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QUARTERLY REPORT #16 APRIL - JUNE 2014

***DEZENVOLVE AGRICULTURA COMUNITÁRIA
(DAC) PROJECT***

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Quarterly Highlights

Farm sales of 114.8 m.t. from the SHAs generated \$92,981 during the quarter: Outdoor production continued strongly. Production and harvest is underway at both greenhouses, but the final harvest payment has not been made yet.

Totals of Vegetable Production from all SHAs		
April - June 2014		
	Kg	US\$
Outdoor Production Original Groups	55,893.90	45,939.71
Outdoor Production Expansion	58,943.00	47,041.60
Greenhouse		
Total	114,836.90	92,981.31

District Horticulture Organization: The leadership of the 430 member Aileu District Horticulture Organization travelled throughout the District to introduce themselves and their vision for the organization to each of the 26 member groups. The leadership also began working on by-laws, opened a bank account, and began the process of formal registration with the Ministry of Justice.

DAC Facilitates Internship with National Employment and Vocational Training Center: DAC linked the CNEFP to the District Horticulture Association leaders, and facilitated the agreement for the Association to provide a 2 week, full-time, on-site internship for 9 students from the Center's horticulture program. DAC field staff provided back-up and monitoring, ensuring the students were learning as many new techniques as possible. The students, the CNFPE, and the farmers were all very pleased with the results and plan to repeat the internship in future.

Activities Year Four

This quarterly report follows the Year Four Workplan, describing activities and achievements in DAC's three main activities:

- 1) Assist farmers to develop business skills and establish organizations that can successfully manage their commercial horticulture activities (*PEOPLE*)
- 2) Assist farmers to improve horticulture technology and practices to meet market demand for product quantity and quality (*PRODUCTION*)
- 3) Assist farmers and other value chain actors and stakeholders to develop a strong horticulture value chain that routinely increases sales volume and profits (*VALUE*)

In Year Four, DAC adds two new activities:

- 4) Trilateral Cooperation Demonstration Activity
- 5) (OPTIONAL) ConocoPhillips GDA Agreement Implementation

This report also contains an updated Workplan Timeline, and a summary of project finance and administration for the quarter.

PLEASE NOTE: *Data reflected in this quarterly report may come from DAC's data collection process, or from our partners Kmanek Supermarket and Dilimart. Our partners may work with more farmers than DAC will work with directly, or with farmers that DAC has not yet entered into our data collection system. As the DAC project expansion scales up rapidly, DAC's official monitoring and evaluation data collected for our indicator reporting may differ from the information in this report. All reporting to USAID on DAC's Performance Measurement Plan indicators are considered the final results.*

ACTIVITY ONE

Assist farmers to manage their commercial horticulture activities (PEOPLE)

In Year Four DAC's Community Mobilization Team will replicate the highly successful business skills trainings developed in Year Three to ensure that all DAC farmers gain the skills to plan, grow and manage their businesses. In the area of management, Year Four activities will transition full responsibility for farmer group and contract farming management to the farmer group leaders and members. Two new initiatives are the formation of an Aileu District Horticulture Organization, and the integration of nutrition programming into the DAC commercially oriented program.

Activity 1A: Business Skills Training

Farming as a Business Training

In this quarter DAC completed a procurement for Timor Aid to deliver the customized Farming as a Business Training to six additional groups in Aileu District during July-August 2014. The District Director of Agriculture also requested that DAC include the extension agents in this training, and DAC gladly agreed. The District Director is impressed with the increased investment activity by DAC farmers.

To date, the training has been completed in 16 communities with 300 farmers (see previous reports), as well as an initial introductory training given to farmer group leaders from 9 Kmanek partner sites (27 farmers).

Farming as a Business Technical Assistance

DAC Community Mobilization staff continued monitoring the impact of the Farming as a Business training, supporting farmers to make good choices about investments in their farming businesses. In this quarter, 86 farmers purchased inputs such as fertilizer, and equipment such as irrigation pumps. 57 farmers used credit, but 29 farmers used their own savings from their vegetable businesses.

Given the importance of helping farmers to make the transition to commercial farming (investing for profit increase), DAC has hired a new Field Technical Assistant, Mr Jose Rangel, to focus on providing individual assistance to farmers. By understanding the individual farmers' businesses and potential to invest, Mr. Rangel can help explain what will be the potential returns from their investment. With this knowledge we hope that farmers will be willing to invest on upgrading or expanding their productions.

