USAID
FROM THE AMERICAN PEOPLE

RAISE PLUS-LIMITED SCOPE OF WORK

FINAL REPORT

PRIVATE ENTERPRISE SUPPORT ACTIVITIES (PESA)
FINAL EVALUATION

August 2006

This publication was produced for review by the United States Agency for International Development.

PRIVATE ENTERPRISE SUPPORT ACTIVITIES (PESA) FINAL EVALUATION

FINAL REPORT

Submitted by:
Weidemann Associates, Inc.

In cooperation with:
Agricultural Management Group, Inc. (AMG)

Submitted to:
USAID/Tanzania

Contract No.:
AEG-I-00-04-00010-00 Task Order #AEG-I-05-04-00010-00

Period of Performance:
March-June 2006

Prepared by:

William Masawe
Agribusiness Specialist

Gregory M. Sullivan
Agribusiness Development Program Specialist

Table of Contents

LIST OF ACRONYMS

AAS	Agribusiness Advisory Service
ADF	Africa Development Fund
AMSDP	Agricultural Marketing Systems Development Project
AGM	Annual Group Meeting
BDS	Business Development Services
BCR	Benefit Cost Ratio
C-E	Cost Effectiveness
CRDB	Community Rural Development Bank
DAI	Development Alternatives, Inc.
ECI	Ebony Consulting International
FO	Field Officer
GoT	Government of Tanzania
IR	Intermediate Result
IRR	Internal Rate of Return
ISD	Integrated Subsector Development Methodology
LO	Liaison Officer
LOP	Life of Project
LTTA	Long Term Technical Assistance
M&E	Monitoring and Evaluation
MAMCOS	Madibira Agricultural Marketing Co-Operative Society
MRPS	Micro-Finance Rural Participatory Scheme
MSE	Micro-Small Enterprise
NPV	Net Present Value
PC	Project Coordinator
PESA	Private Enterprise Support Activities
PMP	Performance and Monitoring Plan
RPMS	Rural Participatory Micro-Finance Scheme
RTS	Results Tracking System
SACCOS	Savings and Credit Cooperative Society
SOW	Scope of Work
STTA	Short Term Technical Assistance
TCCIA	Tanzania Chamber of Commerce and Industry Association
ToT	Training of Trainer programs
USAID	United States Agency for International Development

Section One: Executive Summary

USAID's Private Enterprise Sector Assistance (PESA) project focuses on improving the income of Micro and Small Enterprises (MSE) through the formation of associations for cost-effective delivery of technical, business and management information. Initially, the project focused on introducing policies to improve the business environment. USAID funding for the project was US$ 11.95 million, but funding was reduced to US$ 8.39 million. The budget cut resulted in USAID's sharpening the focus of project activities.

1.1. Methodology of Evaluation

This evaluation focused on program impacts and on the cost-effectiveness of its delivery of services. In conducting the evaluation, the team reviewed product documents to determine structure and to understand how the various components were interrelated. The evaluation team met with representatives of USAID, DAI PESA and other PESA project organizations to assess the effectiveness of their collaboration. Meetings were held with project staff at both the headquarters and zonal offices. A questionnaire was used to gather information addressing the questions in the SOW. Interviews were conducted with project beneficiaries to observe their association meetings and, where possible, to inspect crop production activities. Group interviewees were male and female association leaders and members.

1.2. Key Findings

1. The DAI PESA project made significant progress in establishing smallholder agricultural producer associations in six regions of Tanzania. There are approximately 21,000 MSEs enrolled in 173 associations. The amount of capacity building provided to MSEs and associations is impressive. Project beneficiaries reported benefiting from both technical and business training. The large number of associations can be credited to a committed project staff that provided needed skills to project beneficiaries. Many of the newly formed associations are weak, and association members remarked that some will likely "die a slow death" after the end of the project. The evaluation team could not ascertain the sustainability of all associations as the viability of each varies widely across zones and commodities. The team believes the establishment of associations will take time, as did the successful Kilimanjaro Specialty Coffee Growers Association which took six years. Project beneficiaries reported that they needed their association to provide them access to credit and markets if their incomes were to increase.

2. DAI PESA has put the development of the apex (a management entity responsible for more than one association) as its top priority for the time remaining in the Life of Project (LOP). Nine apexes have been formed which will be important to the sustainability of the project. The apex organizations for the commodity associations are clearly in the start-up mode. The apexes, if they receive additional project support as well as support from other donors, could manage to stem the decline in associations, but this will require a longer time frame than is currently allowed under the existing LOP which ends October 7, 2006. The current assessment is that only a few of these apex organizations will be sustainable at the closure of the project. The Subawanga apex will likely decline because it was formed in December 2005, its remote location, and size of operation.

3. Producer associations which are starting to find their way will have difficulty in supporting their apex with funding unless fees can be tied directly to marketable contracts developed and implemented by the apex. Within the early stages of contracting and product standards, apexes face challenges to implement marketing contracts based on meeting product standards. The producer associations will want to insure their own survival with paid-in membership and delivery of benefits to their members. Producer associations will need capacity building in business services, membership development and governance advice for some time. A simple activity for the apex is to undertake purchases of bulk inputs (e.g., fertilizer) for its members, which will serve to build a relationship between the apex and its associations.

4. The SO9 and SO12 objectives are targeted at agriculture in the rural sector. The project's design proved effective enough for DAI PESA to exceed its targets, but sustainability may be an issue because of the lack of infrastructure and capacity to address structural changes, especially in the policy area.

5. The project's design focuses on support to farmers who are organized into associations. In actuality, farmers and their associations operate from a weak position in a market system that includes high marketing costs and the lack of a progressive agro-processing industry. Ultimately these factors will impact the performance of associations and their apexes for the foreseeable future.

6. DAI PESA had a policy component at the beginning of the project, but budget reduction caused one activity to be eliminated and a second to be downgraded in importance. Government of Tanzania (GoT) institutions are still too weak to implement policies benefiting the private sector. Tax reforms are needed and market reforms, such as the elimination of oversized lembessa bags, would improve the returns to producers and to government tax authorities. Public policy creates the needed awareness, but on-the-ground changes have not materialized.

7. DAI has adapted well to the Mission's declining budgets and to the transition from SO9 to the new SO12. Project staff has been creative in shifting resources to where they have their highest return. A negative impact of the declining budget was DAI's decision for some staff to have dual positions. This has been problematic, especially for Monitoring and Evaluation (M&E). Project staff showed a willingness to reach out to other donor agencies to leverage their resources, e.g. the African Development Fund (ADF). DAI estimated that its activities have resulted in US$ 16.1 million in funds being invested by donor partners.

8. The marketing linkages activity was slow to establish and results were lackluster. The recent employment of a marketing specialist will produce improvements in this area. The market tests in Nairobi for onions and oranges served as a lesson that the market can be punishing for lack of product quality and poor market timing. Associations undertaking market trials benefited from the learning experience. Marketing committees are being formed in the apexes and more market trials are expected.

9. A sustainable source of market information has not developed in the private sector. Negotiations of supply contracts require access to market information on supply and demand for products. The project-published magazine, Miafutaji, although colorful and informative, is unlikely to provide effective market information to members of associations. Moreover,

associations will be unable to bear the cost of this publication after the close of the project. (At the end of the evaluation, the team learned that the magazine would be discontinued.)

10. DAI promotes the concept of alliances to further the policy dialogue. The public-private sector fora create a venue for discussing policy-related issues. The apex has a role to play in private-public sector dialogue at the regional level when action is more difficult at the national level. Alliance meetings are occurring (e.g., the Tanga Region has held eight alliance meetings). Participants of meetings need to be asked to address a current problem with the coordinated game plan that they have agreed to. These fora will be difficult to sustain unless another donor picks them up, or unless the GoT is provided with an incentive to institutionalize them.

11. The Results Tracking System (RTS) has not been a useful tool for project management. Inherent problems with the RTS have been allowed to persist, and the problems will need to be addressed before the next annual data collection in August 2006. Asking DAI to be the gatekeeper to receive project impact data from other PESA collaborators was not effective and caused some false starts. The RTS has the potential to be used by all stakeholders in planning activities and in improving performance. Questions exist about data collection on the part of DAI PESA. The sampling frame was not standardized for all project areas. Furthermore, some indicators do not provide an appropriate understanding of what has been achieved.

12. USAID did not emphasize cost-effectiveness in its design of DAI PESA. However, even though facing a reduction of project funds, DAI was successful in establishing a cost-effective system of establishing associations and apexes to deliver needed capacity building resources to MSEs. The primary financial indicator is gross sale revenue by MSEs. The Benefit-Cost Ratio (BCR), the Net Present Value (NPV) and the Internal Rate of Return (IRR) exceeded standard cut-off levels for an acceptable investment. Two commodity sub-projects, paddy and sugarcane, overshadowed the results when the project is based on absolute levels of revenues and volumes. Paddy and sugarcane represented 86 percent of the estimated incremental gross revenues from project interventions. Both of these sub-projects had producer associations before the start of DAI PESA, though their effectiveness is questionable. It is important to disaggregate the project results by sub-project to better assess the impact of USAID's investment.

