



USAID | **IRAQ**
FROM THE AMERICAN PEOPLE

QUARTERLY REPORT

USAID-*Inma* Agribusiness Program

April – June, 2010



June 2010

This report was produced for review by the U.S. Agency for International Development (USAID).
It was prepared by a consortium led by The Louis Berger Group, Inc.

June 30, 2010

USAID-*Inma* Agribusiness Program QUARTERLY REPORT April – June, 2010



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

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PROGRAM 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 12th Quarter (Apr-Jun 2010) 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, 2010

Program Principals: Charles Bell, Senior Vice President
The Louis Berger Group, Inc.

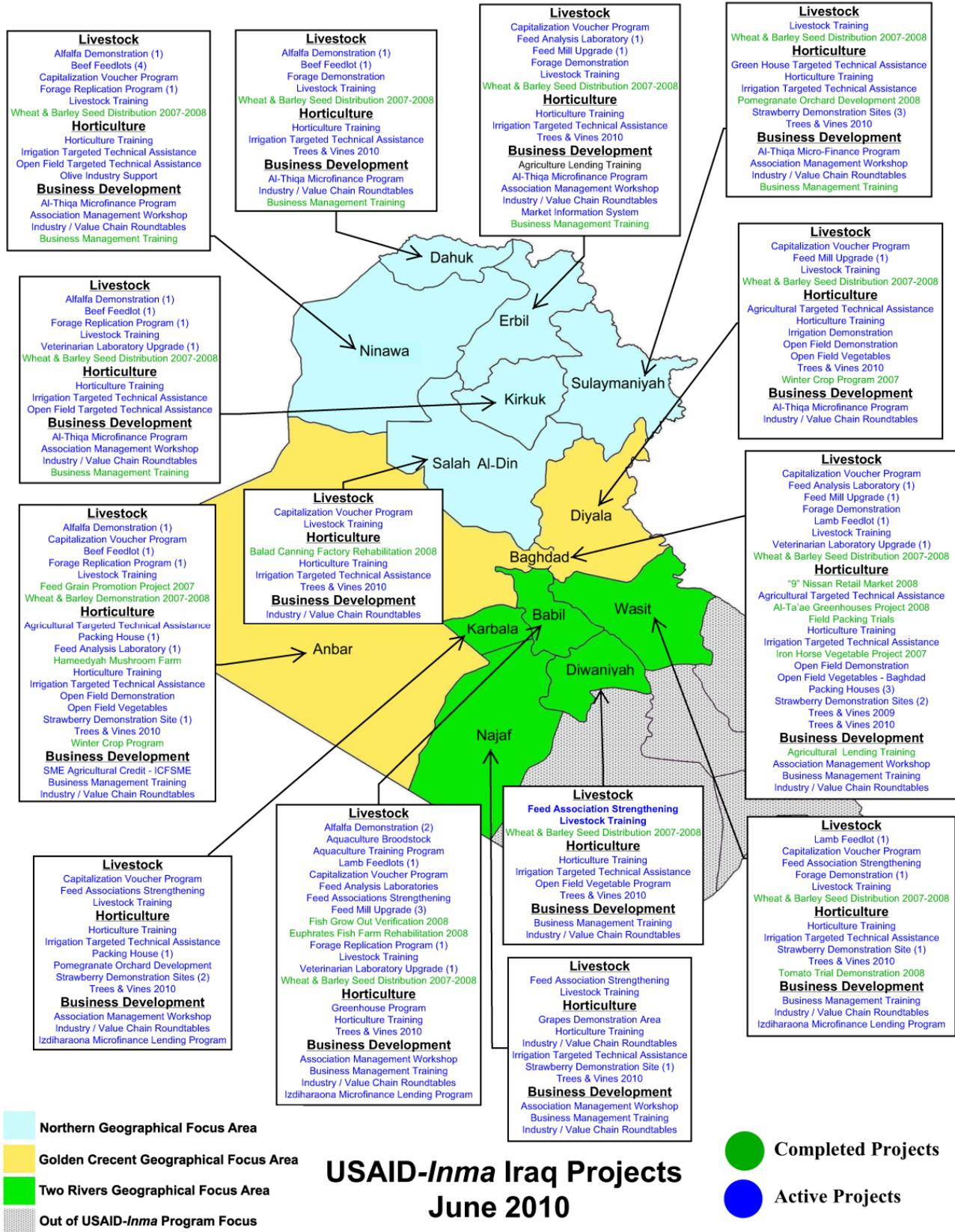
On-Site Leadership: Tracy Atwood, Acting Chief of Party
Shehnaz Atcha, Program Manager

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 three years, May 14, 2007 through August 31, 2010,

ACRONYMS

COP	Chief of Party
COTR	USAID Contracts Officer Technical Representative
DEC	USAID Development Experience Clearinghouse
EFF	Euphrates Fish Farm
ePRT	Embedded Provincial Reconstruction Team
FADO	Future Agriculture Development Organization
FAR	Federal Acquisition Regulations
FOB	Forward Operating Base
GOI	Government of Iraq
GFA	Geographic Focus Area
IRs	Intermediate Results
ITAO	Iraq Transition Assistance Office
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
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
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USG	United States Government

USAID-Inma ACTIVITIES by GEOGRAPHIC FOCUS AREA



EXECUTIVE SUMMARY

Agricultural development is a long-term undertaking, constrained by adverse climates and lack of water, slow adoption of new practices, and the changeability of consumer demand. This quarter, USAID-*Inma* has entered the first complete harvest season where the results of the investment of the past two years are coming to fruition.

In the livestock value chain, the feedlots have come on-line and are stocked with cattle and sheep. Improved feed is already showing results in larger eggs, increased milk production and healthier animals as feed mills come up to capacity. The spawning of the new imported Hungarian broodstock, conducted for the first time in conjunction with the hatchery courses, was the highlight of the aquaculture sector. In addition, USAID-*Inma* began distribution of 1,900 adult Hungarian broodstock to private sector and Government of Iraq (GoI) hatcheries, representatives of which attended USAID-*Inma* training courses. Grantees in three out of the five forage demonstration sites totaling 920 donums in Kirkuk, Ramadi, and Wasit have completed production cycles. They received training in mechanized production and used the equipment they were granted for the cutting and baling of hay.

In horticulture, four out of six planned demonstration greenhouses were planted with spring crops after bio-fumigation procedures were completed. A new greenhouse design to reduce airborne diseases and insect pests was introduced. In fruit culture, USAID-*Inma* continued to assist the monitoring, training and irrigation development of trees and vines imported in January this year. Two of the USAID-*Inma* packing houses are in full gear this harvest season and poised for expansion, and another three are slated to come online next quarter. In addition, USAID-*Inma* strawberry and melon open field demonstrations have been completely sold out. New buyers from across the country purchased these Iraqi-grown products.

In business development, many new USAID-*Inma* enterprises are fully formed, but their continued viability hinges on successful adoption of cultural and management practices which are new to Iraq. USAID-*Inma* technical and management training programs continue to be widely sought after, as does direct assistance to enterprises mentored by USAID-*Inma*. New strategies are being developed to stimulate demand for market information by showing enterprises how to increase profitability.

The results of the USAID-*Inma* Agribusiness Program are beginning to show this season. They are setting the stage for the even greater challenge of sustaining these enterprises as the program enters its fourth year of implementation.

USAID-*Inma* Agribusiness Program

QUARTERLY REPORT

April – June, 2010

VALUE CHAINS

USAID-*Inma* approaches Iraqi food markets through value chain analysis to address the constraints to profitability as product flows from the farm through markets to the consumer. USAID-*Inma* supports two of the most needed and profitable agricultural value chains in Iraq:

- **Livestock**
- **Horticulture**

These activities increase productivity, lower production and marketing costs, increase the profitability of agricultural enterprises, and generate rural employment.

USAID-*Inma* assists Iraqi enterprises to attain a critical mass of producers and marketers to convincingly demonstrate high-value businesses. Specific USAID-*Inma* activities include field trials, demonstrations, and institutional support to catalyze the adoption of improved production, post-harvest, and marketing practices.

USAID-*Inma*'s **Business Development Services** unit complements the value chains through agribusiness financing, market information systems, business consultation services, and training programs.



A. LIVESTOCK VALUE CHAIN



I.1 Feedlot Production

Introduction

During the second quarter of 2010, USAID-*Inma* concentrated on ensuring that recently opened feedlots located in the provinces of Dahuk, Ninawa, Kirkuk, Anbar, Baghdad, and Wasit, continued stocking processes smoothly as grantees learned to adopt various production strategies presented in technical assistance demonstrations and training. This quarter has focused on extensive outreach initiatives involving livestock production operators, feedlot owners, and meat processors/merchants who participated in various red meat roundtables organized in each Geographic Focus Area (GFA).

Other areas of direct assistance included the development of training curricula in small ruminant production, basic animal health, animal nutrition, and contracting with private training institutions for course delivery to livestock producers. Training sessions were provided for more than 500 farmers who were introduced to new technologies and their proper utilization for improved livestock production. Training in operational procedures for nine veterinary laboratories specialists introduced new equipment which allowed three grantees to offer modern diagnostic techniques available to feedlots owners as well as traditional production systems.

Individuals and organizations presently ready to invest their own capital in feedlots have looked towards USAID-*Inma* in order to provide support in the form of technical assistance. During the second quarter of 2010, six candidates that submitted letters of intent to USAID-*Inma* have received assessment teams at their respective sites for verification of land and water availability. The sites identified vary from 100 to 750 head capacity with some sites combining both calves and lambs for the purpose of product diversification. The technical assistance sought by these candidates include facility design, 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, as well as designing business plans, record keeping and operation management.

a) Activities Overview Table

Table I.1: Beef and Lamb Value Chain PMP Indicators and Impact to date					
Activity I	Beef and Lamb Feedlots				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.3.1	Increase in gross sales of local red meat from program-assisted feedlots	\$402,222	\$473,422.88	\$3,300,000 ¹	14.3% ²
8.2.3.2	Production of red meat by program-assisted commercial feedlots by kilograms per year	197,483kg	504,830kg	660,000kg ³	76.5%
8.2.4.4 ⁴					
8.2.6.3	Number of jobs created	38	1,506	350 ⁵	430%

¹ Target taken from RAWP, pg. 27.

² Initial projections in the program preparation phase for gross sales of red meat were based on rates of growth among standard breeds. Breeds in Iraq have demonstrated less initial capacity for growth than the standard metric used. Since the start of the feeding program, considerable data has been collected on Iraqi breeds allowing for more accurate estimations of average daily gains, feed conversion rates, and feed cost per kg weight gain. The PMP for FY4 will be adjusted to reflect these more realistic growth rates.

³ Revised target taken from RAWP, pg. 27.

⁴ Data on SO 8.2.4.4 pending external evaluation. See Monitoring & Evaluation Appendix.