Facilitate Access to Credit for Investments

Since Kmanek Agriculture and the BNCTL are both offering credit to farmers, DAC Community Mobilization has initiated a new activity to support farmers making the best decisions about the use of credit. DAC staff are meeting with all farmer groups to clarify the terms and conditions from each lender, and to help the farmers understand the pros and cons of working with each lender.

DAC continued to facilitate the linkage between farmers and the Commercial Bank of Timor Leste (BNCTL). In this quarter, 14 new farmers took loans totaling \$8,900. This brings to total to date to 49 loans totaling \$20,200.

Kmanek Agriculture continued to support their contract farmers with in-kind loans. In this quarter, Kmanek provided loans to 43 farmers totaling \$8,061 for UV plastic, insect screening, and plastic mulch. This brings the total to 55 loans totaling \$14,235.60.

Total credit facilitated by DAC project for contract farmers to date: 104 loans totaling \$34,435.60.

Bookkeeping Training

Complete. Training in Empreza Diak's customized bookkeeping system has been delivered to 15 communities with 286 farmers in the Kmanek areas, and to 2 groups with 37 farmers in the Dilimart areas. Training of Trainers was also give to Kmanek and Dilimart staff, to enable them to continue training new groups in the future. The buyers have now independently provided training and implemented the system with 7 new groups. Seven months (for Dilimart) and one and a half years (for Kmanek) after starting the training, all groups are successfully using the system.

Business Plans for Greenhouse Associations

Business plans are complete for both Greenhouse Associations. Throughout the year DAC Community Mobilization staff will support the Associations to carry out their activities according to the business plans.

Activity 1B: Management Training

Training and Technical Assistance for Managing Commercial Relationship with Contract Buyer

The farmer groups, organized into their regional associations and the District Association, are well trained in their responsibilities to transmit information and gather inputs from their group members. Following last quarter's price negotiation with Kmanek Supermarket, farmer group leaders disseminated the new price list, and the demand from Kmanek for improved quality and diversity of production.

Dilimart has decided to add two new locations in Ermera District, Gleno and Railako. Interestingly, the sites were identified while Dilimart was assisting farmer groups from Boklelo to purchase chicken manure at Grasia Farm in Railako! DAC anticipates working in this area under the upcoming ConocoPhillips GDA. DAC Community Mobilization staff assisted the farmers to structure their groups and elect their leaders. DAC also facilitated the discussion between Dilimart and the farmer group regarding the price list and the Memorandum of Understanding.

Training and Technical Assistance for Internal Group Management

For all of the Leader Meetings and Federation Meetings in this quarter, DAC Community Mobilization staff assisted the farmer representatives to prepare their agenda prior to the meeting, to take notes and to report back to their communities during the scheduled weekly pick-ups when all farmers are together.

Technical Assistance for Greenhouse Association Management

DAC Community Mobilization staff conducted monthly monitoring of the Greenhouse Associations' implementation of their business plans. To date, activities and spending are on track for both Associations.

Activity 1C: Building District Level Horticulture Organization

Form Representative Area Groups in Kmanek and Dilimart Locations, and Coordinate with Non-DAC Horticulture Groups

Complete. The 26 DAC supported farmer groups, with 448 members, are organized into 5 regional associations, with leadership elected for each group and for each region. 4 regions are partnered with Kmanek and one with Dilimart. DAC and the farmer leaders continue to share information about the upcoming district wide organization with other stakeholders such as World Vision and Maryknoll which support vegetable farmer groups.

Initial Meetings of District Organization Representatives and Agenda Setting

The District Association leadership elected in the last quarter (including President, Secretary, Treasurer and two Community Liaison Officers) established the following priorities for the Association agenda:

1. Introduce Association leadership to all farmer groups
2. Complete of by-laws
3. Formal registration of Association
4. Introduce Association to local authorities
5. Identify physical location for Association
6. Open bank account and collect membership fees
7. Computer training for leadership

The District Association leaders also met with DAC Community Mobilization staff in the last week of March to begin working on the by-laws. In the following quarter, the District Association will meet to discuss their workplan for the upcoming year, complete the by-laws, and begin formal registration process.