13. DAI PESA did not have a gender strategy which resulted in the lack of an effective communication message. Project staff, however, displayed a strong dedication to ensuring women's participation. Women have roles in the associations though men hold most of the leadership positions. Men reported that they valued the role that women played in the association as well as their ideas, transparency and ability to stay on task. In general women said that they were respected for their participation. Some women did mention that they did not share equally in the benefits from product sales. A report issued by the company carrying out trainings noted that the level of women's participation needs to be improved.

1.3. Key Recommendations

The project is in its final year. In the time remaining, the evaluation team proposes the following recommendations for DAI PESA and USAID.

1.3.1. DAI PESA

1. The project should continue to strengthen associations and apexes. The project can use trainers from recent Training of Trainer (ToT) programs to conduct the trainings. Associations need to complete the full complement of training modules. Business Development Services (BDS) services need to be embedded as a component of the apex for support by the associations. An Agribusiness Advisory Service (AAS) composed of former project staff could be contracted by the apex to provide consulting services. A business plan for the AAS needs to be done together with an assessment of the apexes' willingness to pay for types of consulting services.

2. Project focus on improving MSEs' access to credit and to market linkages should:
   - Develop bankable proposals for apex organizations, using the commodities produced by its members as collateral. This requires the development of better crop budgets at the farm level.
   - Advocate for continued donor partner participation in warehouse receipts and in other micro-credit lending programs.
   - Assist the marketing committees of apex organizations to conduct market surveys, e.g., fresh vegetables in Dar es Salaam.

3. Market information is important in the SO12. A simple market price reporting scheme modeled after the Community and Rural Development Bank (CRDB) "bank by phone" can link associations to markets by cell phones.

4. Apexes will need assistance in basic business support with an office, computer and a staff person. Operating funds can be sourced from other donors or from the members themselves. The office needs to be "bare bones," but should still give the apex credibility to negotiate contracts.

5. Alliances are a good forum to discuss specific problems, but they should be convened sparingly, or otherwise their impact will become ineffective. Alliance meetings can be called on a specific problem. Each meeting requires a clear work plan and a set time frame for achieving one or two measurable outputs.

6. The project will need to work on the Results Tracking System (RTS), if the Performance and Monitoring Plan (PMP) is to be effective. DAI needs to supply an M&E person before the next annual survey to improve data collection procedures, analyses, and reporting. This next survey needs to be an end of project summary. The survey will need to account for the impact of other donors cooperating with DAI PESA in sub-project locations.

Reanalyzing the prior data collected is unlikely to be cost effective. Efforts need to focus on collecting meaningful data in August 2006. A greater understanding of the project's impact on household income is needed.

7. DAI submitted a request for a four month "no cost extension" to USAID. There is clear evidence that the benefits of this extension would exceed the costs. The project is making reasonable progress in strengthening associations and apexes. Persons trained under the ToT component can provide the remaining modules. The staff is poised to make strides in boosting the confidence of apex leaders and their respective committee members.

The project has also requested an additional $700,000 to carry the project to June 30, 2007. The results from the cost effectiveness (C-E) analysis indicate that each dollar invested in DAI PESA results in US$ 1.82 in incremental gross revenues to producers, and therefore the additional investment is warranted.

1.3.2. USAID

1. It is recommended that USAID, working with DAI, address the deficiencies in the SO12 to address the weak agro-processing industry.

2. USAID will need to engage the private sector now in the development of a market information system rather than postpone this activity.

3. USAID needs to consider how the RTS can be a more effective management instrument used by all project stakeholders.

1.4. Lessons Learned

There have been several lessons learned from the DAI PESA project.

1. Smallholders are attracted to opportunities for training when their livelihoods are improved. Both men and women attended trainings, although women's attendance could be higher.

2. Smallholders require a full complement of services in the areas of capacity building, availability of credit and access to markets, if they are to remain engaged with their association and apex organizations. If the organization is transparent and responsive to producers' needs (even if services are not immediately forthcoming), producers will remain engaged for a period of time.

3. DAI PESA lacks a gender strategy. This results in an ineffective communication program which does not convey the proper messages that could have engaged women more effectively in the project.

4. It is more cost effective to address deficiencies in management tools, e.g. the RTS, early in the project, rather than allow problems to become more difficult and costly to remedy.

Section Two: Introduction and Background

2.1. Introduction

This USAID evaluation of DAI PESA is being conducted as the project is due to close in September 2006. The focus of this evaluation is on the impact of the project and DAI's effectiveness in implementation. The SOW sets out a set of questions to be answered by the evaluation team (see Annex 1).

The evaluation team reviewed pertinent documents and conducted personal interviews of project staff, project beneficiaries and other stakeholders. A list of interviews is found in Annex 2. The project provided reports and other documents (see Annex 3). The evaluation team made site visits to producer associations and apex organizations and used a questionnaire to evaluate key issues. Interviews were also conducted with project staff, extension agents, and other PESA cooperators both in and outside Dar es Salaam.

The evaluation team thanks the DAI PESA project staff in arranging meetings with stakeholders in the project zones. The team attended two Annual Group Meetings (AGM) and one private-public sector alliance meeting. William Masawe and Gregory Sullivan conducted the evaluation.

2.2. Background

2.2.1. General Setting

A significant period for Tanzania was in 1992 when the GoT shifted from a socialist to a private sector-led economic development approach. For many years Tanzania focused on the resettlement of smallholder agriculturalists into collectives. The GoT's intent was to bring services as well as planned agricultural production and marketing. The failure of the cooperatives has left a negative image among producers and has made farmers wary of any activities that encourage group formation. Some of the DAI PESA associations are former farmer groups that have been reorganized, while others are new. The project assisted in the formation of 173 associations and nine apex organizations.

The trends in global trade are impacting the agribusiness sector in Tanzania. Competitive forces are impacting Tanzania, with Brazil and China emerging as major exporters of cashews. South African products are being imported. Supermarkets, though still in their infancy, are affecting the food distribution system. DAI is responding to these market forces to position its target commodities in the local and regional markets.

2.2.2. Project History and Adjustments during LOP

The project was signed in October 2002 as contract number PCE-I-817-99-0002-00 and Task Order 817. The inauguration date was February 2003. A shortfall in USAID's Economic Growth budget resulted in a reduction of project funds to US$ 10.2 million. A second funding cut occurred and the budget was reduced to US$ 8.4 million. Budget cuts required

elimination of one activity (policy and Long Term Technical Assistance (LTTA)) and the downsizing of another (private-public sector policy dialogue).

USAID undertook its new strategic objective (SO) in FY 05 and a new SO12 replaced the revised SO9 beginning in FY 06. The new SO12 places more emphasis on the delivery of technical training to farmers and on improving marketing linkages. The project successfully established a large number of associations. In March 2005, DAI began to focus on apex organizations and established oranges, vegetables and paddy apexes to support member associations.

2.2.3. Project Structure and Activities

The project activities are in six target regions: Tanga, Morogoro, Iringa, Ruvumu, Mbeya and Rukwa. A project coordinator in each zone managed regional activities. Each zonal office has a project coordinator (PC), two field officers (FO) and an office secretary. Staff at the headquarters in Dar es Salaam backstopped the field activities. In addition, the project hired liaison officers (LOs) as resident advisors to support a particular commodity sub-project. Typically a LO is a staff member in the Ministry of Agriculture who receives a topping up of his/her salary and a monthly operating allowance. In one sub-project a retired sugar specialist was hired to provide technical training.

The project initially had seven activities, two in policy, four in capacity building and one in performance and monitoring. In addition, the project has been a catalyst for other donors to provide additional support activities in the areas of HIV/AIDS and savings and credit cooperative societies (SACCOS).

The budget reductions resulted in DAI reducing the amount of Short Term Technical Assistance (STTA) and in doubling job responsibilities of the local staff. This doubling of job responsibilities has resulted in lower performance in the coordination of certain activities like M&E and market linkages. The project made good use of LOs who supported the activities of the FO.

Section Three: Project Design and Activities

3.1. Overview of Project Design and Activities

DAI PESA started in October 2002 and activities began in February 2003. The project underwent modifications because of USAID budget constraints and a new SO. The initial Strategic Objective, SO9, was general in scope with "increased participation of micro and small enterprises (MSE) in the economy." The three intermediate results (IRs) for SO9 focused on improving the policy environment, improving market linkages, and increasing capacity building of MSEs. The SO12 is more directed at agricultural production and "incomes increased for small farmers in selected commodities." The new SO has two IRs: increased production of selected agricultural commodities, and access to markets for selected agricultural commodities increased. Each of the new IRs have sub-IRs.