⁵ Actual jobs creation taken from Revised Annual Work Plan 2009—2010, S.O. 8.2.6.3, page 28. 150 part-time construction jobs + 200 full-time livestock jobs = 350 total actual jobs created.

b) Activities Implemented Apr – Jun, 2010

- Two-day training sessions in small ruminant production, animal health, and animal nutrition were attended by 547 participants from all three GFAs. The training included a general overview of small ruminant production, feeding and feed resources management, herd and facilities management, strategic market planning for lambs, the importance of animal health, vaccination programs for major animal diseases (more than 300 posters on viral and bacterial diseases were distributed to attendees), concepts of production requirements and feed formulation, utilization of roughages and concentrated feed, and feed resources procurement and storage. Feedback from participants was positive and the trainings served to inform the broader public about the feedlot programs in their respective regions as well as the quality of red meat being produced. The final objective of the training was to prepare livestock producers to produce quality feeder animals that feedlot operators will be willing to purchase.
- Three training sessions of three days each were conducted at three veterinary laboratories that received new equipment for modern animal diagnostic methods. Nine laboratory specialists are prepared to receive samples from around the country for veterinary interventions which can help decrease animal mortality and increase farmer profits.
- Provision of excel sheet templates to feedlots operators in order to keep accurate records and asses performance over time.
- Monthly supervision missions combined with weekly and twice-weekly mentoring at each feedlot ensure that grantees are adopting program-recommended technical and business practices.
- The feedlot replication program has received requests for technical assistance from seven projects sites, five of which were visited for technical feasibility studies.

c) Challenges Faced

- **Challenge:** The biggest constraint in achieving S.O. 8.2.3.1 (Increase in gross sales of local red meat from program assisted feedlots) has been the limited genetic potential of the local breeds of cattle. Little to no information was available on the background of the feeder animals before they were purchased. Critical information such as sire and dam lines, age and medical history were not provided by sellers. This makes any proper assessment of feeding requirements for specific production goals to be primarily based on general knowledge about livestock in other areas of the world with different environments and types of animals.
- **Solution:** Absent Ministry of Agriculture approval on importing larger foreign cattle, USAID-*Inma* has focused monitoring and training efforts on the development of strategic breeding programs with domestic cattle. This has involved instruction and continuing guidance in how to identify genetic indicators of size in cattle stock for farmers to target in breeding.

d) Activities Planned Jul – Sep, 2010

- Close-out support to graduating feedlots.
- Develop agreements for the feedlot replication program and provide technical assistance as necessary.
- Establish a monitoring plan for graduating feedlots.
- Collection and analysis of production data for continued project adaptation to current and future challenges.
- Monitoring and supervision of veterinary laboratory operators.
- Facilitate communication among various value chain actors to improve the flow of market information.

I.2 FORAGE PRODUCTION

Introduction

Commercial production of alfalfa demonstrations that started in 2009 entered its critical phase during this quarter. The program recorded successful growth for alfalfa and barley that were planted at the same time with the later serving as nurse crop for the former. Grantees in three of the five demonstration sites (totaling 920 donums in Kirkuk, Ramadi, and Wasit) have completed production cycles cutting and bailing hay using the equipment they were granted. This quarter also saw alfalfa producers shipping loads of hay to feedlot operations in each GFA. In addition to the fall seeding sites, six new producers with 400 total donums joined the program in a spring seeding initiative. Some of these new participants are feedlot grantees who learned from their experience last winter that integrating feedlot activities with alfalfa production is an essential step for successful red meat production year round.

a) Activities Overview Table

Table 1.2: Beef and Lamb Value Chain PMP Indicators and Impact to date					
Activity 2	Forage Industry				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.3.4	Increase in total gross sales of program-assisted enterprises	\$22,903	\$33,636	\$2,125,000 ⁶	2%
8.2.4.4 ⁷					
8.2.6.3	Number of jobs created	64	304	350 ⁸	87%

b) Activities Implemented Apr – Jun, 2010

- Trained forage producers on the use of tensiometers in order to more accurately predict irrigation timing and estimation of water quantity needs required to avoid issues related to high soil salinity.
- Organized four field days attended by 87 farmers in order to introduce agricultural communities to the forage demonstration program and allow them the opportunity to learn various agronomic methods and new mechanized farm machinery operation. Field day attendees also learned how to transfer the hay from the forage site to the feedlot site, avoid crop spoilage, and retain the highest possible nutrient value.
- Monitored Alfalfa cutting, baling, and storage activities, and intervened where appropriate to demonstrate best practices.
- Provided guidance on marketing and purchasing of alfalfa hay to USAID-*Inma* grantees for feedlot and forage production programs.

⁶ Actual sales calculation taken from Revised Annual Work Plan 2009—2010, page 28, Alfalfa Hay Indicator 1.

⁷ Data on S.O. 8.2.4.4 pending external evaluation. See Monitoring & Evaluation Appendix.

⁸ Actual jobs calculation taken from Revised Annual Work Plan 2009—2010, page 28, Alfalfa Hay SO8.2.6.3.

c) Challenges Faced

- **Challenge:** The chronic lack of water has severely limited prospective areas with the potential to grow alfalfa to only those farms with the economic and geographic means to make significant investments in adequate irrigation to meet the crop water requirement.
- **Solution:** The program will develop a more careful site selection process that includes an evaluation of the candidate farmer's capacity to secure a viable irrigation system that is technically sound and economically reasonable.
- **Challenge:** The cost of hay transportation is consistently high.
- **Solution:** The program will focus on 'Back hauling' in trucks identified 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 severely discounted because the trip is already being made and any additional income counts as pure profit for the transporters.
- **Challenge:** There are storage space constraints for large volumes of roughage.
- **Solution:** The program will seek to introduce pelleting technology which saves space through concentrating nutrients of bulkier forage into compact pellets. Pelletized forage is also easier to transport and more resistant to spoilage.
- **Challenge:** The limited availability of baling wire.
- **Solution:** Further research needs to be conducted in order to find local resources for baling wire.
- **Challenge:** Considerable time is required for continuous training on proper usage and maintenance of forage equipment.
- **Solution:** The program will seek to find a service provider for maintenance, service and spare parts as needed.

d) Activities Planned Jul – Sep, 2010

- Continue work on irrigation and fertilization.
- Continue support and instruction on mechanized equipment usage and maintenance.
- Continue technical assistance on best practices in harvesting and crop drying to retain highest protein yield.
- Provide training to alfalfa producers on crop storing techniques and marketing of baled hay across the country.

I.3 FISH PRODUCTION

Introduction

The USAID-*Inma* Agribusiness Program began working in aquaculture in Iraq in November 2007 by conducting a survey and identifying the shortfalls in the aquaculture value chain. During this quarter the spawning of the new imported Hungarian broodstock was conducted in conjunction with the hatchery courses. In addition, USAID-*Inma* began distribution of 1900 adult Hungarian broodstock to private sector and Government of Iraq (GOI) hatcheries which attended training courses.

a) Activities Overview Table

Table I.3: Aquaculture and Feed Value Chain PMP Indicators and Impact to date					
Activity 3	Fish Production				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.3.3	Increase in total gross sales of local fish by program-assisted fish farms. ⁹	\$1,796,323	\$30,673,158	\$30,000,000	102%
8.2.4.4	Percentage of program-assisted farmers who use improved technology and can document that they are getting more income from their crops.	112 farmers	551 farmers	600 farmers	92%
8.2.6.3	Number of jobs created	0	6,315	1,750	361%

b) Activities Implemented Apr – Jun, 2010

- Imported Hungarian carp spawned.
- 4 hatchery courses conducted at the EFF and MEFF aquaculture training centers. Trainings covered artificial spawning and hatchery procedures; 100 personnel from 30 hatcheries attended, and responded positively to the training.
- 1900 adult carp broodstock imported from Hungary distributed to GOI & private hatcheries.
- 12 million fingerlings produced from imported broodstock sold this quarter by EFF & MEFF.
- A 6 month crossbreeding study was initiated on the carp imported from Hungary as part of the Masters Program being conducted by the Mussayib Technical College located in Babil; copy of results will be shared with USAID-*Inma*.

⁹ In contrast to total numbers outlined in PMP, numbers here are actual, calculated without the 2.5 gross multiplier.

- Basic Aquaculture training continued at the EFF & MEFF aquaculture training centers. Trainings covered feed management, stocking, mechanical aeration and pond preparation; 144 individuals in attendance during the quarter.
- Technical Assistance provided to US Military in Iskandaria area of Babil Province on aquaculture for the use of CERP funds.

c) Challenges Faced

- **Challenge:** Lack of technical skills required for broodstock management on the part of potential program participants, showing a need for hatchery technician training.
- **Solution:** Series of meetings were held with the hatcheries explaining the distribution process for the new broodstock and the requirement to attend the hatchery training before they could receive the broodstock. USAID-*Inma* aquaculture field staff visited each participating hatchery to provide technical assistance on hatchery operations and infrastructure upgrades.

d) Activities Planned Jul – Sep, 2010

- Continue Basic Aquaculture Training at EFF & MEFF training centers.
- Continue sale of fingerlings and palm fish produced from imported Hungarian broodstock. Fingerlings are 30 to 60 grams, palm fish are will be up to 150 grams.
- September time frame should see fish produced from imported broodstock at area fish markets in size of 600 to 800 grams.
- Continue to provide technical assistance as requested by US Military and PRTs.

I.4 FEED PRODUCTION

Introduction

The USAID-*Inma* Agribusiness Program initiated a feed mill upgrade and capitalization voucher project with 6 existing feed mills and 29 farm service associations. The aim is to upgrade production to 20,000 tons annually and provide training on feed formulation and management to increase the quality of feed being produced. The Capitalization Voucher Program provided vouchers worth \$10,000 for use towards the purchase of 40 tons of feed. This is to assist the selected farm service associations in capitalization of their associations and demonstrate to their members the difference between quality feed formulated for specific results and the feed widely being used in Iraq. One of the primary goals of the Capitalization Voucher Program was to introduce farmers to the difference between quality feed and poor grade feed both for production and economics. During this quarter the program was initiated, demonstrating increased animal growth rate and higher economic return.

a) Activities Overview Table

Table 1.4: Aquaculture and Feed Value Chain PMP Indicators and Impact to date					
Activity 4	Protein Feed Mills				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.3.4	Increase in total gross sales of program-assisted enterprises	\$1,136,455	\$1,136,455	\$7,917,000	14.4%
8.2.4.4 ¹⁰					
8.2.6.3	Number of jobs created	83	125	255 ¹¹	49%

b) Activities Implemented Apr – Jun, 2010

- Two feed mill upgrades completed and three feed mill equipment orders delivered and currently being installed.
- Feed Analysis Laboratory equipment delivered and installed to three grantees.
- Third series of capitalization vouchers issued to farm service associations towards purchase of quality feed.
- The use of quality feed specially formulated for increased poultry and egg production by farmers, demonstrating very positive results and bringing very positive response from users. The feed for layers, egg production, significantly increases the number and size of eggs in the first two weeks of use. Due to the new feed formula, egg production from the farmer's 3,000 chickens went from 2,400 eggs to 2,550 eggs, and his box weight of 720 eggs increased from (23-25) kg to (26-28) kg increasing sale price by 36% per box.

c) Challenges Faced

¹⁰ Data for S.O. 8.2.4.4 pending external evaluation. See M&E Appendix.

¹¹ Jobs are actual jobs calculated on RAWP, page 29, Activity 4.c: 75 part-time construction jobs + 180 full-time mill operation jobs = 255 total jobs.

- **Challenge:** The farm service associations participating in the Capitalization Voucher Program desire to pass the savings to their members instead of retaining a portion for capitalization of their associations.
- **Solution:** Business Development Training is addressing the challenge. The associations that follow the recommendation to retain a percentage of the value of the voucher to capitalize their associations receive an additional voucher during that month as incentive to good practice.

d) Activities Planned Jul – Sep, 2010

- Completion of the remaining four feed mill upgrades.
- Continuation of the Capitalization Voucher Program and increase the number of vouchers to the farm service associations following the recommendations of the Business Development training.
- Complete training on Feed Analysis Laboratory Equipment and management procedures of the three new Feed Analysis Laboratories.
- All three Feed Analysis Laboratories will be in operation and conducting business.