Agenda Implementation

1. Introduce Association leadership to all farmer groups
 - a. Completed. The District Association leadership elected in the last quarter (including President, Secretary, Treasurer and two Community Liaison Officers) travelled to each farmer group location to introduce themselves and to discuss the establishment and vision/mission/objectives of the Association.
2. Complete by-laws
 - a. In process. DAC assisted the Association leaders to adapt the by-laws used for the greenhouse associations. Discussion needs to continue with all farmer group leaders.

3. Formal registration of Association
 - a. In process. DAC is working closely with Association leadership and the Ministry of Justice through this complicated process. All forms completed and signed by founding members and Association elected leadership. Must complete by-laws.
4. Introduce Association to local authorities
 - a. Association leaders met with Aileu District Administrator
5. Identify physical location for Association
 - a. District Association leaders met with the Aileu District Land and Property office to request use of government property to establish the Association headquarters. The Land and Property suggested that they find an empty property, since there were no buildings currently available and the use of a building would require paying rent.
 - b. The District Director of Agriculture is also assisting the Association to identify property and potentially share an office location.
 - c. The Association and Kmanek Agriculture are discussing co-locating, with a retail input supply outlet also
6. Open bank account and collect membership fees
 - a. Bank account opened at BNCTL Aileu District branch.
 - b. Membership fees: Founding Member groups paid \$5 per group. Each member of each founding group also paid \$1 as a registration fee. This has totaled \$430 deposited in the Association bank account.
 - c. Membership fees: Future registration fees will be \$5 per member of each group that newly joins. On an on-going basis, each individual farmer member of each group will pay \$0.25 in each week that they have sales to the commercial buyer.
7. Computer training for leadership
 - a. It is important that the leaders can use a computer for keeping notes and financial records. DAC staff provided several hours per week of computer training and creating reporting templates for the leaders. Fortunately many of them have had basic computer training in the past.

Activity 1D: Improve farmer nutrition and health

Nutrition Education

No activity scheduled in this quarter.

Promote Vegetable Consumption

No activity scheduled in this quarter.

ACTIVITY TWO

Assist SHA farmers to improve horticulture technology and practices to meet market demand for product quantity and quality (PRODUCTION)

Quarterly Production Results

Outdoor production continued strongly. Production and harvest is underway at both greenhouses, but the final harvest payment has not been made yet.

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Activity 2A: Continued improvement in technical skills

Outdoor production technical assistance in expansion communities (new technologies and management practices)

DAC staff continued providing high quality technical assistance at farmer sites.

Farmer Field School for IPM and Horticulture Production

World Education Indonesia began implementation of FFS in the 4 remaining farmer groups: Fatubossa 2, Tabor, Boklelo 2 and Casnafa. The trainers conducted Participatory Rapid Appraisal and interviews with the farmers, and held extensive discussions with DAC staff, to gather information and ensure the creation of a viable curriculum. Given the low level of skill and knowledge among Timorese farmers, it is vital that the curriculum remain simple and clearly focused on mastery of skills rather than on a wide range of new topics. The PRA and farmer interviews helped to identify the main constraints to farmers' production – solving those problems will form the basis of the FFS curriculum.

FFS field sites were prepared, and farmers were trained to make liquid organic fertilizer, high quality compost, and build good vegetable nurseries. The first formal FFS sessions were held on June 16-18.

International Training

No activity in this quarter. To date, 40 farmers have attended a one month outdoor vegetable production training at the Value Chain Community in Bandung, West Java.

Following the training, farmers from each community worked together to create a demonstration plot and provide training to their fellow group members.

Finalize and disseminate manuals and guides

Completion re-scheduled to next quarter.

Short term technical assistance

Bruno Benavente provided management support for the Agribusiness and Community Mobilization activities, assisting the DAC Agribusiness Advisor who is also assigned to the Trilateral Cooperation Activity (see below).

Danny Fyffe and Mark Notaras completed the Water Use, Investment and Irrigation training.

Don Humpal completed the Pesticide Safer Use assignment. Joe Freach began activities on the follow-up Pesticide Safer Use training and label guide.