In the revised modification of DAI PESA, activity 1 was increased to support business associations. Activity 2 on private-public dialogue was reduced, and activity 3 on collaboration with government institutions on policy, was dropped. Activity 4—establishing market linkages of private enterprises—was retained in full. Activity 5 was to make business and market information available and was retained, though no funding was available during the first several years. Activity 6 was retained to increase business and enterprise skills. For Activity 7, the Report Tracking System (RTS) was retained, with DAI to remain as the gatekeeper for collected PMP results from the other PESA team partners.

3.2. Findings

3.2.1. Objectives of the Final Revised PESA Proposal

The expected overall result of the USAID/Tanzania PESA Program is "Incomes of Small Farmers Increased in Selected Commodity Sub-Sectors." The objective is clear and direct compared with the objective of the previous SO9. The SO9 objective was too broad in scope for the resources available and for the allotted time in the LOP. The SO9 addressed issues of enabling environment in the value chain, with emphasis on public policy interventions. It was unclear what level of the value chain the policies should target. The result is that the project was unlikely to have the necessary impacts on smallholder farmers, because of the GoT's inability to implement policy changes in the short to medium term. USAID expected too much and too soon.

The emphasis of the SO12 is on increasing productivity and trade of selected commodities. This project is a performance-based task order with identified results.

3.2.2. The Objectives and the Mission's Result Framework

The project's objectives are in line with the results framework, because of a clearly defined focus on agricultural smallholders and the needs for both productivity and trade improvements. IRs are clear and directly linked to the objectives. The three IRs allow for necessary coordination between the farmer and the supply inputs and output markets.

3.2.3. The Objectives and DAI's Manageable Interest

The Mission's SO12 fits within DAI management strengths and is supported by the company's Integrated Subsector Program (ISP). DAI effectively applies its ISP to the development of associations and apex organizations.

DAI staff is competent and able to adjust to the new objective and the results framework of the SO12. In the case of the RTS, DAI was given the responsibility for collecting and assimilating data from other PESA partners into a report for USAID. This activity was outside DAI's manageable interest. Consequently, for a period of time, M&E duties were performed by a staff member with responsibilities for other project activities.

3.2.4. Targets and Achievements of DAI PESA

The indicators, targets and achievements for the final revised SO9 and the SO12 are presented in Table 3.1. Where appropriate, the indicators that match up for the two SOs are placed in the same row. The revised SO9's objective is to increase incomes of small farmers in selected agricultural commodity sub-sectors. This objective is similar to SO12.

The two important target indicators are gross sales revenue and household income.

Gross sales revenue. Gross sales revenue increased for all commodity sub-projects. Gross sales revenue of core project commodities were US$ 1,595,795 in FY03. Gross sales increased to US$ 7,709,136 in FY04, and to US$ 12,497,151 in FY05. The target was to increase gross sales revenue by 5 percent each year. The project reports a sales increase of over 300 percent for FY04 over the baseline, and a cumulative increase at the end of FY05 of 683 percent. A difficulty arises in determining how much of this increase is due directly to the project and how much is based on changes in market conditions and other factors.

Household incomes. The project did not collect field data on household income. The assumption is that increased gross sales revenues will result in a net increase in household income. The difficulties facing smallholder households are their constraints in working capital and in the availability of household and hired labor to implement new technologies and marketing activities. It is important to understand what the returns to both of these limiting factors are, in order to determine if a household is better off because of the project. Furthermore, women said in interviews that additional income is not shared equally in the household because men spend it on non-essential items if they obtain it. In short, money is not finding its way back to the improvement of household livelihoods. DAI PESA is providing training on the importance of SACCOS as well as on household budgeting of expenses. As women become more integrated into the household decision-making process, there will be an improvement in their livelihoods.

Number of new producer organizations established. DAI PESA established 173 associations from May 2003 through March 2006. This includes the creation of nine apex organizations. Out of 173 associations, 79 were reformed from an existing farmer group. The project then shifted its focus to developing apexes to provide services to its member associations. Although it is difficult to specifically determine what state these associations are in, it is clear that some are stronger than others.

Percent change in membership in producer organizations. DAI PESA successfully increased membership in producer organizations from 5,844 to 21,106 at the end of FY05. The project expects to add approximately 630 new members in FY06. The percent change will be measured at the end of FY06. With the baseline set with the associations that have been formed, it will be of interest to now determine if paid membership is increasing or decreasing, indicating the viability of associations in the future.

Value of production marketed by producer organizations. The value of production marketed by producers who are affiliated with associations was approximately US$ 12.49 million at the end of FY05. This value is estimated to increase to US$ 12.62 million at the end of FY06, an estimated increase of 10 percent. An important clarification is that this indicator should not imply that associations are negotiating the sale of their members' commodities.

Volume of production marketed by producer organizations. Producer association members marketed 228,219 metric tons (MT) for FY05. The target is for the volume to increase to 239,630 MT by the end of FY06. An important clarification is that this indicator should not imply that associations are negotiating the sale of their members' commodities.

Number of new producers trained in improved technologies and methods. From May 2003 through September 2005, 44,939 MSEs were trained by DAI-PESA. In the first two quarters of 2006, 11,132 producers were trained. Training has been a large component of the project and stakeholders reported gaining valuable information from this activity. Producers reported record keeping was important to evaluate their agricultural enterprises and also their households' activities.

Increase in yields. Crop **y**ields were not tracked earlier in the project, but evidence indicates that yield of commodities in specific subsectors have increased because of DAI-PESA. For example, sugarcane production increased among outgrowers in Kilombero from 18 to 36 MT per acre. Onion production has increased from 8 to 10 bags to 25 bags per acre. Producers indicated in interviews that technical training was effective in increasing yields. The project encouraged producers to adopt new seed varieties for sunflower, onions and vegetables. Rice yields have not shown dramatic increases, because the varieties preferred are low yielding, but have a unique flavor profile. Paprika production per acre remains low in the range of 180 to 220 kg per acre.

Percent change in areas cultivated under improved technologies and methods. This indicator is new for the project under the SO12. From field interviews it was observed that producers are increasing crop areas using new technologies. For example, paprika producers are expanding into new areas or converting acreage in maize to paprika by an average of .5 acre per producer.

Number of policy fora organized by producer organizations. At the end of FY05, DAI PESA had conducted 12 policy fora. The target for FY06 is 20, and 13 meetings had been completed by the end of the second quarter. It seems likely that DAI-PESA will reach its target for this year.

Number of new business partnerships established by producer organizations. This indicator is new for DAI PESA beginning in FY06. The estimate is for 20 partnerships to be

established by producer organizations. Thirteen have been created in the first two quarters. Oranges from Tanga represented the first attempt by an association to undertake a marketing arrangement between its members and buyers.

3.3. Conclusion

DAI PESA is successfully achieving the targets set for the project. The project has established a broad base of associations across six regions of Tanzania. The organizational model of DAI-PESA, the quality and dedication of its staff, and the demand for services by smallholder farmers contributed to the rapid establishment of associations. The large number of associations overshadows their current capacity to deliver services to their members and to be sustainable after the close of the project.

Reporting indicators emphasize volume and value of sales. A more defining indicator is the number of sales occurring under marketing contracts, as these are important for the success of the project. Contract selling has been slow to emerge and farmers have complained about their access to markets.

Grades and standards are being gradually introduced by the project. For example, the paprika price is based on three grades. The grading system provides producers with an indicator of how to improve their production and, therefore, receive higher revenues. Onion producers are using better seeds to comply with market requirements. Sunflower producers are using improved seed to increase yields. Establishment of grades and standards will result in more efficient market transactions and the ability of associations and their apex to negotiate forward contracts.

The design of PESA is narrowly focused on smallholder agriculture. The revised SO9 helped DAI to better direct their efforts and resources. However, a limitation appears in the SO12 with the absence of attention given to agro-processing and to other downstream marketing functions that are important to boosting demand for agricultural commodities. This leaves an important void in the Mission's SO12.

3.4. Recommendations

The following recommendations are proposed:

- Greater use of liaison officers, as they will need to continue to strengthen the associations in supply and quality control to meet contracts negotiated by the apex.

- Address concerns in collection and measurement of indicators in the PMP and in the functioning of the RTS, before the next annual field surveys are conducted.

- Design and implement a system that improves the communication of PMP results to all stakeholders, including associations and their apex organization, for each specific commodity group.

- Improve the SO12 and the IRs to address the need for a stable and progressive agro-processing industry that can interface with farmer associations and their apex.