B. HORTICULTURE VALUE CHAIN



2.1 GREENHOUSE CROPS

Introduction

This quarter four out of 6 planned demonstration greenhouses were planted with spring crops after bio-fumigation procedures, designed to reduce soil borne disease, were completed. A new greenhouse design to reduce air borne disease and insect pests was introduced. The courses in basic greenhouse training techniques were attended by more than 1,600 trainees. They in turn will begin to apply the skills learned in an estimated 600 greenhouses across Iraq. Two-wheel tractors, designed to affordably mechanize greenhouse operations, were deployed to three GFA's for demonstrations. Ongoing TTA with cooperating partners and neighboring greenhouse operators focused on preventative management to minimize crop losses. Further support was provided to the training contractor for curriculum development for the advanced greenhouse training initiated this reporting period. Currently 97 trainees have completed this advanced training.

a) Activities Overview Table

Table 2.1: Fruit and Vegetable Value Chain PMP Indicators and Impact to date					
Activity I	Greenhouse Crops				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.2.1	Increase in Gross Sales of targeted annual vegetables and fruit in program assisted areas	\$150	\$400	\$4,500,000	0%
8.2.4.4 ¹²					
8.2.6.3	Number of jobs created	132	224	4,500	5%

The original target indicators for Greenhouse Crops of \$4,500,000 actual sales and 4,500 jobs created assumed total recipient firm gross sales and jobs from all agricultural activities which had benefited from technical assistance. The current monitoring methodology looks only at sales and jobs from the demonstration greenhouses, and does not count the benefits to the rest of the greenhouses in the cluster replicating USAID-*Inma* methodologies effectively not counting other greenhouses at the farm in which the farmer could have adopted USAID-*Inma*-recommended practices and increased gross sales and hiring. An independent evaluation of the impact of USAID-*Inma* training activities will potentially provide a significant, positive adjustment to current numbers. In addition, replication of demonstration greenhouse practices by other farmers in the area rarely occurs prior to the third year after the initial demonstration begins. At the moment, the greenhouse activity is only in its second cycle, thus exponential benefits from replication are still at least one year away.

b) Activities Implemented Apr – Jun, 2010

- Greenhouse trainings implemented in all greenhouse locations, training 1,000 farmers in advanced greenhouse practices and 500 trainees in basic greenhouse practices.
- Five new demonstration greenhouses were planted with okra, tomato, cucumber, and eggplant after early spring bio-fumigation implemented to reduce soil-borne diseases for spring season.

¹² Data currently under evaluation (see Executive Summary).

- Developed a new design for and re-built four greenhouses. These new designs minimize disease and insect problems by installing ventilation capacity (to minimize fungal growth), and insect netting (to minimize pest invasion).
- Three two-wheel tractors deployed, one to each GFA for rotating demonstrations. Two-wheel tractors greatly increase greenhouse operations efficiency through mechanizing soil preparation, seeding, and other repetitive labor, at minimal cost (less than \$2,000 per tractor).
- Farmers received TTA and publications to support new management approaches to greenhouse growing in Iraq. The following publications were disbursed in English, Arabic, and Kurdish as part of broader TTA initiatives:
 - Dodder control
 - Orobnache management
 - Downy mildew management
 - Nutritional deficiency
 - Two wheel tractor operation and maintenance manuals (English only; Arabic and Kurdish currently in translation)
 - Two wheel tractor safety (English only Arabic, Kurdish in translation)
 - Recommendations to PRTs for supporting greenhouse sector (English only)

c) Challenges Faced

- **Challenge:** High levels of salinity in soil and water at test sites in Najaf and Karbala have stunted growth in demonstration greenhouse crops. Subsequent water testing by USAID-*Inma* staff confirmed high salinity levels.
- **Solution:** USAID-*Inma* staff have found new cooperating partners in Karbala and Najaf whose soil quality is better suited to demonstration greenhouses. Reconstruction of one of each of their greenhouses will take place in the next quarter to serve as technical training centers for these regions. The old partners are receiving TTA to improve their soil salinity levels and increase productivity.
- **Challenge:** Severe wind storm damaged one rebuilt greenhouse site in Bazeyan.
- **Solution:** USAID-*Inma* has reinforced the roll-up side wall design of the greenhouses to be wind-damage resistant. This reinforcement has been preemptively replicated at other sites to prevent similar damage elsewhere.

d) Activities Planned Jul – Sep, 2010

- Field days to demonstrate new greenhouse technologies seed and management techniques.
- Solarization of greenhouse soils to minimize insect, disease and weed issue in fall crops.
- Evaluation of success of spring planted demonstration crops.
- Implementing new greenhouse design demonstration with two new greenhouses cooperating partners in Najaf and Karbala.
- Survey growers for transplant nursery sites
- TTA:
 - Early Planting technique demonstrations
 - Come and cut okra (Rashediya)

- Greenhouse cooling (passive plus active)/shading to advance planting dates to capture higher priced market.
- Preparation for winter production season w partners /others to insure BAP and maximum income.
- Business development Bazaeyan greenhouse growers group.

2.2 OPEN FIELD CROPS

Introduction

The open field vegetable technical assistance program continued this quarter. USAID-*Inma* worked with PRTs to identify commercial vegetable farmers for participation in the program. They are now receiving extensive technical assistance and advanced hands-on training in irrigation, planting, and plant maintenance. Harvest has started and post-harvest packaging and sales will continue into next quarter.

In response to the poor efficiency of existing irrigation infrastructures, USAID-*Inma* has focused on enhancing efficiency through a.) distributing irrigation calendars to farmers and training them in how to use them to cut down water waste, and b.) targeted technical assistance focused on broader water management issues currently facing. 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, USAID-*Inma* is poised to expand yields through the next quarter and get better quality products to market for its recipients.

Sales for open field crops are high for two reasons. First, several crops, including melons and strawberries, have been in high demand at market, and have led to strong sales for farmers. Second, sales from Balad canning factory are included in the overall open fields sales numbers. USAID-*Inma*'s focus on highly labor-intensive crop targeting with recipients (such as strawberries) has led the program to exceed its jobs target for the activity by 152%.

a) Contributions to Strategic Objectives

Table 2.2: Fruit and Vegetable Value Chain PMP Indicators and Impact to date					
Activity2	Open Field Crops				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.2.1	Increase in Gross Sales of targeted annual vegetables and fruit in program assisted areas	\$36,678	\$35,834,606	\$4,500,000	796%
8.2.4.4 ¹³					
8.2.6.3 ¹⁴	Number of jobs created	75	808	447 ¹⁵	181%

b) Activities Implemented Apr – Jun, 2010

- Sites planted in Ninawa (10 sites, 64 donums); Kirkuk (9 sites, 87 donums), Diwaniyah (four sites, 40 donums), Diyala (one site, 10 donums) and Fallujah (one site, 10 donums) in the following crops: melons, tomatoes, cucumbers, eggplant, and okra.
- Monitored and technically assisted first harvest of strawberries.

¹³ Data currently under evaluation (see Executive Summary).

¹⁴ Total jobs figure also includes 7,720 jobs classified technically as open fields jobs from COIN-funded programming in 2008–2009. While these jobs technically fall under the scope of the open fields activity, USAID-*Inma* believes they were not accomplished as part of the programming the PMP assumes in its targets, and thus are not included in the above calculation.

¹⁵ Total Actual jobs number taken from RAWP, pp. 31–32: Open Field Summer Crops (67FT; 268 PT); Strawberries (19FT; 95PT)

- Technical assistance for melon planting in Diwaniyah included irrigation. Technical assistance was provided every time the irrigation team visited the area to monitor the irrigation systems. The lay-flat pipe system will be completed next quarter.
- For implementing the melons demonstration area in Wasit, a topographic map was prepared and an infiltration test was conducted. This information along with the soil texture was used to establish the “optimum” slope for land leveling and to determine the discharge per furrow and the irrigation time. USAID-*Inma* also prepared the melons irrigation scheduling table.
- Crop water requirements of the main vegetables for the entire Country were determined based on climate water conditions using the FAO CLIMWAT Database for Iraq.
- Instruction for crop irrigation techniques delivered to recipients in the GFA North area.

c) Challenges Faced

- **Challenge:** Best growing practices are not always intuitive, and recipient farmers are sometimes unwilling to abandon practices they have used for generations and risk a whole season’s crop on an unfamiliar approach demonstrated by USAID-*Inma*.
- **Solution:** USAID-*Inma* has negotiated partial acquisition of new techniques by farmers on small portions of their fields. This method does not ask the farmer to risk their whole crop on unfamiliar practices, and are being monitored and used as counterexample site to farmer’s existing techniques. In addition, USAID-*Inma* is deploying teams on weekly site visits necessary to ensure that farmers are tending the demonstration plots with USAID-*Inma*-instructed best practices.

d) Activities Planned Jul – Sep, 2010

- Melons in Wasit:
 - USAID-*Inma* will install and test the lay-flat irrigation pipe system and tensiometers.
 - USAID-*Inma* will monitor irrigation application weekly.
 - Technical assistance to farmers, particularly in harvest and post-harvest practices.
- USAID-*Inma* will continue distribution of vegetable irrigation calendars, and will implement weekly monitoring visits to track irrigation of vegetables and farmer utilization of the irrigation calendars.
- The program will also implement post-harvest TTA and marketing support of various kinds to all sites.

2.3 FRUITCULTURE (ORCHARDS & VINES)

Introduction

Model/Demonstration Orchard Establishment

In January 2010 the USAID-*Inma* Program imported 82,918 stone fruit trees (apricot, plum, peach and nectarine) complemented by an additional 10,040 Iraqi produced saplings for a total of 92,958 fruit trees. A selection of 7,410 imported trees were distributed to the Iraqi Ministry of Agriculture (MoA) for their research farms. USAID-*Inma* support orchard establishment in 9 provinces on 102 sites for a total area of 685 donums.

Provinces (sites):

- Sulaymaniyah (13)
- Dahuk (19)
- Baghdad (29)
- Anbar (4)
- Babil (11)
- Diyala (2)
- Diwaniyah (2)
- Karbala (1)
- Wasit (9)

Irrigation activities within the orchards and vineyards program are focused on providing technical assistance to farmers in order to improve their current on-farm water management practices. Over the last quarter, the imported saplings have been in a highly sensitive rooting phase of development, during which the plants require large and consistently available quantities of water. To ensure farmers are able to provide this, USAID-*Inma* has distributed irrigation calendars, including information about when to irrigate, how much water to apply and irrigation times. These calendars are a powerful tool which will expand yields, conserve valuable water resources, and ultimately cut costs while raising incomes. Over the course of the quarter, irrigation specialists and GFA field staff provided oversight to ensure growers provided correct moisture to the newly planted trees and vines.

Model/Demonstration Vineyard Establishment

In January 2010, the USAID-*Inma* Program imported 27,898 vines complemented by an additional 5,600 Iraqi produced vines. A selection of 2,400 imported vines were distributed to MoA. The recipients were 11 farmers who planted 90 donums of vineyards in Salah Al-Din (30 donums), Najaf (40 Donums), and Taji (20 donums). USAID-*Inma* field staff carefully monitored the farmers' activities to ensure they were adhering 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 1%.