Activity 2B: Materials and Equipment Distribution

Provide protective materials (UV plastic tunnels or plastic mulch) and irrigation solution (drip or alternative) to 150 new farmers

DAC continued to deliver materials and technical assistance to allow all new farmers to install outdoor production facilities appropriate for their own fields and production. DAC's goal is to provide either plastic tunnel or plastic mulch, and an irrigation solution such as drip irrigation, to at least 150 new farmers. The chart below shows distribution to date, and the number still to be distributed.

DAC's irrigation activity will ramp up in the next 2 quarters during the dry season, when farmers are most concerned with improving their water usage and conservation.

	Plastic Tunnel	Plastic Mulch	Drip Irrigation
New Farmers in New Groups	152	70	32
New Farmers in Original Groups	17	0	0
Total	169	70	32
Remaining to Distribute	Exceeded target!		118

In addition, DAC has provided UV plastic for 227 farmers to build seedling nurseries.

Activity 2C: Environmental Protection and Improvement

Reforestation activities

DAC monitored the results of the planting of over 12,000 seedlings in the last quarter. Approximately 80% of the seedlings planted have survived, which is a high success rate partly attributable to the high quality seedling production techniques taught by DAC/RDP4, and partly to the extended rainy season preventing drought stress.

Planting for green manure

No activity scheduled in this quarter (based on heavy rain season).

Contour line / terraced planting training

DAC completed a competitive procurement and signed a purchase order with the local NGO Halarae Foundation. It is important for DAC to support the growth and development of local training providers. It is also most effective to use local organizations that have the right technical, cultural and language skills to facilitate effective change among farmer groups. Halarae is not available to begin the training until August. If rains have continued and the ground is still appropriate for creating terraces and planting, the training will go ahead. If the dry season has made the soil too hard and too dry, the training will be delayed until the start of the rainy season.

Activity 2D: Irrigation

Provide water assessments and irrigation solution recommendations to 9 farmer groups

Complete. Assessments and recommendations for irrigation solutions were delivered for 231 farmers in seventeen communities.

Training in adequate water application to maximize production

DAC's overall approach to promoting better use of water includes formal training in Water Use, Irrigation and Investment, and individual follow-up with high potential farmers to give the hands-on encouragement and assistance for them to make investments.

Mr. Fyffe, DAC Irrigation Consultant and Mark Notaras, training design specialist STTA, provided training of trainers to DAC Irrigation Specialist Vital Morais and Dac Business Development Specialist Zulmira Alves. The four co-delivered the Water Use, Irrigation and Investment training to all DAC staff on April 11 at the Hiam Health horticulture demonstration garden in Dili.

During April-June, DAC Irrigation Specialist oversaw the installation of an irrigation demonstration plot in the Moris Foun farmer group. The irrigation plot will show a variety of irrigation techniques (simple water storage, drip irrigation) and compare properly watered vegetable production to farmers' own average production. The demonstration plot will also compare the results from using mulch (prevents evaporation) or leaving seedbeds open.

On June 16-18, the DAC staff took the lead to deliver the training to three farmer groups at the Aileu District irrigation demonstration plot. Mr. Fyffe and Mr. Notaras provide support and back-up only. Upon completion of the three trainings, the consultants and DAC senior staff were confident that the DAC Irrigation and BDS Specialists could successfully deliver the training to all the DAC farmer groups in the next quarter.

Individual irrigation and Farming as a Business (investment planning) technical assistance

The development of the Water Use, Irrigation and Investment training materials provides the knowledge, skills and framework for DAC staff to effectively provide this technical

assistance. In the next quarter, after farmer groups receive the training, DAC Community Mobilization and Irrigation Specialist staff will provide individual technical assistance to high potential farmers.

Some farmer groups are already investing in improved water management. DAC assisted farmers in Moris Foun and Fo Liman ba Malu to build small water storage tanks that allow groups of 3-5 farmers collect enough water for daily irrigation. DAC assisted the groups to measure their water source, ensuring that adequate water was available for the intended planting area, and to ensure that the groups water collection did not have a negative impact on neighbors' water use. DAC helped the farmers to plan the piping and tank placement, and organize themselves to purchase materials.

Activity 2E: Integrated Pest Management

Pest/Disease Prevention Training

No activity in this quarter. To date in Year 4, training provided through Farmer Field School in 12 DAC communities.

