniya	31		31	04/Dec/2010	5	December
23	Orchards Citrus	Training	North	Baghdad	30		30	04/Dec/2010	5	December
24	Farmers Field schools (FFS G.H)	Training	Two Rivers	Najaf	20		20	05/Dec/2010	1	December
25	Farmers Field schools (FFS Orchard)	Training	North	Dahuk	8		8	05/Dec/2010	1	December
26	Association Workshop	Workshop	North	Kirkuk	5	3	8	06/Dec/2010	2	December
27	Farmers Field schools (FFS G.H)	Training	North	Sulaimanya	25		25	07/Dec/2010	1	December
28	Orchards Citrus	Training	North	Salah Aldeen	25		25	11/Dec/2010	5	December
29	Orchards Citrus	Training	Two Rivers	Diwaniya	26		26	11/Dec/2010	5	December
30	Orchards Citrus	Training	Central	Diyala		26	26	11/Dec/2010	5	December
31	Farmers Field schools (FFS G.H)	Training	Two Rivers	Najaf	20		20	12/Dec/2010	1	December
32	Farmers Field schools (FFS Orchard)	Training	North	Sulaimanya	33		33	12/Dec/2010	1	December
33	Vineyard FFS	Training	North	Salah Aldeen	25		25	12/Dec/2010	1	December
34	Association Workshop	Workshop	North	Ninawa	17	4	21	12/Dec/2010	2	December
35	Orchards Citrus	Training	North	Salah Aldeen	25		25	18/Dec/2010	5	December
36	Orchards Citrus	Training	Two Rivers	TBD	22		22	18/Dec/2010	5	December
37	Orchards Citrus	Training	Central	Anbar	25		25	18/Dec/2010	5	December
38	Association Workshop	Workshop	North	Erbil	8		8	22/Dec/2010	2	December
39	Orchards Citrus	Training	North	Salah Aldeen	25		25	25/Dec/2010	5	December
40	Orchards Citrus	Training	Two Rivers	Babil	23		23	25/Dec/2010	5	December
41	Orchards Citrus	Training	Central	Diyala	27	1	28	25/Dec/2010	5	December
42	Farmers Field schools (FFS G.H)	Training	Two Rivers	Karbala	25		25	25/Dec/2010	1	December
43	Association Worksop	Workshop	Two Rivers	Wasit	17		17	27/Dec/2010	2	December
Total Budget										

APPENDIX B: SUBCONTRACTS AND PURCHASE ORDERS

Activity Title	Activity Period		Comment/Status
	Start	End	
Fruits & Vegetables -Basics of Greenhouse Production Training	12/15/09	4/30/10	Closeout in Process
Fruits & Vegetables - Irrigation Principles and Applications Training	12/10/09	4/30/10	Closeout in Process
Beef & Lamb - Small Ruminants Production Management Training	3/3/10	4/30/10	Closeout in Process
Fruits & Vegetables - Purchase Order to provide Seeds	3/2/10	4/30/10	Closeout in Process
Business Development – Business Management Technical Assistance North	10/29/09	4/30/10	Closeout in Process
Beef & Lamb -Training on Vet Lab. Equipment	4/10/10	6/5/10	Closeout complete
Fruits & Vegetables - Chinese Two Wheel Tractor	3/25/10	5/25/10	Complete
Fish and Poultry - Feed Lab Equipments	3/10/09	5/31/10	Complete
Fruits & Vegetables - Basic Open Field Production Training	1/5/10	5/31/10	Closeout in Process
Fruits & Vegetables - Basic Orchard/Vineyard Management Training	1/20/10	5/31/10	Closeout in Process
Business Development - Association Management Workshop	12/2/09	6/3/10	Closeout in Process
Fruits & Vegetables – Soil Labs	4/10/10	6/10/10	Complete
Beef & Lamb - Basic Animal Health Management	4/24/10	6/30/10	Closeout in Process
Beef & Lamb - Ruminants Animal Nutrition	5/22/10	7/31/10	Closeout in Process
Business Development - Round Table Meetings Service	7/16/09	8/31/10	Closeout in Process
Business Development - Business Management Technical Assistance Services – Central/South	5/20/10	8/31/10	Closeout in Process
Fruits & Vegetables - Irrigation Principles and Applications Training-Round Two	6/1/10	8/31/10	Closeout in Process
Fruits & Vegetables - Basics of Greenhouse Production Training-Round Two	5/10/10	8/31/10	Closeout in Process
Fruits & Vegetables - Advanced Greenhouse Production Training	5/2/10	8/31/10	Closeout in Process
Fish & Poultry - Fingerlings fish for offspring from Hungarian Carp Brood Stock	4/29/10	8/31/10	Complete
Fish & Poultry - Adult Hungarian Carp Brood Stock	4/29/10	8/31/10	Complete
Business Development-Closeout Financial Audit	8/7/10	10/31/10	Final Audits to RIG Office for
Fruits & Vegetables-Greenhouse Supplies and Drip Irrigation	9/12/10	11/30/10	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-Association Management Workshops (BD)	9/20/10	2/28/11	Closeout in Process
Business Development-Basic Orchard/Vineyard Management Training	9/8,/10	3/31/ 11	Closeout in Process
Business Development-Roundtable Meetings (BD)	8/21/10	5/31/11	Closeout in Process
Beef & Lamb -Vet lab Equipment and training (additional)	8/7/10	11/6/10	Closeout in Process
Beef & Lamb - Purchase of live fingerlings offspring of Hungarian Bloodstock (Two Packages)	8/19/10	2/19/11	Subcontract terminated for convenience on 1 Dec
Beef & Lamb - Basic Aquaculture Training Program (Two Packages)	10/6/10	4/30/11	Subcontract terminated for convenience on 1 Dec