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

Olives

Olive groves in northern Iraq are concentrated in the Bashiqa area of the Ninawa Plain. Trees have been growing in the area for over 500 years, and currently 450,000 trees of various ages are producing roughly 50-75 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, which currently has over 200 members, had contacted USAID-*Inma* with the objective of establishing an olive oil industry in the area. USAID-*Inma* is supporting the

Association with funding and technical assistance to establish a pressing operation and improve the quality of olives produced in the region.

a) Activities Overview Table

Table 2.3: Fruit and Vegetable Value Chain PMP Indicators and Impact to date					
Activity I	Fruit Orchards				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.1.1	Increase in Gross Sales of perennial products in program assisted areas	NA	NA	(No sales until plant maturation)	NA
8.2.4.4 ¹⁶					
8.2.6.3	Number of jobs created	372	924	700 ¹⁷	132%

b) Activities Implemented Apr – Jun, 2010

- In this reporting period, USAID-*Inma* field staff carefully monitored the farmers' activities to ensure best practices were employed and were properly using the USAID-*Inma* provided drip irrigation on 30 donums of orchards. Survival rates of the USAID-*Inma* supervised plantings were above those expected for commercial orchards (<10%). The exception was one site in Anbar where the government curtailed the water supply to a canal and the imported trees (993 in total) were lost on 8 donums before the farmer could develop another water supply.
- The other significant losses observed thus far were among the Iraqi purchased saplings (2,000 total), which suffered nearly a 20% loss. On all other sites, however, imported trees are in good condition with mortality rates lower than 1%.
- Demonstration plots are being used as training centers for neighboring farmers. USAID-*Inma* field staff will continue to monitor the survival rate and advise farmers on technical issues as they arise.
- Regarding irrigation systems, continuous follow-up in the twelve orchards demonstration areas were implemented to check the operational conditions of the drip irrigation systems. At the same time, in order to adjust the irrigation times provided to the farmers through the Drip Irrigation Times Charts, a pair of tensiometers were installed. Tensiometers were located within the wetting pattern of a typical emitter. One tensiometer placed near the emitter and down near the maximum rooting depth of the plant will provide information on penetration and when to stop irrigation. A second tensiometer placed near the lateral extent of the wetting pattern, usually 30 to 45 cm from the emitter and in the upper root zone will indicate when to start the irrigation cycle. The frequency of the irrigation cycle and length of irrigation are then adjusted to keep a uniform wetting pattern. Farmers were trained on how to record and use the information this quarter. During each visit, the benefited farmer and farmer's neighbors were gathered and technical assistance was provided along with tensiometer installation.

¹⁶ Data currently under evaluation. See Executive Summary.

¹⁷ Actual Job targets taken from RAWP, pp. 30—31. Targets are: Orchards (440FT); Vineyards (80FT); Olives (100FT; 80PT)

- Apart from visiting the orchard demonstration sites, the irrigation team visited some of the sites where USAID-*Inma* trees were distributed, in order to verify the use of the Irrigation Calendars that were distributed to farmers. Upon request, other Orchard sites were visited to solve problems caused by the poor adjustment of the emitters, clogging, or by high salinity levels in both the water and the soil.

Vineyards

- Planting was completed for vines released from quarantine.
- Monitoring: Monthly visits to each of the 11 vineyards by USAID-*Inma* technical field staff to collect data for M&E, supervise vineyard management, and deliver technical advice to growers.
- USAID-*Inma* established trellises for vine training in demonstration vineyards from 2009.

c) Challenges Faced

- **Challenge:** Sweet water is scarce in Al-Anbar and Madeen due to restriction of water to feeder canals. In Madeen, well-water salinity levels are also high.
- **Solution:** In Al-Anbar USAID-*Inma*, to the extent possible, will continue to do due-diligence on upcoming disruptions in water availability. Well-drilling may be an alternative for farmers where water salinity and availability make it feasible.

In Madeen, farmers were advised to use Euphrates water source when available, or alternatively mix well water with the reduced river-water available and leach salt accumulation later in the year when river water sources rise again.

- **Challenge:** Sites in Babil and Najaf use drainage water as a primary water source which, with a high salinity, is detrimental to plant growth.
- **Solution:** Mix Euphrates river water with the drainage water source which should reduce salinity to plant-tolerable levels.
- **Challenge:** Vineyards are infested with insects and fungi.
- **Solution:** USAID-*Inma* has implemented and will continue to implement TTA in Integrated Pest Management (IPM) and crop protection methodologies.
- **Challenge:** In olive trees, there is an olive fruit fly infestation. Currently 1-2 % of trees show some infection. However, fly numbers in the fall, as the weather beings to cool down, could increase substantially.
- **Solution:** USAID-*Inma* has developed publications on yeast bated bottle fly traps to trap and kill flies. These are currently being translated for trainings next quarter with growers to advise them on self production and placement of the traps.
- **Challenge:** Initial olive oil production runs showed that further refinement of pressed oil is required in order to produce a market-acceptable pure oil. Due to unforeseeable delays in getting pressing operations up and running immediately after the harvest, the olives were stored for months before being pressed. Since olives should be pressed immediately after harvest, this made the initial production run of olive oil needing further refinement in order to produce a market-acceptably pure oil.
- **Solution:** The Al-Zaytoon Olive Association is processing the stored olives as a training opportunity to be ready for next season. The oil processed will be distributed back to its

members. However, the Association has already signed a sales contract for all production. During this training process it was observed that additional equipment was required to improve oil quality and improve operational efficiency. During this quarter, that equipment, including an industrial filter and material handling equipment were procured.

- **Challenge:** 35—40,000 (approximately 8—9%) of the existing olive trees are infected with Verticillium Wilt (VW), reducing production of the infected trees by at least 50% and eventually causing premature tree loss. This fungal disease, if left untreated, could eventually spread through entire orchards.
- **Solution:** TTAs have been planned to instruct farmers in strategies to combat the fungus.

d) Activities Planned Jul – Sep, 2010

- The program will continue irrigation oversight visits to the twelve demonstration areas installed by USAID-*Inma*, and the two areas in Diwaniyah implemented jointly with the PRT. USAID-*Inma* will finalize installation of tensiometers and use them to determine the optimal irrigation pattern for the sites.
- The program will implement TTA focused on all aspects of production in the Orchards.
- The program will implement TTA to assist farmers to complete trellising and fencing of the model vineyards.
- The program will monitor and deploy TTA in early autumn related orchard work, including TTAs in pruning, orchard clean-up, and possible grafting training.
- For olives specifically, the program will implement TTA to combat the spread of VW.

2.4 POST-PRODUCTION AND PACKING HOUSES

Introduction

This quarter, two packing houses have begun full operations, Taji packing house and Al-Rabe'a packing house in Baghdad. Three further packing houses (Karbala, Al-Radwaniyah, and Fallujah) are in the process of construction and will be completed during the first month of the next Quarter. Marketing support activities have ramped up intensively, with several trainings in GAP and HACCP monitoring conducted and in design for next quarter. In addition, advanced marketing work on potential buyers in the Dubai and British markets for Iraqi dates was conducted with a target export date of this coming fall. Finally, several marketing training manuals have been completed in Kurdish and Arabic, and will be used in training implementation next quarter.

The sales numbers for this section are exceptionally high for two reasons. First, they include sales from the Balad canning factory, which account for a full 87% of total sales to date listed below. Second the Taji and Al-Rabe'a packing houses have dramatically exceeded sales expectations (see below), due in large part to quick adoption of USAID-*Inma* TTA practices by the packing shed owners and operators, and an entrepreneurial proactivism on their part to expand their business models beyond the initial designs using USAID-*Inma* practices, having exceeded the base target of \$33,840 in actual sales by approximately \$2,700.

a) Activities Overview Table

Table 2.4: Fruit and Vegetable Value Chain PMP Indicators and Impact to date					
Activity 4	Packing Houses				
SO #	SO	This Quarter	To Date	Goal	% complete
8.2.2.1	Increase in Gross Sales of targeted annual vegetables and fruit in program assisted areas	\$556,130	\$6,959,607	\$33,840	20,566%
8.2.4.4 ¹⁸					
8.2.6.3	Number of jobs created	0	337	250	135%

b) Activities Implemented Apr – Jun, 2010

- USAID-*Inma* focused this quarter on establishing better linkages between farmers, packing houses, and buyers. The Taji packing house throughput expanded dramatically this quarter, growing from gross sales of approximately \$97,334 in the previous quarter to \$551,568 this quarter, an increase of 567%. USAID-*Inma* field staff became the contact links and promoters to ensure completion of supplies and contract needs.
- As markets in Iraq become more sophisticated, and opportunities for export expand, food safety and traceability will become essential. In anticipation of these growing requirements, USAID-*Inma* staff provided GAP training and HACCP monitoring.
- USAID-*Inma* developed export opportunities for the fresh dates market in Europe. STTA was hired to research the current supply situation, quality, and market potential for Iraqi dates as exports. USAID-*Inma* staff met with potential wholesale buyers in the Dubai and British markets, and laid the groundwork for first exports before Ramadan begins.

¹⁸ Data currently under evaluation. See Executive Summary.

- Pre-completion activities with the Al-Radwania pack house were completed to promote post-harvest handling activities. The Al-Radwania packing house manager was provided with returnable containers and trained in field pack of tomatoes and cucumbers. These were supplied to retail and wholesale outlets, and therefore the sales chain is partially in place in advance of packing house commission.
- Three new Packing houses were redesigned (see below).
- A marketing training manual was prepared and translated into Kurdish and Arabic. The training will be provided to trainers initially, and then implemented to a minimum of 500 recipients next quarter.

c) Challenges Faced

- **Challenge:** Inter-tribe rivalries hindered efficient supply chains to packing houses.
- **Solution:** USAID-*Inma* has focused on developing tribe-neutral intermediary relationships to maintain connectivity in the supply chains.
- **Challenge:** Existing recipient record keeping and financial recording are sometimes incomplete.
- **Solution:** USAID-*Inma* field staff and business development staff are working with the management team to ensure simplified, effective financial and book-keeping methods are put in place.
- **Challenge:** Security and regional governmental politics have led to delays in completion of the three new packing houses.
- **Solution:** USAID-*Inma* is providing flexibility by readjusting milestones to more realistic targets for recipients, and is encouraging regular meetings with the recipients to discuss and resolve issues. Agreements where partners have notified USAID-*Inma* of delays caused by these problems have been extended.
- **Challenge:** Crops to be handled and packed in the new packing houses need different packing configuration and cold storage capacities than currently exist.
- **Solution:** Engineering and Infrastructure team are providing a no extra cost redesign to ensure the most cost-effective use of the existing plans to ensure optimum use of the packing houses. Two packing houses have been redesigned to include more cold storage; the third has been completely redesigned internally as a potato packing house, and will require a more fundamental shift in the layout of storage and handling areas and grading and packing equipment than the original design, which was for other crops.

d) Activities Planned Jul – Sep, 2010

- Conclude construction of three new packing houses, and commission and begin activities.
- Train staff in the three new packing houses.
- Carry out a potato supply survey to assist packing house management.
- Continue bolstering linkages between farmers, packing houses, and the market.
- Continue to incorporate private pack houses into the project training and TTA program.

- Conduct Trainings in HACCP design and audit (this does not exist in Iraq and is essential for WTO accession). The program will work with USAID-*Tijara* to maximize results in the food safety sector.
- STTA assistance in the pilot export of Dates and, potentially, other crops to the UK.
- Work with USAID-*Tijara* to promote GAP. USAID-*Tijara* is working On WTO accession, an integral part of which is Gap standards.
- Investigate consolidation center activities in Horticulture clusters. Market opportunities will be better accessible through such centers.

D. BUSINESS DEVELOPMENT SERVICES



3.1 MARKET DATA PUBLICATION

Introduction

To date USAID-*Inma*'s market information strategy has centered on Anka, a private Iraqi market intelligence company and recipient of an USAID-*Inma* grant, collects daily and weekly market prices of fruits and vegetables, animal products and farm inputs at wholesale markets in all provinces in Iraq. Daily and weekly price reports from 18 markets are disseminated on same-day basis to subscribers via email, website, mobile phone text messages, radio broadcasts and newspaper articles. Anka also publishes weekly market analysis reports for Baghdad and other major regional centers that highlight major developments in the markets for selected farm product. Quarterly summaries of seasonal price trends for major products help to identify peaks and valleys of annual marketing cycles.

a) Contribution to Strategic Objectives

Table X: Fruit and Vegetable Value Chain PMP Indicators and Impact to date					
Activity I	Market Data Publication				
SO #	SO	This Quarter	To Date	Goal	% complete
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	100%

b) Activities Implemented Apr – Jun, 2010

- Market information continued through Anka through the end of May 2010.
- Negotiations occurred with Anka to procure value-added market reports.

c) Challenges Faced

- **Challenge:** Anka is the only known source that actively collects market data on a national basis. There is great interest in keeping their service in existence. Anka needs to develop sustainable sources of revenue beyond USAID-*Inma* support. This is a challenge given their limited business experience and an underdeveloped market for market data that would allow them to

Anka management, while very capable in data collection and dissemination, have not been able to take their company in a direction that generates revenue. USAID-*Inma* staff has mentored and consulted Anka over the last year on this issue and offered advice on different business models. However, management seemed content with receiving grant funds rather than implementing a private sector strategy. They finally hired a Sales Manager in November 2009, but in spite of constant mentoring there continues to be no plan or understanding of what is necessary to commercialize their activities.