Organic Pesticide Training and Use

No activity in this quarter. To date in Year 4, organic pesticides production, using local materials, and organic pesticide safe use were taught through Farmer Field School in 12 DAC communities.

Technical assistance to commercial buyers and farmers on safe pesticide storage, distribution, use, and recordkeeping for Good Agricultural Practice

DAC Pesticide Safer Use consultant, Mr. Don Humpal, completed field work on his assignment to:

1. Assessment of completeness and effectiveness of DAC's current safer use program, with recommendations for improvements and next steps. Assessment to incorporate all relevant aspects of compliance with government policy and regulation.
2. Guidelines for safer use practices for pesticides commonly in use by farmers (improved practices for pesticide storage, mixing, applying, harvest intervals, emergency decontamination, container disposal, recordkeeping)
3. Staff training session on safer use guidelines
4. Pesticide safer use management plan (improved practices for pesticide storage, transport, distribution, and recordkeeping) for two supermarket buyers
5. Compile current documents and create any required new templates to ensure DAC has essential documentation on pesticide use that will meet current USAID guidelines for safer use programs.

Deliverable #3, a 2 day "Pesticide Safer Use" training for DAC technical staff, was conducted on May 9 and 16 including:

1. Five Golden Rules for Safe Use of Crop Protection Products (CPP)
2. Purchase, Transport, and Storage of CPPs
3. Personal Protective Equipment (PPE)
4. Mixing and Preparing CPPs
5. Disposal of Empty CPP Containers

6. Portable Application Equipment
7. Calibration of Hand Sprayers
8. Good Spraying Practice
9. Recordkeeping for CPP Safety

Final report and remaining deliverables will be submitted in the next quarter.

Mr. Humpal identified four immediate tasks to rapidly improve the safer use of pesticides among DAC farmers and in the input supply chain. DAC engaged Mr. Joe Freach, a consultant with extensive experience in agriculture development in Timor-Leste, and recent experience in delivering training on agriculture chemical use to input suppliers, to complete the following scope of work:

1. To address the issue of poorly calibrated pesticide applicators (resulting in unsafe and ineffective doses of pesticides) by conducting calibration of a sample of actual equipment of various ages used by DAC farmers. The correct calibration information will allow for the correct calculation of safe and effective doses of pesticide.
 - a. In process
2. To address the issue of incorrect, incomplete, and misleading labels on commercially available pesticides by developing a “label guide” (English & Tetun) that provides correct information for active ingredients, human toxicity class, the basic Personal Protective Equipment (PPE) for mixing and application, and the resistance category of the most common commercially available pesticides.
 - a. In process
3. To replicate the Pesticide Safer Use training for DAC staff, to ensure full understanding of the material and adequate skills for DAC staff to support future delivery of the training to farmers and individualized follow-up technical assistance.
 - a. Complete: Training replicated 4 times in the field with small groups of DAC staff.
4. To provide training to input suppliers so they can begin to develop basic knowledge and skills in making appropriate recommendations for agriculture chemicals and equipment such as pesticide applicators.
 - a. Complete: Training May 22. See Activity 3D, Business development support provided to key actors in value chain.

Activity 2F: Integrated Agriculture Pilot

This pilot helps farmers to improve their use of animals for fertilizer and to increase the value of their animals through fattening, how to use diverse plants to provide food for animals, to deter pests from vegetable plots, and to improve soil fertility that will increase vegetable production.

Training in Integrated Agriculture approach to horticulture

Complete. In Year 4 DAC has provided overall training on the Integrated Agriculture approach and on the proper feeding program for penned animals (including planting the proper plants and trees to use as animal fodder).

Implementation and monitoring of two pilot sites

The three pilot farmers and 2 farmers that are replicating the system on their own initiative continue to carry out the penning, feeding and collecting of manure and urine according to DAC training.

Promotion and dissemination of lessons learned

No activity planned in this quarter. Final results to be measured and announced in August.

ACTIVITY THREE

Assist SHA farmers and other value chain actors and stakeholders to develop a strong horticulture value chain (VALUE)

Activity 3A: Facilitate Horticulture Working Group

In response to the strong interest at the February HWG from input suppliers for more technical training, DAC delivered a one day training on May 22 for 7 representatives from input supply shops (see “Business development support to key actors in value chain”).