APPENDIX C: GRANTS (PROJECTS AWARDED)

Grant #	Name of Grantee	Project Title	Project Location	Project Period		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	Closeout completed
09-2008-FD800-G-2	Hameedyah Mushroom Farm	Hameedyah Mushroom Farm Project	Ramadi, Anbar	17-Apr-08	1-Sep-09	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	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	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	Grant Closed
10-2008-FD800-G-6	Al-Waqt Al Jadeed	Fresh Fruit & Vegetable Packing Sheds	Baghdad	1-Dec-08	30-Jun-09	Closeout completed
10-2008-FD800-G-7	Al-Thiqa Organization	Micro-Finance	Iraq	1-Feb-09	30-Jun-10	Closeout completed
01-2009-FD800-G-8	Al-Amal Al-Waheed Co.	Fresh Fruit & Vegetable Packing Sheds	Baghdad	15-Jan-09	30-Oct-09	Closeout In Process
01-2009-FD800-G-9	Izdiharona	Micro-Finance	Iraq	1-Feb-09	31-Jan-10	Closeout completed
03-2009-FD-800-G-13	Shavin Co.	Feedlot Program	Dahuk	1-May-09	30-April-11	Under Implementation
03-2009-FD-800-G-14	Farmer Association	Feedlot Program	Ninawa	1-May-09	30-April-11	Under Implementation
03-2009-FD-800-G-15	Brotherhood Association	Feedlot Program	Ninawa	1-May-09	30-April-11	Under Implementation
03-2009-FD-800-G-16	Al Nahreen Association	Feedlot Program	Ninawa	1-May-09	30-April-11	Under Implementation
04-2009-FD800-G-17	Middle East Company	Aquaculture Training program	Babil	27-May-09	31-Aug-10	Closeout In Process
04-2009-FD800-G-18	Al Furat Fish Farm	Aquaculture Training program	Babil	27-May-09	31-Aug-10	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	Under Implementation

04-2009-FD-800-G-20	Hawks of Iraq for General Contracting, Co.	Feedlot Program	Babil	14-Jun-09	30-April-11	Under Implementation
04-2009-FD-800-G-21	Dheaa Al-Noor Association for Development	Feedlot Program	Baghdad	14-Jun-09	30-April-11	Under Implementation
06-2009-FD800-G-22	Al Juburi Group	Feedlot Program	Kirkuk	8-Aug-09	30-April-11	Under Implementation
06-2009-FD800-G-23	Nimar Al Jazeera Co.	Feedlot Program	Anbar	8-Aug-09	30-April-11	Under Implementation
06-2009-FD800-G-24	Al Naiim Organization	Feedlot Program	Ninawa	8-Aug-09	30-April-11	Under Implementation
07-2009-FD800-G-25	Mabain Al Nahreen	Packing shed Program	Baghdad	18-Aug-09	31-Jul-10	Closeout In Process
07-2009-FD800-G-26	Western Al Jazeera	Packing shed Program	Anbar	18-Aug-09	31-Jul-10	Closeout In Process
07-2009-FD800-G-27	Dejlat Al Kair	Packing shed Program	Karbala	18-Aug-09	31-Jul-10	Closeout In Process
08-2009-FD800-G-28	Iraq Grandparents	Feed Mill	Dyiala	19-Nov-09	30-April-11	Under Implementation
08-2009-FD800-G-29	Al Furat Fish Farm	Feed Mill	South Babil	19-Nov-09	30-April-11	Under Implementation
08-2009-FD800-G-30	Middle East Co.	Feed Mill	South Baghdad	19-Nov-09	30-April-11	Under Implementation
08-2009-FD800-G-31	VANO Group	Feed Mill	Erbil	19-Nov-09	30-April-11	Under Implementation
10-2009-FD800-G-32	ICF	Micro-Finance	Anbar	15-Dec-09	15-May-10	Closeout In Process
10-2009-FD800-G-33	Al Zaytoon Association	Olive oil	Ninawa	16-Nov-09	30-Mar-10	Closeout In Process
11-2009-FD800-G-34	Najim Al Belad	Poultry Feed mill	South Baghdad	1-Feb-10	30-April-11	Under Implementation
11-2009-FD800-G-35	Dur Al Furat	Poultry Feed mill	North Babil	1-Feb-10	30-April-11	Under Implementation