Table 3.1. Indicators, targets and achievements for DAI PESA project

SO9	SO12	Baseline	Target	Achievement
#1. % change in no. of MSEs in all program-assisted subsectors	#5. % change in membership in producer organizations	Baseline = 5,844 MSEs at start	Target: 15% increase/year Increase 633 (3%) in FY06	End of FY05, 21,106 MSEs – 261% increase. FY06: TBD
#2. Total no. of new MSEs formed		Baseline = 5,844 MSEs at start	Target: 2,809/yr	End of FY05 15,262 new MSEs Exceed target
#3. Total number of policy dialogues held annually between MSEs and GoT reps	#6. no. of policy fora organized by producer organizations	FY04 baseline= 0 FY06 baseline= 12	FY04 Target N/A FY06 target = 20	End of FY04, 9 End of FY05, 12 In FY06 – Qtr 1 & 2 completed 13
#4. % change in total value of program subsector sales by MSEs by USAID-funded activities	#7 Value of production marketed by producer organizations	Baseline = $1.5M	FY04&05 = 5%/yr FY06 = 10%/yr	FY04 = $7.709M FY05 = $12.497M FY06 TBD
#5. Avg. % change in volume of sales by MSEs in program subsectors	#8 Volume of production marketed by producer organizations	Baseline = 24375 MT Baseline for FY06 = 228,219 MT	FY04&05 = 19%/yr FY06 = 239,630 MT	End of FY05 increase of 836% FY06 TBD
#6. % change in no. of programs assisting MSEs to access inputs		Baseline = 2,819	FY04&05 = 5%/yr	FY04 = 81.5% FY05 = 6.6%
#7. % change in no. of MSEs accessing training support services	#2. No. of new producers trained in improved tech. & methods	Baseline = 0 Baseline FY06 = 44,939	Target = 2,100 MSEs FY06 Target = 22% (54.939)	FY04 & 05 = 43,361 MSEs trained by end of FY06 = 56,071
	#1. % increase in yields of selected commodities	Baseline = 228,219 MT	Target = 239,630 MT	FY06 TBD
	#3. % change in area cultivated under new tech. & methods	Baseline TBD	Target TBD	FY06 TBD
	#4. no. of new producer organizations established	Baseline = 176 (from 5/03 to 9/05)	Target = 4	FY06 = 180
	#9. No. of new business partnerships created by producer organizations	Baseline = 0	Target = 20 in FY06	FY06 = 13 (end of Qtr 2)

Section Four: Project Strategy and Implementation

This section examines the strategy employed by the implementer and how the implementation was conducted.

4.1. Findings

4.1.1. DAI PESA's Strategy for Implementing PESA

DAI employed a strategy called the Integrated Subsector Development (ISD) methodology. This strategy is described in the Second Annual Work Plan, Version #4 (page 14). The strategy has four stages: 1) subsector selection, 2) subsector study, 3) subsector support planning, and 4) subsector support delivery. DAI recognized that with limited project resources, it was necessary to concentrate their efforts.

Subsector Selection. The project used a pre-selection screening of subsectors based on ten criteria. In addition, Ebony Consulting International (ECI), which conducted the subsector studies, had a list of seven criteria for screening subsectors. For example, the subsector had to be in one or more of the six targeted regions and represent opportunities for growth. Furthermore, there had to be a large number of farmers involved with a critical mass of growers that could be organized. Finally the subsector had to have a perceived competitive advantage in the market. The selection criteria do not anticipate what is the best use of USAID funds in relation to other opportunities. The selection of two sugar sub-projects, both with established associations, calls into question the selection process.

Subsector Study. Subsector studies were completed on oranges, rice, paprika, sunflower, onions, sugarcane, and horticulture products leading to project activities. Other studies were completed on cashews, fish, beans and tea, but no action was taken on these commodities. The studies were of satisfactory quality and helpful to the planning of the sub-projects.

Subsector Support Planning. DAI realized the need for other donor organizations to be brought in early in the project. The project collaborated with public sector agencies, Tanzania Chamber of Commerce and Industry Association (TCCIA), Ministry of Agriculture, and other donor organizations. This action leveraged the funds available to the project. DAI describes their planning process as: "[by] pulling together all the productive and supportive parties as allies, and by organizing alliance and association level partners to prioritize and take on improvements, we are preparing critical-mass producer areas to be reliable suppliers, producers of value-added items, and in general desirable sources to buyers for on-going commerce."

Subsector Support Delivery. The evaluation team found that the project is performing at a satisfactory level in delivery of services. Training was conducted and appreciated by the stakeholders. Stakeholders reported that they lacked the confidence to obtain the necessary working capital or to establish market linkages. Farmers did say that they wanted greater access to credit and to markets.

4.1.2. Effectiveness of DAI PESA

The ISD calls for support for marketing linkages, and this activity was weak in the beginning of the project. With a full-time market coordinator since August 2005, activities are rapidly being implemented.

4.2. Conclusions

DAI developed a concept paper on selecting subsectors best suited for project interventions. The concept paper looks for the presence of key conditions to be present in a subsector for project consideration. The project management has to examine its selection criteria to evaluate if it has the proper mix of commodities in its portfolio. A question that the evaluation team has is the selection of sugarcane. This is an industry that is impacted by trade agreements, receives subsidies in key producing nations, and is a commodity that is dumped on the world market. Furthermore, the outgrower schemes in Kilombero have been in existence for a long period of time, are well established and are not in immediate need of DAI-PESA's limited resources.

It would have been important to see more farmer participation in the selection of commodities to determine if there were circumstances present that would have otherwise eliminated a commodity like sugar from being selected.

In regards to the orange sub-project—and likely similar in other commodities—is the influence of the traders/brokers and their relationship with producers. In the case of oranges, these traders can lock up a producer's production for multiple years through contracting, which limits the role of the association.

Sunflower production in Rukwa Region is also a questionable choice for a commodity. The number of producers is small and the area is not convenient for DAI-PESA intervention. On the other hand, the attractive aspect of the sunflower sub-project is that 14 processors formed the Subawanga Sunflower Oil Processors Association (SSOP), and direct marketing can be organized between producers and processors. However, more resources will be needed to see significant benefits in this subsector. The sunflower program in zone 3 will end early, and it is unlikely that much activity will continue.

4.3. Recommendations

The following recommendations are proposed.

- Involve producers using participatory tools to identify the relevant subsectors. DAI would have realized very early in the LOP that stakeholders viewed working capital and market linkages as key constraints to be addressed.

- Develop business plans for the apexes to increase the access to credit and markets.

- Assist associations and apexes to realize their hidden sources of capital to better access credit and markets through the use of trainings and business development.

- Provide intensive training for its field officers who will assume new responsibilities as business advisors.

Section Five: Sustainability

5.1. Findings

DAI refers to "producer associations as our base platform for sustainable farmer development." To gauge if the project will be sustainable, the evaluation team interviewed stakeholders of associations and their apex organizations. Out of 47 associations contacted, stakeholders in 25 organizations (53 percent) said that their association would survive after DAI PESA. Twenty percent of the associations reported that their survival was questionable or will be difficult. Thirteen stakeholders (27 percent) of associations said survival was not possible. There was no apparent correlation between the duration of time since an association was founded and its likelihood for survival. An association will have a higher probability to survive if strong leadership is present, membership receives adequate training, and market linkages are established. For example, paprika associations are forming a business relationship with a prominent buyer, Tanzania Spices Limited (TSL), and this group will likely continue to operate. The outgrower sugarcane schemes have been in existence before DAI PESA began, and they have good financing and strong market links to the sugar mill. Onion producers in Iringa receiving credit from the Micro-Finance Rural Participatory Scheme (MRPS) are likely to survive. DAI PESA has helped to make these producers credit-worthy. The access to credit can be a key driver in the sustainability of associations.

Stakeholders were asked whether their apex organization was sustainable after the end of the project. Out of 27 responses, fifteen (56 percent) said yes, nine (33 percent) gave a qualified yes (e.g. with difficulty), and three stakeholders (11 percent) said no. Stakeholders who believed that the association will survive also believed that their apex will survive.

Association leaders reported the initial number of founding members and their current membership. For the associations sampled, the number of members declined 10 percent. It will be important for the apex and the associations to track membership numbers and to determine the reasons members are not paying their membership dues and leaving the association.

Stakeholders were asked about milestones reached in preparation for their survival after DAI PESA. Sixty-four (64) percent of stakeholders said that their association had a bank account. Slightly over 80 percent said that their association was registered. Approximately 60 percent had established SACCOs with an average amount of Tsh. 3.13 million per SACCO. These are strong indicators that an association will survive after the project.

Out of a total of 173 associations, 79 were re-formed from a farmer group. These associations are relying on DAI PESA as a last resort to organize themselves into viable business organizations. These reformed associations have been resurrected from failed cooperatives, or in the case of Mbeya, as water user associations. These reformed associations have presented the greatest challenges for project staff.