Aside from the issues with Anka management, the potential market for agricultural information is underdeveloped as farmers and other firms rarely utilize internal information, let alone external market information to make business decisions. There is also a cultural legacy where information is usually gathered through family and social networks without a fee.

Anka's primary product is basic price data, which has limited appeal as it would require instantaneous distribution for it to have the most value. The data requires some value-added analysis to become a useful product.

- **Solution:** USAID-*Inma* will also look for ways to generate demand for market information so that private companies such as Anka can find a willing market for their products and services. To this end, USAID-*Inma* will reach out to Industry Associations to assess the type of information that is valuable to their membership and the role they can play in both the collection and dissemination of basic and value-added information. The information that Anka collects is valuable and collection should be continued to be supported at cost. It is used to make critical business decisions.

d) Activities Planned Jul – Sep, 2010

- Grant modification to continue funding to Anka through August 31, 2010 to collect market information in four key regional markets on selected products
- Conduct Market Research to see if other firms/organization can provide similar services moving into the new work period
- Reach out to industry/producer associations to assess type of market information that is needed and their potential to develop a MIS capacity.

3.2 BUSINESS ASSISTANCE

Introduction

This quarter, USAID-*Inma* continued its efforts to strengthen the management capacity of Agribusinesses in Iraq. BDS focused its efforts on continuing Direct Firm-Level Assistance and providing On-site Technical Assistance to our supported companies. This work builds upon previously held Management Workshops by providing assistance in the practical application of proper management practices. In addition to supporting the development of private enterprises, USAID-*Inma* provided assistance to Agribusiness Associations interested in developing commercial activities to benefit their members. We provided on-going direct assistance to 36 supported projects represented by 34 firms, 29 associations and 30 large commercial growers.

a) 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	To Date	Goal	% complete
8.2.4.2	Percentage of program-assisted businesses benefiting from cluster formation	1011 businesses participated	3626 businesses participated	PMP assumes 65% received benefits	100% based on current PMP ¹⁹
8.2.4.3	Firms and associations trained to understand markets and farming profitability	63 (29 farm service associations)	157	42 farm service associations	69% of farm service associations

b) Activities Implemented Apr – Jun, 2010

- Firm Level – On-site Technical Assistance:
 - North – 12 companies – 60 days
 - Central and South – 38 days

This quarter, USAID-*Inma* provided on-site Technical Assistance to nineteen supported companies in the Central and Two-Rivers Geographic Focus Areas. Thirty-eight days of assistance were provided to these companies to support the implementation and utilization of record keeping systems and the development of operational plans that would identify critical operational points and devise appropriate systems, controls and procedures to improve management capacity and reduce risk. The on-site Technical Assistance assisted in the practical application of topics covered in the Business Management Workshops held last quarter.

- Firm Level – Direct Assistance
 - Completed Business Plans
 - Firms – 2 Veterinary laboratories
 - Associations – 16
 - Continued Firm Level Consultations with Firms and Associations
- Business Management Roundtable – Diyala
 - Targeted 21 open-field and Greenhouse growers

¹⁹ PMP will be revised during the next quarter.

Business Development Staff continued to provide direct firm-level assistance to all USAID-*Inma*-supported firms. Staff provided advice and worked with supported firms already in operation to improve financial and management systems; reduce operational risk; and develop appropriate business and marketing strategies. In addition to assisting firms already in operation, staff provided assistance to Feed Laboratory and Veterinary Laboratory Grantees in the development of their business plans.

- Roundtables – Total 34

USAID-*Inma* has also been able to support the development of Agribusinesses through Industry Roundtables. This quarter, USAID-*Inma* continued to hold its highly regarded Roundtables that provide a forum for agribusiness to share best practices, learn of new business opportunities and work together to identify, prioritize and discuss solutions for issues facing the industry as a whole. During this quarter, 34 roundtables were conducted. Roundtables conducted this quarter included Feed Production, the Olive Industry, and Forage Field Days in Anbar, Wasit, Ninawa and Kirkuk.

- Association – On-site Technical Assistance – 60 days

Association Management on-site Technical Assistance which was lunched April 2010, provided sixty days of technical assistance to associations participating in the Capitalization Voucher Program. The objective of the assistance is to support the practical implementation of record keeping, cash management, organization management and capacity planning. Essentially, the assistance is geared toward improving the Association's capacity to track and manage the transactions associated with the voucher program.

c) Challenges Faced

- **Challenge:** State intervention into the economy has left the sector facing a large gap in knowledge in how to run and manage a private enterprise. Experience must be regained in learning how to respond to the market and competition while being cognizant of cost and profitability.
- **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.

To this end, USAID-*Inma* has been 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 their financial resources, develop the procedures, policies and systems to effectively run their 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 running a business, 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:** Upgrade the capacity of existing agricultural associations to handle commercial activities. Many agricultural associations in Iraq were created as benefit organizations to receive grants or donations. Many are organized along family or tribal lines. Also most are not engaged in continuous activities. This is true with a majority of the twenty-nine associations participating in the Capitalization Voucher Program. Very few have record keeping systems in place and save one, do not have any long range plans.
- **Solution:** Building on the Association Development Workshops held last quarter that focused on association management issues, USAID-*Inma* provided on-site technical assistance to those Associations participating in the Capitalization Voucher Program. The focus of the technical assistance was to ensure that the associations had the management capacity and systems in place to handle the transactions associated with the vouchers. Also, BDS staff worked with each association to create brief business plans that laid out how they would handle the operations for the feed transactions and articulated their use of the proceeds from the feed sales.
- **Challenge:** Finding qualified service providers to implement planned program activities. BDS utilizes service providers to assist in carrying out many of our program activities such as roundtables, Technical assistance and business management training. In the course of contracting these services it has been difficult to find qualified companies. The issue is further compounded when the few qualified companies are loaded with projects. We encountered this situation when trying to bid out a contract for Management Seminars to be held from June – August 2010. We received one proposal from a new provider and found that they could not get to the level we needed.
- **Solution:** In the next quarter, USAID-*Inma* will hold bidders conferences with interested providers to discuss the desired outcomes of the program activity. Also, the business development team will hold several seminars on topics relevant to the program activities. We will engage the pool of trainers to improve the quality of both proposals on upcoming programs and the overall capacity of local firms and their staff.

d) Activities Planned Jul – Sep, 2010

- Firm Level – On-site Technical Assistance:
 - Central and South – 100 days
- Firm Level – Direct Assistance
 - Complete business plans for Veterinarian and Feed Laboratories
 - Continued management consultations with firms and associations
 - Emphasis on getting firms to incorporate an audit as a business development opportunity
- Roundtables – Total 20
- Management Capacity TOT Session
 - Hold roundtable with service providers, consultants, and instructors on the status of agribusiness management capacity as a training of trainers exercise in preparation for upcoming program activities.

3.3 AGRICULTURAL LENDING

Introduction

A critical factor which impedes 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 their 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 through their inability to access capital.

Access to capital is hindered by 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 lending to agriculture. USAID-*Inma* is addressing several of these deficiencies by providing loan capital to Micro-Finance Institutions (MFIs) and Private Commercial Banks to target Small to Medium Enterprises (SMEs).

a) 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	To Date	Goal	% complete
8.2.6.2	Number and value of loans provided by micro-finance institutions receiving USAID- <i>Inma</i> grant assistance to recipients	\$526,150	\$4,951,420	\$5,000,000	99%
8.2.6.3	Number of Jobs created through USAID- <i>Inma</i> grant supported private bank loans to agribusiness	306 farmers	3,228 farmers	3,400	95%

b) Activities Implemented Apr – Jun, 2010

- USAID-*Inma* has supported microfinance institutions (MFIs) as a source of investment capital for agribusiness growth. Through two MFIs (Al-Thiqa and Izdiharona), 5 million dollars of USAID-*Inma* funds have reached farmers and small agri-businesses in the Governorates of Ninawa, Dahuk, Erbil, Kirkuk, Sulaymaniyah, Diyala, Babil, Karbala, and Wasit. This quarter saw Al-Thiqa reach their grant amount of \$4 million by lending out \$815,400 in 262 new loans to reach a total disbursement of \$4,000,500. Out of this amount \$182,600 was extended to 51 women farmers. Izdiharona, which completed disbursement of its \$1 million grant in 4th quarter 2009 continued to report on its lending activities during this quarter.
- In December 2009, USAID-*Inma* awarded a grant of \$1 million to ICF/SME in order to target SME borrowers engaged exclusively in Agricultural Production and Processing activities in Anbar Province, through two participating banks, North Bank and Bank of Baghdad. They operate two branches, one in Fallujah (Bank of Baghdad), and one in Ramadi (North Bank). This quarter, these two banks have utilized their allocations to fund 79 loans utilizing

\$738,601 of grant funds to finish disbursement of the total grant amount. The \$1million grant generated a total of \$1.493 million in total new loans to agribusiness in Anbar Province.

MFI	Province	Loans Quarter	Loans To-date	Total Quarter	Total To-date
Izdiharona					
	Karbala	74	253	\$213,725	\$791,575
	Babil	57	319	\$115,700	\$915,486
	Wasit	0	11	\$0	\$37,321
	sub-total	131	583	\$329,425	\$1,744,382
Al-Thiqa					
	Ninawa	125	551	\$380,700	\$1,609,500
	Dahuk	23	119	\$92,500	\$528,400
	Erbil	19	70	\$81,700	\$266,000
	Sulaymaniyah	6	36	\$20,700	\$145,700
	Diyala	54	363	\$147,000	\$976,700
	Kirkuk	35	169	\$92,800	\$474,200
	sub-total	262	1,308	\$815,400	\$4,000,500
	TOTALS	393	1,891	\$1,144,825	\$5,744,882

ICF	Bank				
	Bank of Baghdad	36	43	\$406,027	\$432,298
	North Bank	13	19	\$332,574	\$580,455
		49	62	\$738,601	\$1,012,753

C) Activities Planned Jul – Sep, 2010

- Grant close-outs
- Planning for additional agricultural lending training to occur in 4th Quarter

The USAID-*Inma* Agribusiness Lending Training Program was implemented in 4th quarter 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 assisting financial institutions in developing appropriate agricultural credit products and how to access and make loans to the sector. This training will be repeated in the 4th quarter 2010 to train additional loan officers in making agricultural loans