APPENDIX D: PERSONNEL

Expatriate Staff through March 31, 2011

HQ

	Employee Name	Title		Location	Contract
1	Shehnaz Atcha	Program Manager	USA	HQ	LBG
2	David Czarnecki	Program Coordinator	USA	HQ	LBG
3	Brittany Bishop	Contracts Administrator	USA	HQ	LBG
4	Deborah Birch	Project Communications Director	USA	HQ	LBG
5	Heather Risley	Communications Coordinator	USA	HQ	LBG

Baghdad

1.	Gerald Turnbull	Chief of Party	USA	Baghdad	LBG
2.	Martin Connaughton	Greenhouse Specialist	USA	Baghdad	ARD
3.	Graham Dale	Agricultural Processing Specialist	UK	Baghdad	LBG
4.	Michael Green	Financial Director	USA	Baghdad	LBG
5.	Ludwig Schatz	Training Specialist / Advisor	Germany	Baghdad	LBG
6.	Timothy Kock	Deputy Chief of Party	USA	Baghdad	LBG
7.	Al Williams	Horticulture Team Leader	USA	Baghdad	Agland
8.	Juan Sevilla	Water & Irrigation Specialist	Peru	Baghdad	LBG
9.	Kara Dixon	Procurement manager	USA	Baghdad	LBG
10.	Nerys Irving-Jones	Reporting Specialist	British	Baghdad	LBG
11.	Franco Scotti	Economist	Italy	Baghdad	LBG
12.	Craig Carlson	Senior Business Development Specialist – Team Leader	USA	Baghdad	ARD
13.	Daniel Dunn	Agriculture Economist	USA	Baghdad	TAMU
14.	Alexander Dahan	Technical Specialist-Horticulture	British	Baghdad	LBG

Short-Term Technical Assistance

1.	Rajesh Sail	Deputy Procurement Manager	India	Baghdad	LBG
2.	Ronnie Stratton	Butcher	USA	Baghdad	LBG
3.	Mickey Foley	Mushrooms	USA	Baghdad	LBG
2.	Cynthia Turnbull	Data and Document Specialist	USA	Baghdad	LBG
3.	Sergio Delgado	Association Specialist	Bolivia	Baghdad	LBG
4.	Justen Smith	Livestock Specialist	USA	Baghdad	LBG
5.	Vincent Nasir	Grants Manager	Pakistan	Baghdad	LBG

Home Office Site Visits

1.	Andrew Grodzicki	Director of Procurement	USA	Baghdad	LBG
2.	Shehnaz Atcha	Program Manager	USA	Baghdad	LBG

APPENDIX E: EXPATRIATE PERSONNEL – MOBILIZATION/DEMOBILIZATION

Mobilization - The following staff arrived in the January – March quarter:

- Jeanne Lee Bartholomew - Agricultural Writing Specialist (January 3)
- Rajesh Sail - Deputy Procurement Manager (January 3) Short term
- Andrew Joseph Grodzicki - Procurement Director (January 14) HQ
- Cynthia Turnbull - Documentation Procedures Specialist (February 3) Short term
- Rajesh Sail - Deputy Procurement Manager (February 19) Short term
- Shehnaz Atcha - Program Director (March 5) HQ
- Sergio Albert Delgado - Technical Specialist (March 15) Short term
- Justen Oliver Smith - Livestock Specialist (March 19) Short term
- Vincent Nasir - Grants Manager (March 20)