Stakeholders of apex organizations generally agreed that the foundation is not solid yet for continuing their operations. Further training of apex committees is needed if the organizations are going to produce tangible results. For example, the evaluation team

witnessed the election of representatives for the marketing committee of the Ifakara rice apex. It was a satisfying sight to see each candidate get up before the group of over 40 members representing 19 associations and state their case for being on the marketing committee. These team building exercises improve leadership skills and provide self-confidence to the members of the associations and apexes.

The issue of sustainability is whether the apex can replace the functions being currently performed by the DAI PESA staff. The apex will have to attract commercial opportunities for its members if associations themselves are to be viable. In turn, associations will have to establish the capacity to pledge and deliver on marketing contracts established by the apex. This will require meeting market specifications in contracts for quantity, quality and time of delivery. The vegetable apex in Mgeta is testing their capacity to deliver fresh vegetables to Shoprite supermarkets in Dar es Salaam.

5.2. Conclusions

DAI PESA staff provided intensive training to a large number of association members. This training has empowered individuals to recognize opportunities. Individuals reported better budgeting decisions regarding business and household finances.

Notwithstanding the amount of training conducted, the project recognizes the current weaknesses in the apex organizations. Sustainability of associations and apexes will be at an uneven pace. Associations and their apex that can deliver a complete package of services to its members have a better chance of surviving. The project will have to bring these organizations up to a level of competency so that they can be viable after the project closes. At the present time, associations are willing to support their apex. Annual fees have been paid by many member associations, indicating solid support for the apex.

The apex will have to provide services that create value to their member associations. Without measurable benefits, the influence of the apex will decline and most association will experience a slow death.

Associations will have to gain the self-confidence to not see themselves as weak entities, but rather as having a viable future. These associations are fighting to overcome two historic disadvantages: the failure of the cooperative movement and a sense of dependency that a donor will provide for them. Overcoming these constraints will require the emergence of dynamic leaders who see the possibilities of the associations.

Associations do not operate on a level playing field. Agro-processors in the sub-projects are not seen as being innovative. In the case of paprika there is a sole buyer, which creates the difficulty in having balanced negotiations on prices and quantities. The SO12 has not effectively addressed this marketing constraint, and the weak structure of the marketing channels affects the sustainability of producer associations and their apexes.

5.3. Recommendations

In the time remaining in DAI PESA, the staff will need to press on with their game plan to strengthen apexes to deliver tangible benefits to its members. These are some recommended actions to be considered.

- Field officers have been designated as business advisors. They will need intensive training to carry out these new functions with apex organizations. Retired professionals in the immediate vicinity could be recruited.

- Association and apex members still require demand-driven training. Some associations have not received their full complement of training modules and these need to be completed. The project has undertaken ToT programs and these individuals need to be mobilized to complete any outstanding training modules.

- DAI PESA needs to assist the apexes to package and present bankable projects to lenders. These can be in the form of marketing opportunities, deliverable contracts, or warehouse receipts programs. These projects can support the apexes in input purchasing programs. For example, the Ifakara rice apex has 20 associations and approximately 1,300 members under its umbrella. If each member pledges to supply 2 bags of rice to the apex's marketing program, this would constitute 260 MT of paddy (unrefined rice) with a farm gate value of Tsh. 39 million (US$ 39,000). The value of the paddy could be used as collateral for a bank loan for production inputs, or to establish a program to allow for the paddy to be held and sold later in the year when prices typically rise for paddy and rice.

- Credit schemes like the MPRS/CRDI need to be initiated so that a larger number of association members have access to credit.

- USAID will need to revisit the SO12 and its IRs, if it seeks to reach its objective of increasing incomes to smallholder farmers. This can be done within the context of the current DAI PESA, or through other funding mechanisms available to the Mission.

- The leadership of the apexes needs to track membership numbers and determine why members are not paying their membership dues and leaving the association.

Section Six: Cost Effectiveness

The evaluation team used standard project analysis methods to measure cost effectiveness. Project documents, expert testimony from project staff, and interviews with project beneficiaries provided the necessary information to complete the analysis.

6.1. Findings

6.1.1. Least Cost Delivery Systems

The SO9 for USAID did not specifically address the issue of developing least-cost delivery systems. The indicators focused more on maximizing returns to the project beneficiaries (MSEs).

The project staff did a good job of meeting performance targets during a period of declining project funding. DAI allocated resources effectively to establish associations and later apex organizations. DAI PESA program staff were assigned multiple responsibilities, and although the sharing of job responsibilities was a cost saving, it also resulted in less-than-expected results from M&E and marketing linkages activities.

One field officer was assigned in each region. The ratio of MSEs and associations to field officers is high, resulting in field officers being stretched too thinly. DAI employed liaison officers (seconded from the Ministry of Agriculture), providing effective support to the field officers. In Mbirali District, DAI PESA staff worked with the project staff of Madibira Agricultural Marketing Co-Operative Society (MAMCOS) and the funding project, ADF. This cooperation was important to DAI effectiveness.

6.1.2. Cost Effectiveness (C-E) in PESA Objectives

The purpose of measuring C-E is to determine whether there has been a satisfactory return on USAID's investment in DAI PESA. The results of the financial analysis can be compared to other investment opportunities that USAID has in Tanzania or even outside of Tanzania.

C-E is a measure of a project's costs and benefits that will occur over time. Because project costs and benefits occur at different time periods, it is necessary to estimate a present value for each for proper comparison. This working definition applies to DAI PESA, because project costs occur in the early years and benefits will accrue after the project has ended.

A key project impact indicator is the amount of gross sales. Each year in August, DAI collects data from MSEs to estimate the volume and value of products sold by each commodity sub-project. The use of gross sales as an indicator has some limitations for evaluation purposes. First, year-to-year variations in sales can occur because of weather, which impacts the market sales price and the volume marketed. Second, each MSE would be producing all the products—even without the project—so the project's effect has to be measured as incremental sales. Third, the MSEs have incurred additional costs (cash and non-cash) to implement DAI PESA activities, compared to production without the project. Finally, other donor projects in both rice and sugar have impacted the MSEs, so that the allocation of benefits to just DAI PESA is difficult.

6.1.3. C-E based on project costs and gross sales

The project cost for DAI PESA is US$ 8.4 million (Annex 5, Table 5.1, column 5). If a discount rate of 20 percent is applied, then the present value of the project costs is estimated at US$ 5.43 million (see Annex Table 5.1, column 7). The accumulated sales by MSEs in the first three years were US$ 21.8 million. Assuming a 5 percent rate of growth in sales per year starting in year 4 until year 10, the estimated gross sales—less an adjustment for growth in sales without the project—would be US$ 108 million at the end of ten years (Annex 5, Table 5.1, column 10). The present value of the accumulated incremental gross sales would be US$ 36.8 million, assuming a discount rate of 20 percent. The benefit-cost ratio (BCR) is 6.78, which indicates US$ 1.00 invested in DAI PESA resulted in US$ 6.78 in incremental commodity sales by project beneficiaries. A BCR greater than 1 indicates that the investment will generate greater benefits than costs of the investment. The IRR on the incremental gross revenues is 253 percent, which reflects the project's success in increasing incremental gross sales. The net present worth (NPW) of the project is US$ 31.4 million.

6.1.4. C-E Analysis based on sub-project commodities

DAI PESA works in seven commodity groups: oranges, onions, paprika, paddy, sugarcane, sunflower, and vegetables. The number of MSEs at the end of FY05 was 18,810 (another project document sets the number of MSEs at 19,159). They are mostly paddy (41.5%), sugarcane (19.5%) and paprika (21.5%) producers. The project reported total sales of US$ 26.34 million for all MSEs in all commodity sub-projects, based on audits for FY03, FY04, and FY05 (see Annex 5 Table 5.2, Col. 9).

Sugarcane and paddy sales were $22.2 million, approximately eight percent of gross sales reported by DAI PESA. An estimate of incremental gross sales (FY04 and FY05 less FY03 sales) is US$ 15.2 million. Paddy and sugarcane incremental gross sales were US$ 13.1 million, which represented 86 percent of the incremental sales (see Annex 5, Table 5.2, Col. 9).

The sales of the paddy and sugarcane sub-projects overshadow the sales of other sub-projects. Sugarcane has a strong network of two established associations in Kilombero and a sugar mill, which is operated by a South African conglomerate, with mills in other African countries. There are also agreements between the GoT and the South African company on business arrangements with the producers in the outgrower schemes. These factors make it difficult to estimate the benefits attributed solely to DAI PESA. The same can be said for the Madibira rice scheme, where ADF is operating the rice mill.

6.1.5. C-E Analysis based on with and without project interventions.

The use of gross sales figures does not give a complete picture, because it does not include the costs that producers incur to achieve the higher yields resulting from the DAI PESA trainings. Anecdotal data were collected on costs of production by the evaluation team. However, without detailed cost of production data comparing impacts "with and without project assistance," only a general estimate can be made. An effort was made to estimate the incremental production and marketing costs associated with DAI interventions (See Annex 5 Table 5.3). In some cases, the assumption was made that incremental costs were a percent of the reported gross sales for the product.