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

APPENDIX A: COMPLETED ACTIVITIES

	Activity	Type	GFA	Province	Days	From	To	Month	Budget
1	Basic Green House Production Training	Training	North	Salah Al-Din	5	3	7	April	\$2,000
2	Orchards and Vines Training	Training	North	Erbil	5	3	7	April	\$2,000
3	Orchards and Vines Training	Training	North	Kirkuk	5	3	7	April	\$2,000
4	Orchards and Vines Training	Training	Two Rivers	Karbala	5	4	8	April	\$2,000
5	Orchards and Vines Training	Training	Central	Baghdad	5	3	7	April	\$2,000
6	Basic Open Field Vegetable Production	Training	North	Sulaymaniyah	5	3	7	April	\$2,000
7	Irrigation Principles and Application Training	Training	Central	Baghdad	5	4	8	April	\$2,000
8	Irrigation Principles and Application Training	Training	Two Rivers	Karbala	5	4	8	April	\$2,000
9	Irrigation Principles and Application Training	Training	Two Rivers	Wassit	5	4	8	April	\$2,000
10	Irrigation Principles and Application Training	Training	North	Ninawa	5	4	8	April	\$2,000
11	Roundtable Greenhouses	Round Table	Central	Baghdad	1	4		April	\$3,600
12	Aquaculture Hatchery Training EFF	Training	Two Rivers	Babil	10	9	18	April	\$2,000
13	Small Ruminant Production Management Training	Training	Two Rivers	Wassit	2	7	8	April	\$2,000
14	Roundtable Aquaculture	Round Table	North	Sulaymaniyah	1	8		April	\$3,600
15	Roundtable Feed Production	Round Table	Two Rivers	Babil	1	10		April	\$3,600
16	Roundtable Irrigation	Round Table	Central	Baghdad	1	10		April	\$3,600
17	Basic Green House Production Training,	Training	Two Rivers	Babil	5	10	14	April	\$2,000
18	Basic Green House Production Training	Training	Two Rivers	Wassit	5	10	14	April	\$2,000
19	Basic Green House Production Training	Training	Two Rivers	Diwaniyah	5	10	14	April	\$2,000
20	Basic Open Field Vegetable Production	Training	Central	Baghdad	5	10	14	April	\$2,000
21	Basic Open Field Vegetable Production	Training	North	Kirkuk	5	10	14	April	\$2,000
22	Basic Open Field Vegetable Production	Training	Two Rivers	Babil	5	10	14	April	\$2,000
23	Orchards and Vines Training	Training	Central	Baghdad	5	10	14	April	\$2,000

24	Orchards and Vines Training	Training	Two Rivers	Wassit	5	10	14	April	\$2,000
25	Orchards and Vines Training	Training	Two Rivers	Diwaniyah	5	10	14	April	\$2,000
26	Orchards and Vines Training	Training	Two Rivers	Najaf	5	10	14	April	\$2,000
27	Orchards and Vines Training	Training	North	Dahuk	5	10	14	April	\$2,000
28	Irrigation Principles and Application Training	Training	Two Rivers	Najaf	5	11	15	April	\$2,000
29	Irrigation Principles and Application Training	Training	Two Rivers	Diwaniyah	5	11	15	April	\$2,000
30	Irrigation Principles and Application Training	Training	Central	Baghdad	5	11	15	April	\$2,000
31	Irrigation Principles and Application Training	Training	North	Erbil	5	11	15	April	\$2,000
32	Roundtable Red Meat	Round Table	Two Rivers	Wasit	1	12		April	\$3,600
33	Horticulture Strawberry	Conference	Central	Baghdad	1	12		April	
34	Roundtable Olive	Round Table	North	Ninewa	1	13		April	\$3,600
35	Roundtable Market Driven Production	Round Table	Two Rivers	Diwaniyah	1	11		April	\$3,600
36	Small Ruminant Production Management Training	Training	North	Dahuk	2	14	15	April	\$2,000
37	Small Ruminant Production Management Training	Training	Two Rivers	Diwaniyah	2	14	15	April	\$2,000
38	Roundtable Horticulture Greenhouses	Round Table	Central	Diyala	1	17		April	\$3,600
39	Basic Green House Production Training	Training	Central	Baghdad	5	17	21	April	\$2,000
40	Basic Green House Production Training	Training	North	Erbil	5	17	21	April	\$2,000
41	Basic Green House Production Training (Women)	Training	North	Sulaymaniyah	5	17	21	April	\$2,000
42	Basic Green House Production Training (Women)	Training	Two Rivers	Najaf	5	17	21	April	\$2,000
43	Basic Open Field Vegetable Production	Training	North	Dahuk	5	17	21	April	\$2,000
44	Basic Open Field Vegetable Production	Training	North	Salah Al-Din	5	17	21	April	\$2,000
45	Orchards and Vines Training	Training	Two Rivers	Babil	5	17	21	April	\$2,000
46	Orchards and Vines Training	Training	Two Rivers	Karbala	5	17	21	April	\$2,000
47	Orchards and Vines Training	Training	Central	Anbar	5	17	21	April	\$2,000

48	Orchards and Vines Training	Training	Central	Diyala	5	17	21	April	\$2,000
49	Orchards and Vines Training	Training	North	Ninawa	5	17	21	April	\$2,000
50	Orchards and Vines Training	Training	North	Salah Al-Din	5	17	21	April	\$2,000
51	Irrigation Principles and Application Training	Training	Central	Baghdad	5	18	22	April	\$2,000
52	Irrigation Principles and Application Training	Training	Two Rivers	Najaf	5	18	22	April	\$2,000
53	Irrigation Principles and Application Training	Training	North	Kirkuk	5	18	22	April	\$2,000
54	Roundtable Poultry	Round Table	North	Erbil	1	19		April	\$3,600
55	Aquaculture Hatchery Training MEFF	Training	Two Rivers	Babil	10	16	25	April	\$2,000
56	Roundtable Horticulture	Round Table	North	Erbil	1	20		April	\$3,600
57	Roundtable Horticulture	Round Table	Central	Baghdad	1	22		April	\$3,600
58	Roundtable Forage Field Day	Round Table	Central	Anbar	1	22		April	\$3,600
59	Small Ruminant Production Management Training	Training	North	Erbil	2	21	22	April	\$2,000
60	Small Ruminant Production Management Training	Training	Central	Anbar	2	21	22	April	\$2,000
61	Roundtable Forage Field Day	Round Table	Two Rivers	Wasit	1	24		April	\$3,600
62	Basic Green House Production Training	Training	Two Rivers	Wasit	5	24	28	April	\$2,000
63	Basic Green House Production Training	Training	Two Rivers	Najaf	5	24	28	April	\$2,000
64	Basic Green House Production Training	Training	Two Rivers	Diwaniyah	5	24	28	April	\$2,000
65	Basic Green House Production Training	Training	Central	Anbar	5	24	28	April	\$2,000
66	Basic Open Field Vegetable Production	Training	Central	Diyala	5	24	28	April	\$2,000
67	Orchards and Vines Training	Training	North	Erbil	5	24	28	April	\$2,000
68	Orchards and Vines Training	Training	North	Sulaymaniyah	5	24	28	April	\$2,000
69	Orchards and Vines Training	Training	Two Rivers	Najaf	5	24	28	April	\$2,000
70	Orchards and Vines Training	Training	Central	Baghdad	5	24	28	April	\$2,000
71	Orchards and Vines Training	Training	Central	Baghdad	5	24	28	April	\$2,000
72	Irrigation Principles and Application Training (Women)	Training	Central	Baghdad	5	25	29	April	\$2,000

73	Irrigation Principles and Application Training	Training	North	Ninawa	5	25	29	April	\$2,000
74	Irrigation Principles and Application Training	Training	North	Salah Al-Din	5	25	29	April	\$2,000
75	Roundtable Horticulture	Round Table	Central	Baghdad	1	25		April	\$3,600
76	Roundtable Red Meat	Round Table	Central	Anbar	1	25		April	\$3,600
77	Roundtable Forage Field Day	Round Table	North	Ninawa	1	26		April	\$3,600
78	Roundtable Forage Field Day	Round Table	North	Kirkuk	1	28		April	\$3,600
79	Small Ruminant Production Management Training	Training	Two Rivers	Babil	2	28	29	April	\$2,000
80	Small Ruminant Production Management Training	Training	Central	Anbar	2	28	29	April	\$2,000
81	Small Ruminant Production Management Training	Training	Central	Baghdad	2	25	26	April	\$2,000
82	Roundtable Horticulture	Round Table	Central	Anbar	1	29		April	\$3,600
83	Roundtable - Horticulture	Round Table	North	Sulimaniyah	1	2		May	\$3,600
84	Basic Open Field Vegetable Production	Training	North	Kirkuk	5	2	6	May	\$2,000
85	Basic Open Field Vegetable Production	Training	North	Dahuk	5	2	6	May	\$2,000
86	Basic Open Field Vegetable Production	Training	North	Salah Al Deen	5	2	6	May	\$2,000
87	Basic Open Field Vegetable Production (Women)	Training	Two Rivers	Najaf	5	2	6	May	\$2,000
88	Orchards and Vines Training	Training	Central	Anbar	5	2	6	May	\$2,000
89	Orchards and Vines Training	Training	Two Rivers	Wassit	5	2	6	May	\$2,000
90	Orchards and Vines Training	Training	Two Rivers	Diwaniyah	5	2	6	May	\$2,000
91	Orchards and Vines Training	Training	North	Dahuk	5	2	6	May	\$2,000
92	Orchards and Vines Training	Training	North	Salah Al Deen	5	2	6	May	\$2,000
93	Roundtable Poultry	Round Table	Central	Diyala	1	5		May	\$3,600
94	Aquaculture Hatchery Training EFF	Training	Two Rivers	Babil	10	6	15	May	\$2,000
95	Roundtable Aquaculture	Round Table	Two Rivers	Wassit	1	8		May	\$3,600
96	Basic Open Field Vegetable Production	Training	North	Sulimaniyah	5	8	12	May	\$2,000
97	Basic Open Field Vegetable Production	Training	Two Rivers	Babil	5	8	12	May	\$2,000

98	Basic Open Field Vegetable Production	Training	Two Rivers	Diwaniyah	5	8	12	May	\$2,000
99	Orchards and Vines Training	Training	Central	Baghdad	5	8	12	May	\$2,000
100	Orchards and Vines Training	Training	Two Rivers	Babil	5	8	12	May	\$2,000
101	Orchards and Vines Training	Training	Two Rivers	Karbala	5	8	12	May	\$2,000
102	Orchards and Vines Training	Training	Two Rivers	Najaf	5	8	12	May	\$2,000
103	Orchards and Vines Training	Training	North	Kirkuk	5	8	12	May	\$2,000
104	Roundtable Horticulture	Round Table	Two Rivers	Karbala	1	11		May	\$3,600
105	Roundtable Aquaculture	Round Table	Two Rivers	Babil	1	15		May	\$3,600
106	Basic Open Field Vegetable Production	Training	Two Rivers	Wassit	5	15	19	May	\$2,000
107	Basic Open Field Vegetable Production (Women)	Training	Two Rivers	Najaf	5	15	19	May	\$2,000
108	Orchards and Vines Training	Training	Central	Baghdad	5	15	19	May	\$2,000
109	Orchards and Vines Training	Training	North	Ninawa	5	15	19	May	\$2,000
110	Orchards and Vines Training	Training	North	Erbil	5	15	19	May	\$2,000
111	Orchards and Vines Training	Training	North	Sulimaniyah	5	15	19	May	\$2,000
112	Orchards and Vines Training	Training	Two Rivers	Wassit	5	15	19	May	\$2,000
113	Veterinary Laboratory Equipment Training	Training	Central	Baghdad	3	17	19	May	\$2,000
114	Basic Animal Health Management Training	Training	North	Salah Al Deen	2	19	20	May	\$2,000
115	Roundtable Forage Field Day	Round Table	Central	Anbar	1	18		May	\$3,600
116	Aquaculture Hatchery Training MEFF	Training	Two Rivers	Babil	10	20	29	May	\$2,000
117	Veterinary Laboratory Equipment Training	Training	Two Rivers	Babil	3	20	22	May	\$2,000
118	Roundtable Forage Field Day	Round Table	North	Kirkuk	1	22		May	\$3,600
119	Basic Open Field Vegetable Production	Training	North	Dahuk	5	22	26	May	\$2,000
120	Basic Open Field Vegetable Production	Training	North	Sulimaniyah	5	22	26	May	\$2,000
121	Basic Green House Production Training	Training	Central	Baghdad	5	22	26	May	\$2,000
122	Orchards and Vines Training	Training	North	Dahuk	5	22	26	May	\$2,000
123	Orchards and Vines Training	Training	Central	Baghdad	5	22	26	May	\$2,000
124	Orchards and Vines Training	Training	Two Rivers	Babil	5	22	26	May	\$2,000