Demobilization - The following staff demobilized in the January – March quarter:

- Justen Oliver Smith - Livestock specialist (January 11) Short term
- Andrew Joseph Grodzicki - Procurement Director (January 19) HQ
- Rajesh Sail - Deputy Procurement Manager (January 29)
- Ronnie Stratton - Livestock Harvesting Specialist (February 5) Short term
- Mickey R. Foley - Technical Specialist (February 17) Short term
- Nerys Irving Jones - M&E Reporting Specialist (February 24)
- Shehnaz Atcha - Program Director (March 15) HQ

Mobilization for the following quarter - The following staff are expected to arrive in the April – June:

- Procurement Manager (currently in negotiation)

APPENDIX F: QUARTERLEY GROSS SALES AND JOBS

The two program indicators for 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 IV Q2	Year III	Year II	Year I	Indicator
\$105.8	\$6.56	\$49.8	\$30.0	\$19.4	Gross Sales
14,323	384	706	11,360	1,873	Employment

APPENDIX G: PERFORMANCE MONITORING AND EVALUATION

The USAID-*Inma* primary indicators, gross sales and jobs created are found in Appendix J.

During the quarter a tremendous amount of emphasis was placed on monitoring and evaluation which includes data management, data verification and storage. Beginning in the previous quarter a comprehensive summative and formative report was conducted and the results and revisions were published this quarter. Using the results from the survey and the assistance of the short term data management and documentation specialist the next step of validating the sales and jobs data was undertaken. After tremendous effort the jobs and sales data were validated. In addition, standard operating procedures for data collection were developed and implemented. Moreover, the development of the project informational database continued. During the review of the data handling and storage techniques it was discovered that the data informational database was not designed to integrate the information from program, procurement and finance. To correct the problem the database was reviewed with the programmer and an action plan was developed to address the problems. In general, the plan is to implement a three phase approach to recapture and store data. It was determined that there was a tremendous amount of useful information but it was poorly captured and integrated.

During the quarter the Performance Monitoring Plan was revised and resubmitted. The document represents the third revised Performance Monitoring Plan for the *Inma* Agribusiness Program, USAID Contract No. 267-C-00-07-00500-00. The *Inma* program is an integral part of the United States Government's National Economic Development (NED) Program with the overall goal to: *Expand Private Sector Economic Opportunities*. The NED Program's approach is to stimulate economic growth to provide greater opportunities for the people of Iraq to engage in normal economic and social behavior, creating a climate for peace and stability.

The revision represents major changes from the previous versions. The current document tries to capture the true operational conditions within the country and provide a realistic approach to the calculations for jobs and sales creation. In addition, the values are separated into actual and corrected values. Actual values are values taken and verified from sales records and records of producers. The actual values are then corrected with either a correction factor set forth by Dr. John Mellor stating that each dollar of sales at the farm gate results in 2.5 more sales for the supply chain and creates two jobs. In comparison, the FAO correction factor is 1.6.

In addition, the Data Quality Self Assessment document was revised. The USAID-*Inma* Program received word on April 18, 2008 from the Director, Economic Growth and Agriculture Office, USAID/Iraq that Data Quality Self-Assessments (DQAs) were required on all USAID-*Inma* Performance Monitoring Plan (PMP) indicators. A template for the DQA was provided with a completion date of June 30, 2008. In addition, the Economic Growth and Agriculture Office in August 2010 required that the DQA should be updated to capture changes in the program and be in agreement with the contract extension and PMP submitted in 2010. This document presents the updated DQA sheets for each of the Performance Monitoring Plan indicators submitted in December 2010 and revised in January 2011

APPENDIX H: SITE SPECIFIC ENVIRONMENTAL COMPLIANCE

Compliance Checks for Feedlots

Compliance Checks	Feedlot				
	Alhusienyia	Fallujah	Gubba	Kirkuk	Mohalabia
Outside of sensitive environments	Yes	Yes	Yes	Yes	Yes
Less than 700 head of cattle	Yes	Yes	Yes	Yes	Yes
Less than 10,000 head of sheep	Yes	Yes	Yes	Yes	Yes
At least 2 kilometers outside of	Yes	Yes	Yes	Yes	Yes
At least 3 kilometers outside of population centers in the direction of prevailing winds	Yes	Yes	Yes	Yes	Yes
At least 100 meters from nearest water body	Yes	Yes	Yes	Yes	Yes