Orange. DAI estimated that orange production in Tanga has increased from 5,514 kg/producer to 8,383 kg/producer, and that the price per kg increased from an average of US$ .03 to US$ .082 (6 oranges per kg). The incremental increase in gross revenues per producer is US$ 288. In Morogoro, orange production per producer declined during the time period, because of weather, from 8,300 to 6,800 kg per farmer. The price increased however from US$ .022 to US$ .068. Incremental gross revenue per producer increased US$ 48.

Onion. Production increased from 1,000 kg per farmer to 2,500 kg per farmer. The price increased from US$ .06 to US$ .09/kg. The increase in the incremental gross revenues is US$ 76 per farmer.

Paprika. This is a new crop for producers. Production is rising each year as producers learn how to cultivate, harvest and dry the product. Production is averaging 200 kg per ac and the average gross revenue per farmer is US$ 23.

Paddy. Production in the Chimala scheme in Mbeya Region increased from 1600 kg to 1800 kg/acre, and the price increased from Tsh. 85 to Tsh. 210/kg. This represents a US$ 200/acre increase in gross revenue, or about US$ 484/farmer. In the Madibira sub-project, yields remained constant, and the price increased from Tsh. 210 to Tsh. 236/kg. Incremental revenues were US$ 184/farmer. In Ifakara, rice production has increased from 720 kg/ac to 1,350 kg/ac, an increase of 87 percent. Price increased on average from Tsh. 210 to Tsh. 236. The incremental gross revenue to the producer in Ifakara was US$ 124.

Sugarcane. Production per MSEs at the Kilombero sub-project went from 10 MT/ha to 27 MT/ha, and the price increased from US$ .0125 to US$ .0166/kg of sugarcane. Each farmer received on average an additional US$ 224. There was no increase in incremental gross revenues at the Turini sub-project based on the data received.

Sunflower. Seed production in Subawanga declined in both production and the sales price. No improvement was seen for the period under review. Sunflower yield per acre in FY06 is expected to double because of better seed varieties. The incremental gross revenue is US$ -12.00.

Sunflower oil and cake processors saw impressive changes in their incremental gross revenues. Processors manufactured 4,000 lt of oil and 15,000 MT of cake before the project. At the end of FY05, sale of oil was 14,000 lt and sale of cake was 23,200 kg. The total incremental increase in gross revenue per processor from oil and cake was estimated at US$ 7,442.

Vegetables. Production increased from 1,370 kg/ac to 1,600 kg/ac, and the price per kg increased from US$ .06 to US$ .139/kg. Vegetable producers realized an increase of US$ 123 in additional gross revenues per year.

The total adjusted annual incremental gross revenue from the project was US$ 4.42 million (see Annex 5 Table 5.3, Summary Statistics). This amount is the minimum annual gross value created by the project per year realized at the end of FY05. The average increase in

additional gross returns per MSE was US$ 274 at the end of FY05. If the sunflower oil and cake processors are removed from the analysis and just commodity producers remain, the average increase in gross revenues per farmer was US$ 237 (see Annex 5 Table 5.3, Summary Statistics). The top three commodity sub-projects with the highest incremental returns per MSE were sunflower oil and cake processors (US$ 7,442), paddy producers in Chimala (US$ 484), and orange producers in Tanga (US$ 288). The three commodity sub-projects with the lowest incremental gross revenues were sunflower seed (US$ -11), sugarcane in Turini (US$ 0) and paprika (US$ 22).

The evaluation team chose to take the incremental annual gross revenue realized at the end of FY05, and projected this amount to 2012, assuming that this value remained constant in real terms. The stream of incremental gross revenues is offset by USAID project costs (Annex 5 Table 5.1, Scenario #2). Both streams of benefits and costs are discounted, using a rate of 20 percent. The estimated BCR is 2.18. The ratio is significantly lower than when only gross sales are considered, but the BCR is still greater than one, which is our cut-off number for rejection of an investment project. The IRR for the projected 10 years is 57 percent, which is greater than the current opportunity cost of capital in Tanzania (estimated at between 25 to 30 percent in rural areas).. USAID's investment has had a satisfactory financial rate of return. The NPV of the incremental benefits from the commodity sub-projects is US$ 6.41 million, using a discount rate of 20 percent for the ten year period.

6.1.6. Secondary Benefits

DAI examined the impact of DAI PESA on other commodities produced by MSEs. The inference is that skills received in training for orange production would impact on other crops grown by MSE. For example, maize is planted for the first three years in newly established orange orchards. Maize yield has increased from 400 kg to 600 kg per acre, and the price of maize has increased from Tsh. 60/kg to Tsh. 150/kg. The incremental increase in revenue to the farmer has been Tsh. 66,000/acre ($60/acre).

Though it is reasonable to expect that a diffusion of skills to other crops can occur, anecdotal information and the difficulty in measuring impact does not warrant inclusion in the financial analysis. It is reasonable to acknowledge that DAI PESA has improved the capacity of a large number of MSEs and that this generates secondary benefits, but it is not sufficient to justify the worthiness of USAID's investment in DAI PESA.

6.1.7. Donor Partner Values

DAI PESA was a catalyst for other donors and organizations to become involved in the seven commodity sub-projects. The extent of other donors' direct involvement varies by commodity and zone. Some of the key partners are: ADF, Agricultural Marketing Systems Development Project (AMSDP), and CIDR/RPMS (Rural Participatory Micro-Finance Scheme). The evaluation team received a list of donor partners, and the amount of their contributions disaggregated by each project zone totaled to approximately US$ 16.1 million. The evaluation team did not consider this amount in the C-E analysis, because there was no way to validate the impact that these investments had on DAI PESA results. DAI has done well to attract these partners, who could be important collaborators in carrying on DAI PESA activities after the close of the project.

6.2. Conclusion

USAID has received an acceptable rate of return on their investment in DAI PESA.

A more appropriate measure of cost effectiveness is to consider incremental net changes in sales, rather than the absolute value of sales. MSEs in the sub-projects would have been producing most of the products promoted by DAI PESA, except for possibly paprika.

The analysis reveals that the product sub-sectors with the highest incremental benefits to MSEs are in sunflower oil and sunflower cake processing, paddy in Chimala and oranges in Tanga. The revenues to producers of sunflower seed actually declined for the two years being measured. The prospects for increased yields from better varieties of seed will improve incremental gross revenues to producers. During the same period, sunflower processors realized large net increases in revenues.

One of the poorest performing product categories was in sunflower seed production in Subawanga, sugarcane in Turini and paprika. Though sugarcane represents a very large percent of the gross sales reported for MSEs, the incremental gross revenues accounting for additional costs for implementing interventions were not as attractive as other commodity sub-projects. Though onions had an incremental increase of US$ 76/MSE, if the product can be stored and sold in the off-season market window, then the revenues to the producer are attractive.

6.3. Recommendations

- The project indicators need to focus on incremental changes in income to the MSEs. This measure will be more indicative of changes in household livelihoods.

- The project needs to develop crop budgets to improve decision making in the selection of sub-projects. An analysis using crop budgets would have determined that sugarcane was not an attractive candidate in DAI PESA's portfolio of projects.

Section Seven: Gender Strategy

7.1. Findings

7.1.1. Gender Strategy

DAI PESA did not have a gender strategy. Out of an estimated 21,100 members in associations, women comprise 32 percent of the membership. This percentage could certainly be higher given the important role of women in agricultural production and in household activities. It was evident in meetings held with associations that gender awareness is embedded into the project activities. The project staff is sensitive to the important role that women play both in the associations and also in households' survival. The number of professional women on staff in DAI PESA is small at the present time.

When asked to list women's strengths, men responded that women were more likely to be transparent in their operations, as well as more dependable than men in following through on tasks. This was a common response in many associations. In a few cases women assumed the position of chairperson of their association, but mostly males prevailed in these positions. Men were quick to point out in group meetings with the evaluation team that they believed that it was important to have their wife as a knowledgeable partner in business activities, in the event of a death in the family. Male stakeholders repeated this several times in different evaluation interviews, so it seems clear that DAI PESA has chosen to communicate this message to encourage husbands and wives to attend the meetings together.

In several association meetings, women addressed the group about being accepted by male members in the association. They felt that their opinions were sought out and respected. The GoT has had a national gender strategy and this seems to be evident in the villages visited. Women remarked that the training provided information on how to better budget and manage their household finances.

Women did express their concerns about sharing equally the benefits of the project with their husbands. Some women felt that though there was an understanding about their role, the benefits would be taken by the husband. Other women said allocation of benefits from sale of products was not as much a problem. Women were frank about the need for greater equality in making decisions. However in almost all meetings, men dominated the discussions with the evaluation team, even after repeated solicitation of women's comments. A woman did remark that men needed to be more accommodating in allowing women to participate in overnight field trips to observe production and marketing practices.