The next HWG will be delayed due to priority government activities. The planned reorganization of the Ministry of Agriculture was rolled out in June, including the announcement of the new National Director of Horticulture Oscar Goncalves. The meeting of the CPLP in July will supercede all other activities. DAC will work with the new National Director of Horticulture Goncalves to schedule the next HWG for August.

Activity 3B: Technical assistance to DAC commercial partners

Post-harvest handling

No activity in this quarter. In Year 4 DAC has provided an expert consultancy to assess Kmanek post-harvest handling system, and supported Kmanek in developing grading standards, materials, and delivering training.

Supply chain management

DAC completed a competitive procurement and finalized a purchase order with Empreza Diak to provide business development services to Dilimart. Kmanek has received similar assistance directly from DAC COP in 2012-2013, during which many of the key systems and tools were developed. Dilimart has been introduced to these systems and tools but needs additional support to customize them to meet Dilimart’s specific business model, and to more effectively and consistently implement them.

Dilimart is expanding the contract farming business to meet increasing demand, and plans to add 1-3 additional farmer groups in new Districts. In order to manage this growth, and continue to expand independently in the future, Dilimart needs assistance to improve their management systems and to strengthen their capacity to consistently implement those systems.

Dilimart has identified a set of key challenges to be addressed:

1. Failure to consistently meet targets for vegetable production
2. Failure to consistently collect, analyze and use data for management decisions
3. Failure to adjust input distribution to match production capacity and market demand
4. Failure to provide consistent, adequate information and communication with farmer groups
5. Lack of effective operations management reports to senior management

Empreza Diak will assist Dilimart to customize and improve current management systems, strengthen staff capacity to implement those systems, and provide additional effective management reporting tools and processes.

Product promotion

No activity scheduled in this quarter.

Activity 3D: Business development support to key actors in value chain

Input Supply

DAC completed the first of 3 technical trainings planned for Year Four. On May 22, DAC provided a technical training to 7 participants from input supply shops in Dili. The agenda covered:

1. Overview of Agriculture Chemicals
2. Chemical Safety (storage, handling, PPE)
3. Understanding chemical labels
4. Introduction and distribution of information sheets on vegetable production, soil fertility, and climate (materials produced by Seeds of Life and Mercy Corps)

Traders/Wholesalers

In preparation for the BNCTL seminars, DAC collected more detailed information from traders previously identified working in the Ainaro, Aileu and Ermera Districts. Through extensive trips to the Districts and personal meetings with the traders, DAC gathered important information for linking these traders to vegetable producers and the BNCTL. Information included the sub-District they focus on, the size of their business, the average quantities of vegetables traded, the markets where they focus their sales, and their contact information.

Buyers

No activity scheduled in this quarter.

Finance Institutions

BNCTL, the finance institution that has provided loans to DAC farmers in Aileu District, requested DAC support to increase their lending to other vegetable farmers in Aileu and Ainaro Districts. BNCTL identified two problems that constrained their lending:

- Vegetable farmers don't have a consistent market and are not always able to sell their product
- Vegetable farmers need technical assistance to avoid crop loss to pest/disease

DAC and BNCTL will collaborate to offer one-day seminars in the District branch offices in order to:

- Introduce traders (identified through DAC value chain research) interested in forming stronger more consistent business relationships with vegetable farmers
- Introduce vegetable farmer groups interested in forming stronger more consistent business relationships with traders
- Introduce technical assistance providers active in the District and MAF extension agents working in the vegetable farmer group sucos
- Present the opportunities to access credit from BNCTL
- Present the opportunity to receive business development services from the IADE business support centers

Activity 3E: Refine horticulture market research

DAC continued analysis of the final data collections. Final results will be published before the end of Year Four.

Activity 3F: Provide training and internship opportunities

Students from universities

The National Employment and Vocational Training Center (CNEFP) at Tibar has a horticulture certificate program. The Center requested DAC assistance to give students a practical internship. DAC linked the CNEFP to the District Association leaders, and facilitated the discussion and agreement for the Association to provide a 2 week internship for 9 students from the horticulture program. DAC field staff provided back-up and monitoring, ensuring the students were learning as many new techniques as possible. The 9 students were placed with 4 farmers, in the Hakiak Moris, Tasonih, Foin Kman and Mudanca communities from March 24-April 4. The students, the CNFPE, and the Seloj farmers were all very pleased with the results and plan to repeat the internship in future.