Compliance Checks for Fruit and Vegetable Packing Sheds

Compliance Checks	Fruit and Vegetable Packing Sheds	
	Alrabee	Radzwaniyah
Outside of sensitive environments	Yes	Yes

Compliance Checks for Feed Grain Mills

Compliance Checks	Feed Grain Mills VANO (New-Under construction)
	Outside of sensitive environments
At least 1 kilometer from population centers in the direction of prevailing winds	Yes

SITE VISITS: PRELIMINARY ENVIRONMENTAL MONITORING

The Impact Assessments and Programmatic Environmental Assessment methodologies are based on a modified version of Conesa-Fernandez-Vitora [2003]. To improve the process only Intensity and Extension factors were calculated for each project site. The Environmental Assessment Team has deemed this as sufficient information for determining any differences in the significance of environmental impacts because it is believed that the factors of Manifestation, Persistence, Reversibility, Synergy, Accumulation, Effect, Periodicity and Recuperability are intrinsic characteristics of the previously analyzed impacts and therefore will not change from site to site.

PROJECT TITLE: AL HUSIENYA FEEDLOT

Date Visited: 25/03/2011

Assessor Name(s): Zainab Al-Saadi

Location: Baghdad province

Type of Project: Beef Feedlot

Project Status: On-going

Impacts:

Construction Related Impacts		Nature (+/-)	Intensity					Extension					N/A	
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical		
Infrastructure Demolition, Construction, and Rehabilitation	Debris and waste generation	-												√
	Noise	-												√
	Dust and particulates	-												√
	Vehicular emissions	-												√
	Fuel emissions (eg generators)	-												√
	Pavement removal/installation	-												√
	Septic tanks	-												√
	Site cleanup (emissions, spills, etc.)	-												√
	Oil and chemicals spills	-												√
	Contaminated soils/debris removal	-												√
	Drainage pattern modification	-												√
	Soil removal	-												√
	Construction camp/logistic area	-												√
	Construction dumpsite	-												√
Increased water use	-												√	
Social and Cultural	Landscape modification	-												√
	Interference with daily activities	-												√

	Disturbance of cultural sites	-												√
Environ- mental	Modification of water quality	-												√
	Modification of soil quality	-												√
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	-												√

PROJECT TITLE: FALLUJAH FFEDLOT

Date Visited: 3/26/2011

Assessor Name(s): Zainab Al- Saadi

Location: Anbar province

Type of Project: Beef/ Calves Feedlot

Project Status: complete

Impacts:

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-RABEE PACKING HOUSE

Date Visited: 3/27/2011

Assessor Name(s): Zainab Al- saadi

Location: Baghdad

Type of Project: Fruit/Vegetable Packing

Project Status: Completed

Impacts:

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	-											√

PROJECT TITLE: MOHALABIA FEEDLOT

Date Visited: 20/3/2011

Assessor Name(s): Ammar Jassim

Location: Ninavah province

Type of Project: Beef Feedlot

Project Status: complete

Impacts:

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: KIRKUK FEEDLOT

Date Visited: 20/3/2011

Assessor Name(s): Ammar Jassim

Location: Kirkuk province

Type of Project: Beef Feedlot

Project Status: complete

Impacts:

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: GUBBA FEEDLOT

Date Visited: 20/3/2011

Assessor Name(s): Ammar Jassim

Location: Ninavah province

Type of Project: Beef Feedlot

Project Status: complete

Impacts:

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: RAZWANIYAH PACKING HOUSE

Date Visited: 3/28/2011

Assessor Name(s): Zainab Al- Sadi

Location: Baghdad

Type of Project: Fruit/Vegetable Packing

Project Status: completed

Impacts:

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	-											√

PROJECT TITLE: VANO FEED MILL (new – under construction)

Date Visited: 3/20/2011

Assessor Name(s): Ammar Jassim

Location: Erbil province

Type of Project: Feed Mills

Project Status: On-going

Impacts:

Construction Related Impacts		Nature (+/-)	Intensity					Extension					N/A			
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical				
Infrastructure	Demolition	-														
	Rehabilitation	-														
	Debris and waste generation	-		√						√						
	Noise	-		√				√								
	Dust and particulates	-	√					√								
	Vehicular emissions	-		√				√								
	Fuel emissions (eg generators)	-		√				√								
	Pavement removal/installation	-												√		
	Silo construction	-			√			√								
	Septic tanks	-		√				√								
	Site cleanup (emissions, spills, etc.)	-		√				√								
	Oil and chemicals spills	-	√					√								
	Contaminated soils/debris removal	-	√					√								
	Drainage pattern modification	-												√		
	Soil removal	-												√		
Construction	camp/logistic area	-	√					√								
	dumpsite	-	√					√								
	Increased water use	-												√		
	Social and Cultural	Landscape modification	-		√				√							
		Interference with daily activities	-	√					√							
Disturbance of cultural sites		-	√					√								
Environmental	Modification of water quality	-												√		
	Modification of soil quality	-												√		
Operation Related		ur e	Intensity					Extension					N/A			