125	Orchards and Vines Training	Training	Central	Baghdad	5	22	26	May	\$2,000
126	Roundtable Forage Field Day	Round Table	North	Ninawa	1	24		May	\$3,600
127	Basic Animal Health Management Training	Training	Central	Baghdad	2	26	27	May	\$2,000
128	Basic Animal Health Management Training	Training	North	Erbil	2	26	27	May	\$2,000
129	Basic Animal Health Management Training (Women)	Training	Two Rivers	Najaf	2	26	27	May	\$2,000
130	Roundtable Forage Field Day	Round Table	Two Rivers	Wassit	1	27		May	\$3,600
131	Veterinary Laboratory Equipment Training	Training	North	Kirkuk	3	28	30	May	\$2,000
132	Roundtable Forage Field Day	Round Table	Two Rivers	Najaf	1	29		May	\$3,600
133	Basic Green House Production Training	Training	Central	Baghdad	5	29	2	May-June	\$2,000
134	Basic Green House Production Training	Training	Central	Baghdad	5	29	2	May-June	\$2,000
135	Basic Green House Production Training	Training	Central	Baghdad	5	29	2	May-June	\$2,000
136	Basic Green House Production Training	Training	North	Erbil	5	29	2	May-June	\$2,000
137	Basic Open Field Vegetable Production	Training	North	Erbil	5	29	2	May-June	\$2,000
138	Basic Open Field Vegetable Production	Training	Two Rivers	Babil	5	29	2	May-June	\$2,000
139	Basic Open Field Vegetable Production	Training	Two Rivers	Karbala	5	29	2	May-June	\$2,000
140	Basic Open Field Vegetable Production	Training	Two Rivers	Diwaniyah	5	29	2	May-June	\$2,000
141	Orchards and Vines Training	Training	North	Salah Al Deen	5	29	2	May-June	\$2,000
142	Orchards and Vines Training	Training	North	Dahuk	5	29	2	May-June	\$2,000
143	Orchards and Vines Training	Training	North	Sulimaniyah	5	29	2	May-June	\$2,000
144	Orchards and Vines Training	Training	Two Rivers	Diwaniyah	5	29	2	May-June	\$2,000
145	Orchards and Vines Training	Training	Central	Baghdad	5	29	2	May-June	\$2,000
146	Basic Animal Health Management Training	Training	Central	Diyala	2	2	3	June	\$2,000
147	Basic Animal Health Management Training	Training	North	Ninawa	2	2	3	June	\$2,000
148	Basic Animal Health Management Training	Training	Two Rivers	Karbala	2	2	3	June	\$2,000
149	Roundtable Poultry	Round Table	Two Rivers	Karbala	1	5		June	\$3,600
150	Basic Greenhouse Production Training	Training	Two Rivers	Najaf	5	5	9	June	\$2,000
151	Basic Greenhouse Production Training	Training	Two Rivers	Babil	5	5	9	June	\$2,000

152	Basic Greenhouse Production Training	Training	Central	Baghdad	5	5	9	June	\$2,000
153	Basic Greenhouse Production Training	Training	Central	Diyala	5	5	9	June	\$2,000
154	Roundtable Red Meat	Round Table	North	Ninawa	1	9		June	\$3,600
155	Basic Animal Health Management Training	Training	Central	Baghdad	2	9	10	June	\$2,000
156	Basic Animal Health Management Training	Training	North	Kirkuk	2	9	10	June	\$2,000
157	Basic Animal Health Management Training	Training	Two Rivers	Babil	2	9	10	June	\$2,000
158	Roundtable Business Management	Round Table	Central	Diyala	1	12		June	\$3,600
159	Advanced Greenhouse Training	Training	North	Erbil	5	12	16	June	\$2,000
160	Advanced Greenhouse Training	Training	North	Ninawa	5	12	16	June	\$2,000
161	Advanced Greenhouse Training	Training	Central	Anbar	5	12	16	June	\$2,000
162	Advanced Greenhouse Training	Training	Central	Baghdad	5	12	16	June	\$2,000
163	Irrigation Practises and Principles	Training	North	Kirkuk	5	13	17	June	\$2,000
164	Irrigation Practises and Principles	Training	North	Dahuk	5	13	17	June	\$2,000
165	Irrigation Practises and Principles	Training	North	Salah Al-Din	5	13	17	June	\$2,000
166	Irrigation Practises and Principles	Training	Two Rivers	Babil	5	13	17	June	\$2,000
167	Irrigation Practises and Principles	Training	Central	Baghdad	5	13	17	June	\$2,000
168	Roundtable Red Meat	Round Table	North	Kirkuk	1	14		June	\$3,600
169	Roundtable Red Meat	Round Table	Central	Baghdad	1	16		June	\$3,600
170	Basic Animal Health Management Training	Training	Central	Anbar	2	16	17	June	\$2,000
171	Basic Animal Health Management Training	Training	Two Rivers	Babil	2	16	17	June	\$2,000
172	Animal Nutrition Management Training	Training	Central	Diyala	2	16	17	June	\$2,000
173	Basic Greenhouse Production Training	Training	North	Sulaymaniyah	5	19	23	June	\$2,000
174	Basic Greenhouse Production Training	Training	Two Rivers	Wasit	5	19	23	June	\$2,000
175	Basic Greenhouse Production Training	Training	Two Rivers	Karbala	5	19	23	June	\$2,000
176	Basic Greenhouse Production Training	Training	Central	Baghdad	5	19	23	June	\$2,000
177	Advanced Greenhouse Training	Training	North	Kirkuk	5	19	23	June	\$2,000
178	Advanced Greenhouse Training	Training	North	Dahuk	5	19	23	June	\$2,000
179	Advanced Greenhouse Training	Training	North	Diyala	5	19	23	June	\$2,000

180	Advanced Greenhouse Training	Training	Central	Baghdad	5	19	23	June	\$2,000
181	Advanced Greenhouse Training	Training	Central	Baghdad	5	19	23	June	\$2,000
182	Orchards and Vines Training Programme	Training	Central	Anbar	5	19	23	June	\$2,000
183	Irrigation Practises and Principles	Training	North	Erbil	5	20	24	June	\$2,000
184	Irrigation Practises and Principles	Training	North	Ninawa	5	20	24	June	\$2,000
185	Irrigation Practises and Principles	Training	North	Sulaymaniyah	5	20	24	June	\$2,000
186	Irrigation Practises and Principles	Training	Two Rivers	Karbala	5	20	24	June	\$2,000
187	Irrigation Practises and Principles	Training	Two Rivers	Najaf	5	20	24	June	\$2,000
188	Irrigation Practises and Principles	Training	Central	Baghdad	5	20	24	June	\$2,000
189	Irrigation Practises and Principles	Training	Central	Baghdad	5	20	24	June	\$2,000
190	Aquaculture Training Programme	Training	Two Rivers	Babil	5	20	24	June	\$2,000
191	Roundtable GH Association Business Management	Round Table	North	Sulaymaniyah	1	21		June	\$3,600
192	Roundtable Market Information	Round Table	North	Erbil	1	22		June	\$3,600
193	Basic Animal Health Management Training	Training	North	Dahuk	2	23	24	June	\$2,000
194	Basic Animal Health Management Training	Training	Two Rivers	Babil	2	23	24	June	\$2,000
195	Basic Animal Health Management Training	Training	Central	Diyala	2	23	24	June	\$2,000
196	Animal Nutrition Management Training	Training	North	Sulaymaniyah	2	23	24	June	\$2,000
197	Animal Nutrition Management Training	Training	Two Rivers	Najaf	2	23	24	June	\$2,000
198	Basic Greenhouse Production Training	Training	North	Dahuk	5	26	30	June	\$2,000
199	Basic Greenhouse Production Training	Training	North	Kirkuk	5	26	30	June	\$2,000
200	Basic Greenhouse Production Training	Training	North	Ninawa	5	26	30	June	\$2,000
201	Basic Greenhouse Production Training	Training	Central	Anbar	5	26	30	June	\$2,000
202	Basic Greenhouse Production Training	Training	Central	Baghdad	5	26	30	June	\$2,000
203	Advanced Greenhouse Training	Training	North	Sulaymaniyah	5	26	30	June	\$2,000
204	Advanced Greenhouse Training	Training	North	Salah Al-Din	5	26	30	June	\$2,000
205	Advanced Greenhouse Training	Training	Central	Baghdad	5	26	30	June	\$2,000
206	Advanced Greenhouse Training	Training	Central	Baghdad	5	26	30	June	\$2,000

207	Advanced Greenhouse Training	Training	Central	Anbar	5	26	30	June	\$2,000
208	Advanced Greenhouse Training	Training	Central	Baghdad	5	26	30	June	\$2,000
209	Roundtable Irrigation	Round Table	Two Rivers	Najaf	1	26		June	\$3,600
210	Irrigation Practises and Principles	Training	North	Ninawa	5	27	1	June-July	\$2,000
211	Irrigation Practises and Principles	Training	North	Kirkuk	5	27	1	June-July	\$2,000
212	Irrigation Practises and Principles	Training	Two Rivers	Diwaniyah	5	27	1	June-July	\$2,000
213	Irrigation Practises and Principles	Training	Two Rivers	Wasit	5	27	1	June-July	\$2,000
214	Irrigation Practises and Principles	Training	Central	Baghdad	5	27	1	June-July	\$2,000
215	Irrigation Practises and Principles	Training	Central	Anbar	5	27	1	June-July	\$2,000
216	Roundtable Horticulture Orchards	Round Table	Central	Baghdad	1	30		June	\$3,600
217	Basic Animal Health Management (Women)	Training	Central	Diyala	2	30	1	June-July	\$2,000
218	Animal Nutrition Management Training	Training	North	Salah Al-Din	2	30	1	June-July	\$2,000
219	Animal Nutrition Management Training	Training	Central	Baghdad	2	30	1	June-July	\$2,000

APPENDIX B: EXPATRIATE PERSONNEL

HQ

Employee Name	Title	Nationality Data	Location	Contract
Charles Bell	Senior Technical Advisor	USA	HQ	LBG
Cecilia Basso	Human Resources Advisor	USA	HQ	LBG
Stephanie Mattes	Contract Administrator	USA	HQ	LBG
Shehnaz Atcha	Program Manager	USA	HQ	LBG
Deborah Birch	Project Communications Director	USA	HQ	LBG
Heather Risley	Communications Coordinator	USA	HQ	LBG
Daniel White	Proposal / Project Coordinator	USA	HQ	LBG

Iraq

Ross Wherry	Chief of Party	USA	Baghdad	LBG
Tracy Atwood	Deputy Chief of Party / Technical	USA	Baghdad	LBG
Martin Connaughton	Greenhouse Specialist	USA	Baghdad	LBG
Graham Dale	Agricultural Processing Specialist	UK	Baghdad	LBG
Constant Kabwasa	Financial Director	Republic of Congo DCR	Baghdad	LBG
Ludwig Schatz	Training Specialist / Advisor	Germany	Baghdad	LBG
Jenna Bisenius	Public Affairs Manager	USA	Baghdad	LBG
Al Williams	Horticulture Team Leader	USA	Baghdad	LBG
Juan Sevilla	Water & Irrigation Specialist	Peru	Baghdad	LBG
Duane Stone	Aquaculture, Poultry & Feed Production Leader	USA	Baghdad	LBG
Siham Salman Al-Malaki	Senior Contract Specialist	Iraq (Green Card)	Baghdad	LBG
Tony Laos	Beef & Lamb Value Chain Team Leader	USA	Baghdad	TAMU
'Souleyman Kebe'	Livestock Specialist	USA	Baghdad	LBG
Franco Scotti	Economist	Italy	Baghdad	LBG
Craig Carlson	Senior Business Development Specialist - Team Leader	USA	Baghdad	LBG
Jeff Bonner	GFA Regional Manager / Golden Crescent (Central Region)	USA	Baghdad	LBG
Kathleen Webb	Monitoring & Evaluation Manager	Kenya	Baghdad	LBG
Peter Park	Contract Administrator	USA	Baghdad	LBG
Daniel Dunn	Agriculture Economist	USA	Baghdad	LBG