MAF extension agents

DAC provided a complete schedule of the Farmer Field School training in all 8 communities to the Aileu District Director of Agriculture and to the National Director of Extension, and invited the participation of any extension agents.

ACTIVITY FOUR

Trilateral Cooperation Demonstration Activity

Activity 4A: Preparation

Site selection and preparation – Cotolau
Complete.

Site selection and preparation – District pilot sites
Complete for Phase 1 Beans in Ainaro and Bobonaro Districts.

Site selected and prepared for Phase 2 Onions in Ainaro, Aileu and Bobonaro Districts. All sites are areas where the main income for farmers is onion cultivation.

- Bobonaro District
 - Suco Ilatlaun (training site)
 - Suco Soilesu (training site)
- Ainaro/Aileu District Border
 - Suco Fatubossa (training site)
 - Suco Liurai (small demo plot/group nursery)
 - Suco Fatubessi (small demo plot/group nursery)

Crop selection, variety selection, sourcing seeds

Complete. DAC will work with two crops approved by USAID and MAF: beans (dried beans commonly referred to as “koto mean”) and onions (test of red onion and Bombay onion). DAC selected 5 varieties of beans (3 local and 2 imported (RWV 1348 and MWIRASI) recommended by Seeds of Life) for the demonstration plots. Four onion varieties selected for the Phase 2 demonstration plots are South Pacific Seeds Rio Red Rocks, East West Seeds Tuk Tuk, Rocalba Cebolla Babosa, and Rocalba Cebolla Flora.

Training participant selection

Complete. DAC selected the following participants for Phase 2 Onions:

1. UNITAL and UNTL students (total 24)
2. MAF extension staff and local authorities (total 6)
3. Smallholder farmers (total 64)

Activity 4B: Implementation

DAC assigned one full time staff to the Cotolau site, and one staff to each of the District sites. The staff are all performing very well, delivering impressive results while being totally independent in their daily work. Farmers in Ainaro/Aileu and Bobonaro are extremely interested in the demonstration plot and participate regularly and fully in the activity. DAC staff have also begun to visit individual farmer fields to provide technical assistance and training on the farmers’ own sites.

Season 1 Beans

Complete. See results in prior reports.

Season 2 Onions

Seed germination began in late April at all sites. Results varied significantly among the sites. Germination results to date are very poor at Cotolau and at the Suco Ilatlaun site in Bobonaro, and very good in Fatubossa and the Suco Soilesu site in Bobonaro. Water and climate variables seem most important in the variations. These results will provide important information for the Ministry of Agriculture strategic decisions going forward.

Transplanting was initiated in the last week of June.

UNTL participation

Students from UNTL and UNITAL continued to participate enthusiastically in the training.

Activity 4C: Training

Prepare 11 technical and 3 complementary training modules

DAC has now prepared and delivered 11 technical and 3 complementary training modules for Phase 1 Beans. In this quarter, DAC prepared the following modules:

Training 4: Storage and Marketing:

Technical Modules

1. Harvest (part 2): Harvest results presented
2. Post-harvest handling and storage (part 2): Post-harvest results presented
3. Marketing: Linking producers to markets, and training producers to develop and manage commercial relationships with buyers

Complementary Modules

1. Formation of commercial producer groups: Introduction to the contract farming model, introduction to group bookkeeping tools, and discussion of the benefits and requirements of forming legally registered groups
2. Nutrition: Reversing malnutrition trends by teaching legume cooking techniques and highlighting the benefits of legume consumption as a key source of iron and vitamin A, two nutrients that are critical for the physical development of children and adults. Additional focus on the importance of vegetables for nutrition.

Deliver training at Kotolau demonstration plot

Training 4: Storage and Marketing was delivered during a full-day session in Dili. All of the training participants from the Cotolau, Ainaro and Bobonaro District sites were included..

Presenters included:

- DAC Agribusiness Advisor/Trilateral Activity Team Lead William Bere Ati
- HIAM Health (nutrition, cooking demo)
- Professor Acacio Guterres, UNTL (storage)
- Mercy Corps (storage containers)
- IFAD (storage containers)

Deliver training at District pilot sites

See above.