Impacts			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	-											✓
	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: ALZAYTOONA – OLIVE OIL PRODUCTION

Date Visited: 3/20/2011

Assessor Name(s): Ammar Jassim

Location: Ninavah Province

Type of Project: olive oil production

Project Status: completed

Impacts:

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	-											√

PROJECT TITLE: DIYALA FEED MILL

Date Visited: 3/30/2011

Assessor Name(s): Zainab Alsaadi

Location: Baquba Province

Type of Project: feed mill

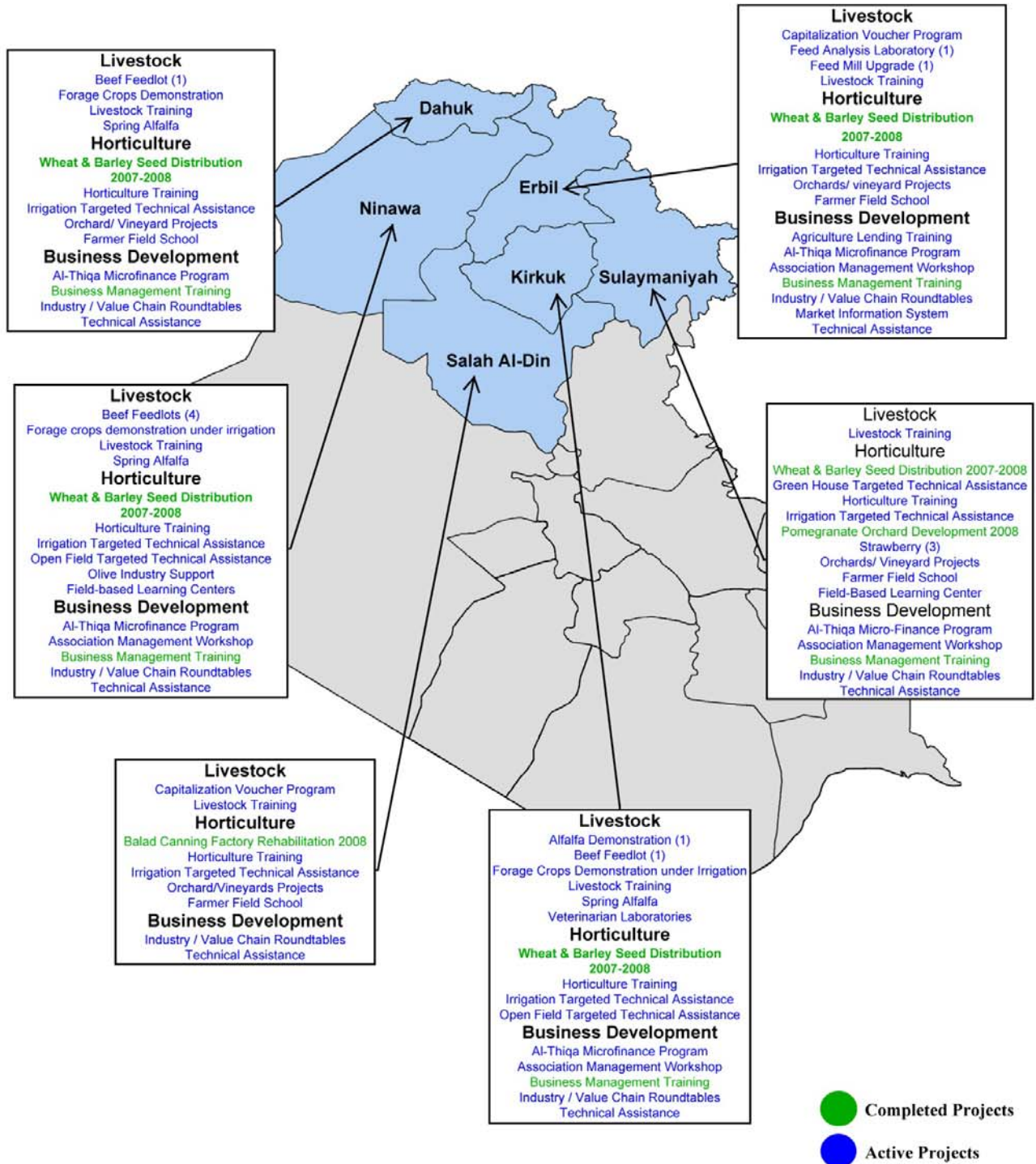
Project Status: completed

Impacts:

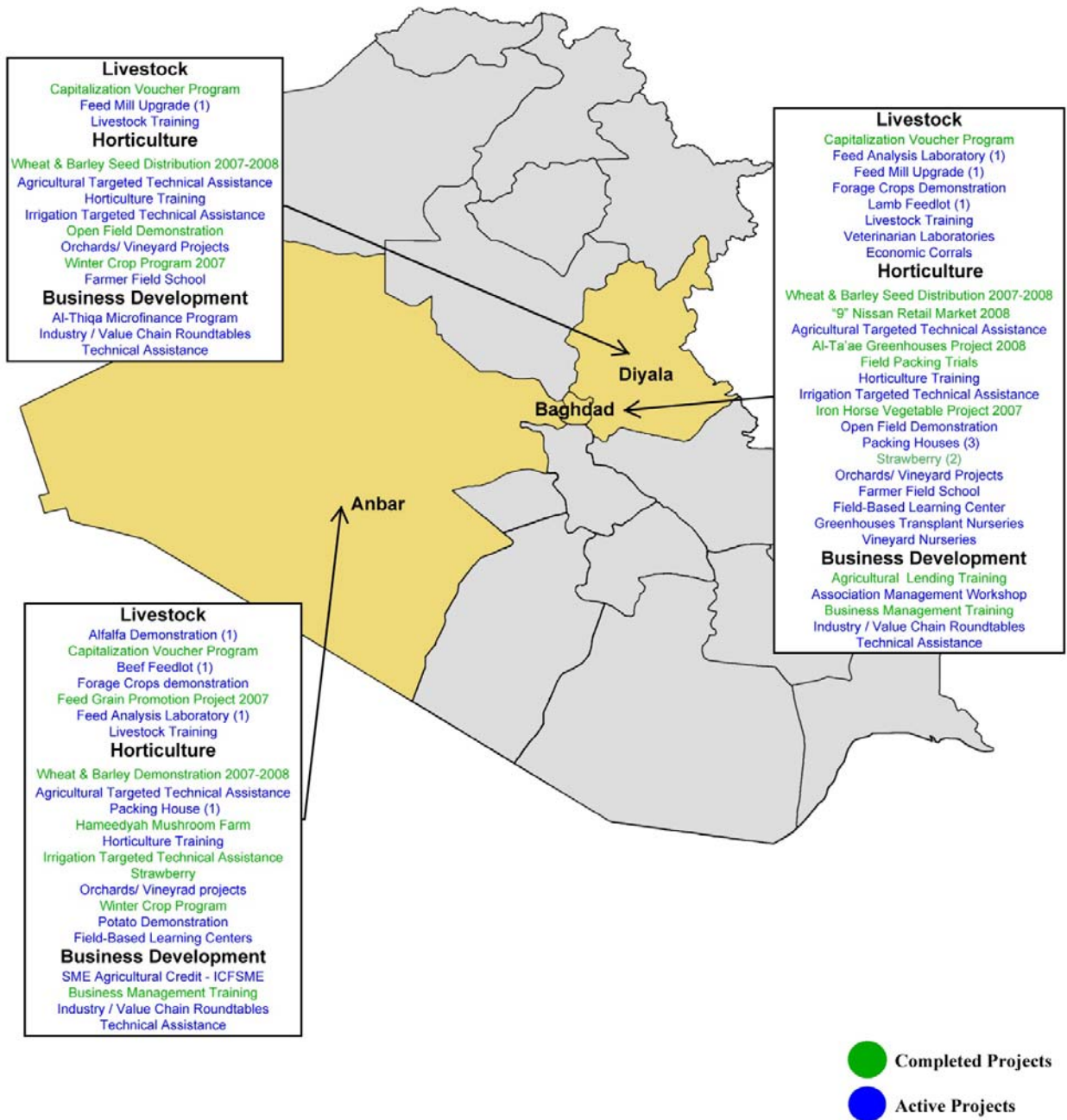
Operation Related Impacts		Nature (+/-)	Intensity					Extension					N/A
			Low	Medium	High	Very High	Total	Punctual	Partial	Extended	Total	Critical	
Process	Maintenance and cleaning	-	√						√				
	Chemical storage and handling	-											√
Inputs	Water use	-	√								√		
	Energy/fuel use	-	√						√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