The fact that the project has no female field officers and only a PC who was hired late in the LOP (December 2005) has probably resulted in less advancement of women in associations. In a quarterly report, the training supervisor noted that women's participation in training had remained low and that new ideas were needed to improve women's attendance. The project did hire a female LO in Iringa Region, and she was very effective in the field. This is one good example, but for the most part women implementers have not been involved.

7.1.2. Improvements in economic opportunities for women

M&E data were not collected on specific benefits being garnered by women. If members in general benefitted from the project, then it could translate into economic opportunities for women. Certainly women in association interviews stated that their situation had improved because of the opportunities realized through project activities. The allocation of resources in the household needs to be examined. Women stated publicly that their husbands will spend the proceeds from the sale of the products without consulting them, and such expenditures could be on non-essential items.

7.2. Conclusions

Even though there was not a gender strategy in DAI PESA, the project fostered an environment of involving women in the development of the associations.

Men in the associations were not threatened by having women active in the associations. The number of women as a percentage of members indicated an effort on the part of DAI PESA to have women's representation.

Women held positions of leadership in some associations. However, for the most part, men were in control and women were more passive in their interactions in the meetings.

Without a gender strategy and constant awareness of women's status in Tanzanian society, gains in gender equality will not occur.

The level of women's participation in training could be improved and an effective communication message directed at women on the benefits of the program would result in greater participation.

7.3. Recommendations

- More female trainers are needed to assist in capacity building of associations and their apex.
- Women-only training modules can serve an important function for increasing their participation.
- Household surveys are needed to determine if the gains made in marketing commodities results in improvements in household livelihoods.

Section Eight: Project Monitoring Plan (PMP)

8.1. Findings

PESA had nine SO9 team partners at its inception. USAID reduced the number to four (DAI, ACDI/VOCA, Technoserve and Enterprise Works), which was more manageable for implementing the PMP.

The PMP had a shaky beginning with intense interactions between USAID, DAI and the PESA team partners on the best course of operations of the RTS. Some of the implementing partners were not clear on DAI's role in the PMP, and there was an initial resistance on the part of the team partners to be fully cooperative.

The reporting by the donor partners was not properly documented, so numbers could not be harmonized across subsectors. During one period, data were submitted in one format only to be recoded in another format leading to entry errors. The initial program was in ACCESS, and the computer programmer who designed the program left the project at a critical stage of its development. The program became unworkable across the different PESA projects, and it was not effective for program management. These events lingered and affected the usefulness of the PMP.

DAI made staff assignments, which negatively affected the usefulness of the RTS. At one point in the project, the staff person responsible for M&E had other job responsibilities. This commingling of assignments most likely resulted in the M&E activities getting shorted in the necessary time and resources required to be effective.

When it was recognized that the RTS was not reflecting accurately the situation in the field, a consultant was hired to review 100 interviews from each of DAI PESA's 12 sub-projects for two years. Divergence in the level of impact was found between the RTS findings and the smaller sub-sample of interviews. It is not clear how to explain the differences. What was consistent is that year-to-year trends for the two samples tracked each other.

With the Mission's shift in focus from SO9 to SO12, indicators on the increase in yields and percent change in area cultivated under improved technologies and methods may pose measurement challenges. It will be important to get the PMP operational with proper field information.

The project is tracking indicators from both SO9 and SO12 in its quarterly reports. This decision allows for consistency in tracking the impact of the project from its inception.

8.1.1. Data Quality and Validity

A weak link in the DAI PESA project is the data collection, analysis and reporting. The evaluation team confirmed that data were collected at the field level. However, the various methods used to collect data and survey procedures within and across zones were not consistent. This has led to the aggregation and projection problems. It was reported at one

field location that beneficiaries with larger land holdings were excluded from the sample because this was a smallholder project.

There was no mention made of steps to pre-test the survey instrument and to make necessary adjustments before entering the field. This can result in spurious results. Validation of the data being collected was not consistent, and in one case the PC redid the data collection to reconfirm what was being observed in the field. The lack of a pre-testing and validating the data means that there are no assurances that the RTS can be an effective tool for management.

DAI was tasked with the responsibility of receiving data from the other contractors and of compiling the data for reporting to USAID. Without a consistent protocol for collecting data on its own activities, it was not in a position to be a good steward of the process of data management from the other donor partners.

8.1.2. Performance Indicators

DAI PESA had performance indicators. The performance indicators changed when the Mission revised the SO9 and then transitioned to the new SO12, but, in general, the same indicators remained. Some new indicators on yield were added and measurement may be difficult to obtain accurate figures.

DAI encountered problems with the RTS. The reporting process and the software used were not efficiently implemented. This was a system design problem. The RTS was not structured in a user-friendly way.

8.2. Conclusion

The RTS is not an effective tool for tracking DAI PESA impacts. The project is having wider impacts that are not being effectively tracked. This is because the software program is limited and resources are not allocated by the project to effectively use the RTS.

The program lacks the ability to be an effective tool for management decisions. Furthermore, associations and now apexes are not benefiting from the information to the degree possible.

The sampling frame, data collection and validation of results were not consistent from location to location. Sampling methods in each zone varied based on the time and interest of the PC.

8.3. Recommendations

- DAI needs to assign a STTA consultant specializing in M&E to review all aspects of the RTS and make necessary changes before field data collection starts in August 2006. The STTA could be from DAI headquarters in Washington, D.C. The LTTA staff person for M&E needs to spend some time in the field in order to become acquainted with the situation on the ground and be able to better understand and validate the data being collected.

- The sampling frame and data collection need to be consistent across all sub-projects. Stratified sampling is recommended to allow for different size of land holdings of beneficiaries. The structure of the sampling needs to be accepted by each PC and the field enumerators. If possible, based on time and cost, one team should do the survey in one zone. A sub-project that is spread across more than one region or zone should be done by the same enumerators. For example, paddy sub-projects in Mbeya and Iringa would be done by the same team.

- The project needs to drill down on the performance of each commodity sub-project. The M&E results need to be disaggregated so that apex members and their associations can be informed on how the group is performing relative to other associations. For example, paprika growers have not achieved the results of other growers in the country. It would be instructive to compare differences. The impact of the project on household livelihoods would be recommended rather than just tracking gross sales revenues.

Section Nine: Annexes

Annex 1 Scope of Work

I. EVALUATION FOCUS

The focus of this evaluation is to assess the performance of DAI's implementation of PESA. Relating to activities 1, 4, 5, and 6 the contractors will answer the following questions:

1. What were the objectives of the final revised PESA proposal? Were these objectives clearly stated? Why or why not? Were they in line with the Mission's results framework? Why or why not? Were they within the manageable interests of DAI and the PESA project? Why or why not? Were the targets and achievements outlined in the final revised PESA proposal realized? Why or why not?
2. Did DAI employ a strategy in implementing PESA? If so, describe the strategy including how it was developed. Was the strategy employed by DAI (including staffing practices) effective in realizing the goals of PESA? If so, what major variables accounted for this success? If the strategy was not effective in realizing the goals, explain why.
3. Is there a definition of sustainability in the PESA proposal? If not, why not? If there is a definition, is it likely that the results reported by DAI are sustainable? Why or why not?
4. Was cost effectiveness a stated objective in PESA's proposal, the Mission's results framework, or DAI's PESA strategy? If not, what is a "working definition" of cost effectiveness that might apply to PESA implementation? Why is this definition applicable? According to this definition, has the implementation of PESA by DAI been cost-effective? (Here the contractor is allowed to choose several different measures of cost effectiveness [e.g., return on investment, cost/benefit analysis, cost per project beneficiary, etc.] as long as the measure is explicitly stated and directly addressed in the evaluation of cost effectiveness.)
5. Although not an explicit goal of PESA, was an effective gender strategy in place, and has it led to improvements in women's economic opportunities? Why or why not?

Specific to Activity 7, the contractors will answer the following questions:

1. Was data quality and validity addressed in the PESA proposal, results framework, or PESA strategy? Why or why not? If quality and validity are addressed, what is the quality and validity of DAI's data collection methodology and data collection for PESA activities? If data quality and validity were not addressed, what commonly accepted measure of data quality and validity can be used to evaluate DAI's data collection methodology and data collection? According to this measure, what is the quality of DAI's data collection methodology and data collection?
2. Were performance indicators established for DAI's management of USAID/Tanzania's SO9 Results Tracking System? Why or why not? How well did DAI manage (in terms of efficiency and effectiveness) the Results Tracking System for USAID/Tanzania's SO 9?

It is important that the recommendations that result from this evaluation take into account USAID/Tanzania SO 9 and SO 12 goals and objectives and as well as those of the PESA.

USAID/Tanzania acknowledges that it is normal during the course of an evaluation that additional germane questions may arise. USAID/Tanzania will consider recommendations from the Contractors to changes tin the set of questions within SOW once they arrive in country.