Iraq (Short-Term Consultants)

Shehnaz Atcha (5-21 May)	Program Manager	USA	HQ	LBG
Daniel White (8 Jun - present)	Project / Proposal Coordinator	USA	HQ	LBG
Michael Green (13 Jun - 5 Jul)	Acting Finance Manager	USA	HQ	LBG

APPENDIX C: EXPATRIATE PERSONNEL MOB / DEMOB

Mobilization - The following staff arrived in the Apr - Jun quarter:

- Robert Nottelman - Technical Specialist (3 Apr) *short term*
- Shehnaz Atcha - Program Manager (5 May) HQ
- Daniel White - Proposal Coordinator (8 Jun) HQ
- Michael Green - Acting Finance Manager (13 Jun) HQ
- Rajesh Sail - Acting Procurement Manager (29 Jun)

Demobilization - The following staff demobilized in the Apr - Jun quarter:

- Alexander Dahan - Horticulture Marketing Specialist (1 April) *short term*
- Robert Nottelman - Technical Specialist (13 Apr) *short term*
- John Hargreaves - Agriculture Economist (20 Apr) *short term*
- Shehnaz Atcha - Program Manager (21 May)
- Sheik Jalloh - Logistic Manager (31 May)
- Cynthia Bowes - Operations Manager (31 May)
- Jorge Pagador - Orchard Specialist (21 Jun)
- Osama Abdelaal - Grants Manager (24 Jun)
- Susan Rupprecht - Procurement Manager (25 Jun)

Mobilization for the following quarter - The following staff are expected to arrive in the Jul - Aug quarter:

- Jerry Turnbull - Chief of Party (Jul)
- Jit Pradhan - Monitoring & Evaluation Manager (Jul)
- Nerys Irving-Jones - Reporting Specialist (Jul)
- Kara Dixon - Procurement Manager (Jul)
- Alexandre Dahan - STTA Date Marketing Specialist (Jul)

USAID-Inma is recruiting for the following positions:

- None

APPENDIX D: PERFORMANCE MONITORING & EVALUATION

The following Performance Monitoring & Evaluation report presents progress results for April 1 - June 30, 2010 (Quarter 3, FY3).

The individual project results (implemented through the value chains and GFAs) are based on the monitoring mechanism²⁰ as required in the USAID/LBG contract and as stated in the USAID-*Inma* Agribusiness Program Annual Work Plan Revised 2009—2010.²¹ This mechanism is inclusive of three steps:

- i. The development of monitoring instruments: The M&E department has developed, and tested 75 tools²², questionnaires and checklists to report on the performance of USAID-*Inma*;
- ii. Administration of these instruments by Iraqi staff, and;
- iii. Analysis and presentation of the data by the Monitoring & Evaluation staff.

In this quarter, the M&E department continued to modify ten new field tools to be used by the GFAs and M&E staff on a monthly basis.

Additional²³ tools were developed in June 2010 for an assessment of the outcome of eighteen of fifty-four loans provided by USAID-*Inma* and facilitated through the ICF (administered by the North Bank and Bank of Baghdad) in Anbar and Fallujah²⁴. M&E also collaborated with the Training Specialist to plan for an upcoming ex-parte assessment of the impact of USAID-*Inma* training to be conducted by a third-party firm.

In the first two months of this quarter, the M&E Department also participated in responses to an audit by the Office of the Inspector General (USAID) field work, a Gender team study and an external evaluation of USAID-*Inma* led by the QED Group. By the time of this report, M&E has not received feedback on the studies.

At the same time the M&E Department produced summary statistical spreadsheets of USAID-*Inma* achievements (based on the two project indicators²⁵ and the strategic objectives drawn from the indicators) for USAID-*Inma* from April 1 – June 30, 2010. Using Dr. John Mellor's economic formula, 'Gross' sales refer to actual sales by project assisted enterprises multiplied by 2.5, as each new dollar in agriculture is expected to generate USD 2.50 in additional rural incomes, creating a cumulative economic effect. Each actual job is also expected to generate two additional or 'gross' jobs, so actual jobs are doubled to reflect gross jobs.

In the reporting targets and program data listed in the main body of this report, however, USAID-*Inma* has only reported actual sales and jobs, pending a re-evaluation of the Mellor formula as an accurate reflection of existing data.

The M&E Department analysis of Indicator files and project files from April 1st to June 30, 2010 showed continued progress of the project with gross sales worth \$4,443,320, bringing sales to a total **\$75,603,693** or **150%** of the F5 \$50,531,000 expected by the end of August, 2010.

Both fulltime and part time jobs have increased this quarter. Actual full time jobs created in this quarter were **846** jobs, an increase from the previous quarter, which had seen **718** jobs created. USAID-*Inma* has

²⁰ PMP, p.4

²¹ Revised publication date February 24, 2010.

²² Tools still need to be developed with the Business Development Value Chain. M&E has made requests for M&E Organizational tools and expanded parameters for MFI and ICF bank monitoring, but the department has not yet completed.

²³ This assessment did not take place as intended due to insecurity. A less reliable method-telephone interviewing was used.

²⁴ This assessment was planned as field visits, which had to be cancelled due to insecurity. A less reliable method-telephone interviews, was utilized.

²⁵ Indicator 1 states "Increase in total gross sales of program assisted enterprises", while Indicator 2 refers to "Increase in employment in the agriculture/agribusiness sectors attributable to project activities" According to the contractual F5 indicators, by EOP USAID-*Inma* is expected to create sales valued at \$50,531,000 actual sales, and 9,858 actual jobs.

performed well with respect to part time jobs, creating **313 actual part time jobs** this quarter bringing total part time jobs to **16,288**. The project has created **533 actual full time jobs** this quarter, to a total of **3,261 full time jobs**.

As the project begins transitioning into its extension year, revamping, streamlining, and bolstering M&E data collection, analysis, and responsiveness to client requests will be an increasing priority. The new project-wide management information system database will play a large part in centralizing all data, from financial to performance management, in one unified and easy to access source.

In addition, quarterly reporting has shifted to focus primarily on project progress towards satisfying the goals of the strategic objectives. In the process of developing this reporting mechanism, several questions arose regarding clarification of either what specifically a given strategic objective is intending to report (see training, below), what should be included in that reporting, or both.

As a result of this process, M&E has established the following clarifications of SO metrics:

1. Actual versus gross sales and jobs: The original PMP established gross projections for sales and jobs creation on the John W. Mellor exponential multiplier, based on the Egyptian agricultural case. The Mellor framework predicts that agricultural growth puts unique demand on the rural non-tradable sector, at roughly the rate of \$1.50 spent for every \$1.00 earned on farm (thus the 2.5 multiplier for sales), creating roughly one job outside of agriculture for every job created within it (thus the 2.0 multiplier for jobs). While these basic assertions of causality seem to obtain in Iraq as well as Egypt, data on the sector as a whole, or the impact of USAID-*Inma* to date in particular, are insufficient to justify one specific multiplier over any other. Thus to avoid unintentional distortion of the project's impact, starting with this quarterly report all M&E monitoring and reporting will be in actual, not gross projections.
2. For the business assistance activity, S.O. 8.2.4.2 "Percentage of program-assisted businesses benefiting from cluster formation" does not reflect our program as it has evolved since the initial PMP was devised. For this report, it has been interpreted as a basic metric tracking quantity of businesses that have participated in cluster formation associations. As part of the development of the new PMP for the extension year, this S.O. will be revised with the value chain leader and M&E to reflect the current nature of the program.
3. For the business assistance activity, S.O. 8.2.4.3 "Firms and associations trained to understand markets and farming profitability," the original goal was 42 farm associations. The activity has evolved to include training of firms aside from associations. As part of the development of the new PMP for the extension year, this S.O. will be revised with the value chain leader and M&E to reflect the current nature of the program.
4. S.O. 8.2.4.4 "Percentage of program-assisted farmers who use improved technology and can document that they are getting more income from their crops" is currently only available for the fish production activity. Data for all over activities to which this S.O. pertains is pending external evaluation of its impact, which is under development. While the explicit relationship between existing training data and this S.O. have yet to be evaluated, basic numbers on training for the quarter and project to date are outlined below.

TRAINING SUMMARY

The USAID-*Inma* training activities are rated 'Satisfactory' pending an external assessment of levels of adaption and degree of increased incomes.

In terms of training, the Strategic Objectives results were set at an overall achievement level of **7,995** persons to be trained in various subject matters related to the value chains. USAID-*Inma* training records show **13,019** persons (including 1,177 females-9%) have been trained since the beginning of the project using different methodologies such as subcontracted training courses, TTA, roundtables, conferences, and workshops.

For this quarter, training activities and participants were as follows:

Activity	Trainees this quarter	
	Male	Female
Beef and Lamb Feedlots	381	114
Alfalfa and Grass Hay	228	6
Aquaculture Production	143	1
Poultry Production	0	0
Stone Fruit & Pomegranates	0	0
Orchards and Vineyards	1056	101
Olives	0	0
Open Field Crops	428	100
Greenhouse Crops	831	177
Irrigation Training	488	79
Business Development	662	77
Total	4217	655

There were no specific target numbers for the quarter but the completed training courses contributed to the overall achievement of the strategic objectives. A total of 4,872 people were trained in this quarter including 655 women farmers (13.4%)

In order to measure effectiveness, it is now necessary to carry out post training random sampling for training courses completed during the first quarter of 2010. This will be done by outside consultants to assess the quality and impact - the degree of adoption of new technologies and increased incomes.

These studies will supplement those already done by the M&E Department, which carried out random sampling for fish trainees in Babil and 2009 orchard farmers in Rashdiya in FY2, Q4 and FY3 Q1. Both these studies showed a high level of recall, adaption of new technologies and some increase in incomes, which farmers attributed to the USAID-*Inma* project.

The figures below show training totals to June 29, 2010 against the expected **overall** results as stated in the Strategic Objectives results template. These results are pending external assessment by QED, but **quantitatively** are '**Highly Satisfactory**' with the exception of forage training:

i. USAID-*Inma* goal for livestock production and vet lab training was: 1000 farmers to be trained. The achievement level was: 925 farmers trained (779 Male & 146 Female). Percentage of achievement: **92.5%**

USAID-*Inma* goal for Forage training was: 320 farmers to be trained.
ii The achievement level was: 87 farmers trained (87 Male (Percentage of achievement: **27.18%**. However, as most forage training was accounted for as roundtables, the actual number of participants was considerably higher and achieved its target with a 100 % attendance (321 in total, 315 male and 6 female)

iii. USAID-*Inma* goal for **Aquaculture** training was: 500 farmers to be trained, while the achievement was: 536 farmers trained 484 Male & 52 Female) (Percentage of achievement: **107.2%**

iv. USAID-*Inma* goal for **Orchard** training was: 1975 farmers to be trained While the achievement was: 1839 farmers trained (1738 Male & 101 Female) Percentage of achievement: **93.11%**

v. USAID-*Inma* goal for **Open Field** was: 1260 farmers to be trained While the achievement was: 1244 farmers trained (1080 Male & 164 Female). Percentage of achievement: **98.73%**

vi. USAID-*Inma* goal for **Green House** was: 2000 farmers to be trained While the achievement was: 2101 farmers trained (1864 Male & 237 Female). Percentage of achievement: **105.05%**

The M&E departments notes that from successful assessments of fish training (recall, adaption level, and stated increased incomes) that one of the key factors to effective training is adequate duration for the farmers to gain sufficient knowledge.

It is recommended that future courses focus on training from 2-5 days in duration to ensure trainees are able to understand and practice the various new technologies from USAID-*Inma*.

- END -