APPENDIX I: MAPS

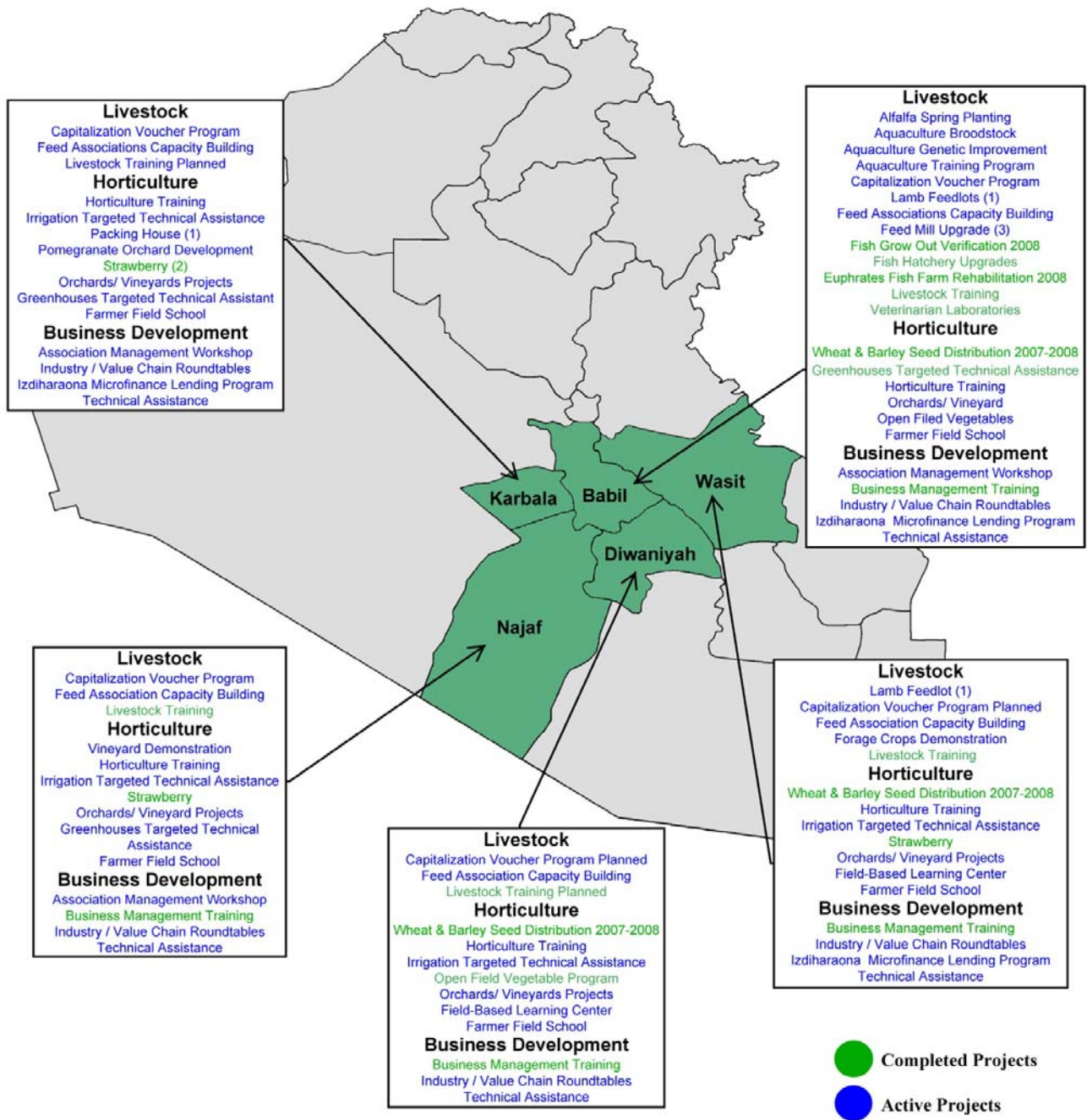
USAID-Inma Iraq Projects, North March, 2011



USAID-Inma Iraq Projects, Central March, 2011



USAID-Inma Iraq Projects, South March, 2011



USAID-Inma Iraq Projects, South East March, 2011