Activity 4D: Promotion and Dissemination

Beans “taste test” event

The beans taste test was conducted during the Training 4 in Dili. Results did not show a significant consumer preference:

BEANS		LIKE	LIKE A LITTLE BIT	DON'T LIKE
RW1348	A	32	10	5
Local Ululefa	B	35	8	3
Local White	C	36	6	4
MWIRASI	D	32	9	5
Local Red	E	34	6	5
	NOT COUNTED	7		
	VALID SUBMISSIONS	47		
	TOTAL SUBMISSIONS	54		

Activity Five (Optional) Implement ConocoPhillips GDA

Activities TBD

Annex 2 Year 4 Workplan Timeline

See next two pages.

DAC YEAR FOUR WORKPLAN TIMELINE	2013				2014							
	September	October	November	December	January	February	March	April	May	June	July	August
Activity One: Assist farmers to manage commercial horticulture												
<i>Activity 1A: Business Skills Training</i>												
Farming as a Business Training												
Farming as a Business technical assistance												
Facilitate Access to Credit												
Bookkeeping Training												
Business Plans for Greenhouse Associations												
<i>Activity 1B: Management Training</i>												
Training & TA for managing commercial relationship with buyers												
Training and TA for Internal Group Management												
TA for Greenhouse Association Management												
<i>Activity 1C: Building District Level Horticulture Organization</i>												
Form Representative Area Groups and Coordinate with non-DAC groups												
Initial Meetings and Agenda Setting												
Agenda Implementation												
<i>Activity 1D: Improve Farmer Nutrition and Health</i>												
Nutrition Education												
Promote Vegetable Consumption												
Activity Two: Improve horticulture production to meet market demand												
<i>Activity 2A: Continued improvement in technical skills</i>												
Technical assistance in expansion sites												
Farmer Field School for IPM and Horticulture												
Manuals and Guides												
<i>Activity 2B: Material and Equipment Distribution</i>												
Provide protective materials and irrigation solutions												
<i>Activity 2C: Environmental Protection and Improvements</i>												
Reforestation												
Planting for green manure												
Contour line / terraced planting training												
<i>Activity 2D: Irrigation</i>												
Water assessments and irrigation recommendations												
Training in adequate water application												
Individual irrigation investments												

DAC YEAR FOUR WORKPLAN TIMELINE	2013				2014							
	September	October	November	December	January	February	March	April	May	June	July	August
Activity 2E: Integrated Pest Management												
Pest/Disease Prevention Training (FFS)												
Organic Pesticide Training and Use (FFS)												
Assistance to farmers/buyers on safer pesticide use & recordkeeping												
Activity 2F: Integrated Agriculture Pilot												
Socialization and farmer selection in Integrated Agriculture approach												
Implementation and monitoring of 2 pilot sites												
Promotion and dissemination of lessons learned												
Activity Three: Develop Strong Horticulture Value Chain												
Activity 3A: Facilitate Horticulture Working Group												
Activity 3A: Facilitate Horticulture Working Group												
Activity 3B: Technical assistance to DAC commercial partners												
Activity 3B: Technical assistance to DAC commercial partners												
Post-harvest handling												
Supply chain management												
Product promotion												
Activity 3D: Business development assistance to key actors												
Activity 3D: Business development assistance to key actors												
Activity 3E: Refine horticulture market research												
Activity 3E: Refine horticulture market research												
Activity 3F: Provide training and internship opportunities												
Activity 3F: Provide training and internship opportunities												
Activity Four: Trilateral Cooperation Demonstration Activity												
Activity 4A: Preparation												
Activity 4A: Preparation												
Site selection & preparation - Kotolau												
Site selection & preparation - District pilot sites												
Crop selection, variety selection, sourcing seeds												
Training participant selection												
Activity 4B: Implementation												
Activity 4B: Implementation												
Season 1 Beans												
Season 2 Onions												
UNTL Participation												
Activity 4C: Training												
Activity 4C: Training												
Prepare training modules												
Deliver training at Kotolau and District pilot sites												
Activity 4D: Promotion and Dissemination												
Activity 4D: Promotion and Dissemination												
Beans "taste test" event												