II. METHODS AND PROCEDURES

The contractors will use rapid appraisal techniques (e.g., key informant interviews, site observations, mini surveys, etc.) when conducting this evaluation. The evaluation team will inspect the operations of DAI's office in Dar es Salaam and field offices. In the field, the contractors will visit and meet representative farmers and farm groups associated with the major commodities DAI has worked with over the past three years (i.e., oranges, onions, paprika, rice, sugar cane, and sunflower).

Another concern to examine is if the strategy and resources used by DAI to achieve the PESA program's targets are cost-effective. The contractors will use a cost-effectiveness (C/E) comparison of monetary and non-monetary benefits related to different techniques used by DAI.

III. TEAM COMPOSITION

The evaluation team will consist of an external consultant as Team Leader and up to two Technical Specialists. The Team Leader should have hands-on experience in agro-business development (or other relevant field) in East Africa and experience in the design, implementation, and evaluation of USAID projects. The Technical Specialists should come from fields that complement those of the Team Leader to cover the full range of skills needed (e.g., background in areas such as monitoring and evaluation, crop production, rural finance, market analysis, trade, or agricultural development). The inclusion of African professionals as Technical Specialists is highly recommended.

The contractors will describe the use of USAID expertise in the work plan, and the work plan will describe the process of consultations and discussions with key USAID staff – in Washington or at the Mission. A staff member from the EG So will participate in the evaluation process.

IV. REPORTING REQUIREMENTS

The team will submit a detailed work plan along with the schedule of field work, specifying how the information will be collected, organized, and analyzed to meet the information needs specified in the scope of work not later than three days after the team arrives in Tanzania. The work plan will be submitted to and approved by the EG SO before the consultants begin for field work.

After completing the field work and before leaving country, the team will submit a draft evaluation report and brief EG SO staff. The EG SO staff will provide comments and suggestions within one week after receiving the draft.

The Final Report (hard copy and electronic version in Word and PDF format) will be sent to the Mission within two weeks after the completion of the field work in Tanzania. In addition, in accordance with ADS 540.3 an additional copy of the final report will be submitted to USAID's Development Experience Information and Reference Services (DEXS).

To ensure that the evaluation findings and recommendations are presented in a way that is useful to the Mission, the following outline is recommended:

- Executive summary not to exceed two pages in length composed of a brief methodology statement, findings, and key recommendations.
- Introduction and background section for the overall evaluation
- Brief description of PESA activities
- Discussion of SOW questions, using the following format: findings, conclusions, and recommendations.

Annex 2 Work Plan and Schedule of Evaluation Team

April 2, 2006 (Sunday) U.S. consultant arrives from the U.S.

April 3rd (Monday) Introductory meeting at USAID with Steven Fondreist and Tim MacAndrews. Meeting with Joe Burke, COP of DAI PESA and other staff in the head office.

April 4th (Tuesday) Review of project documents and continued interviews with project staff.

April 5th (Wednesday) Review of project documents and consultant attends the afternoon session of the bi-annual project meeting and sits in on discussions on linking project stakeholders to other donor funders.

April 6th (Thursday) Review of documents and consultant conducts afternoon session on project evaluation schedule and elicits information on project data for financial analysis and cost effectiveness.

April 7th (Friday) Meeting with Tim Pipers of Technoserve to discuss M&E protocol with DAI PESA.

April 8th (Saturday) Review of documents and preparation of draft outline.

April 9th (Sunday) Departure to Tanga with Tanzanian consultant for start of field visits.

April 10th (Monday) Attend AGM meeting for Tanga Apex Organization for orange associations. In afternoon visit with the members of the Kilongo association and tour orange groves.

April 11th (Tuesday) Meeting with two associations for oranges (Maili Moja F.A and Kwamgwe F.A), then drive to Morogoro.

April 12th (Wednesday) Meeting with members of Kilolo Best Onion Apex and association members and Mr. Erasto Lameck, the field officer for Iringa. Drive to Nyanzwa village and interview farmers and tour onion fields and irrigation scheme. Interviews conducted with both association and non-association members. Travel to Iringa for the night.

April 13th (Thursday) Travel with Erasto Lameck to conduct two meetings with members of paprika associations in Mangalali and Ihemi.

April 14th (Friday) Meeting with Erasto Lameck. Held discussion with Ms.Sauda Omary, Liaison Officer (LO) for paprika sub-project and also working on biointensive foods for HIV/AIDS families.

April 15th (Saturday) Review of project documents and prepare draft report in Iringa.

April 16th (Sunday) In Iringa and review of documents.

April 17th (Monday) Review project document and continue with preparation of the draft report in Iringa. Meeting with Mike Rousso of CRISO chip factory in Iringa to discuss food

processing opportunities and the purchase of paprika and chilies for the factory and sunflower oil for the fryer. Travel in afternoon to Mbeya. Evening meeting with Joel Strauss, Project Coordinator for Zone 3.

April 18th (Tuesday) Travel with Joel Strauss to Chimala and interview Mr. Wambura, chairman of association and secretary of the apex. Interview Mr. Vahaye, rice farmer and operator of rice mill in Chimala. Drive to the rice scheme at Kapunga. Continue travel to Madibira and the rice scheme and meet with the staff of the project. Conduct interview and then travel to Mafinga for the evening.

April 19th (Wednesday) Early departure to drive to Ifakara in Morogoro Region to attend the AGM meeting of the Ifakara high quality rice apex. Interview members from the association (see Annex 4, Table 4.2).

April 20th (Thursday) Traveled with the F.O Erasto Lameck and the L.O. Mr. M.P.S Lukurunge and the association head of Mbingu Rice Association Mr. Sanga to interview members of the association. After meeting depart to Morogoro for the evening.

April 21st (Friday) Attended the apex meeting of the Morogoro Orange Growers Association and Apex for names of associations in attendance. Depart the AGM and drive to Mgeta to visit with members of the vegetable associations. After the meeting depart to Dar es Salaam.

April 22nd (Saturday) Meeting with COP J. Burke and M & E Specialist, Marco Wamara on data requests for project evaluation.

April 23rd (Sunday)

April 24th (Monday) Work in the DAI PESA office preparing the draft report to USAID/Tanzania.

April 25th (Tuesday). Work on the draft report.

April 26th (Wednesday). Work on draft report.

April 27th (Thursday) Work on draft report and make presentation to USAID/T project staff.

April 28th (Friday) Work on draft report and depart in evening to the United States.

Annex 3. References

DAI PESA 1st Quarterly Report (Oct – Dec. 02)

_____ 2nd Quarterly Report (Jan - Mar. 03)

_____ 3rd Quarterly Report (Apr – Jun. 03)

_____ 4th Quarterly Report (July – Sept 03) 1st Annual Report

_____ 5th Quarterly Report (Oct – Dec. 03)

_____ 6th Quarterly Report (Jan - Mar 04)

_____ 7th Quarterly Report (Apr – Jun 04)

_____ 8th Quarterly Report (July – Sept 04) and 2nd Annual Report

_____ 9th Quarterly Report (Oct – Dec. 04)

_____ 10th Quarterly Report (Jan – Mar 05)

_____ 11th Quarterly Report (Apr – Jun 05)

_____ 12th Quarterly Report (Jul – Sep 05 and 3rd Annual Report)

_____ 13th Quarterly Report (Oct – Dec. 05)

_____ 14th Quarterly Report (Jan – Mar 06)

_____. Tanzania Investor Roadmap – Primers on Regulations. 3rd Edition

_____. Cashew Policy Forum, March 26, 2004

_____. Weights and Measure Forum, July 29, 2004

_____. Policy and Taxes in The Tanzanian Cashew Industry. October, 2004

_____. Commodity Information Collection and Dissemination. Rice in Mbarali and Oranges in Muheza. September 30, 2003.

_____. Delivering on the Brand Promise – Brand Strategy Options for Mbeya High Quality Rice.

_____. Competitive Analysis of Tea in Tanga Region: Case Study Amani-Muheza Districts.

_____. Guide Book on the Registration of Associations in Tanzania. April, 2006.

_____. Miafutaji magazine. Volumes 1 – 3.

ECI Africa and DAI PESA. Competitive Analysis of Sunflower in Sumbawanga District. Final Report. May, 2004.

_____. Competitive Analysis of Beans in Rukwa Region. Final Report. May, 2004.

_____. Cashew Nuts Sub-Sector Study. Final Report. October, 2003.

_____. Rice Sub-Sector Study. April, 2003.

_____. Competitive Analysis of Cotton in Ulanga District, Morogoro. September, 2003.

_____. Orange Sub-Sector Study. Final Report. April, 2003.

_____. Fresh Horticulture Sub-Sector Study. Final Report. November 2003.

_____. Competitive Analysis of the Sugar Industry in the Kilobero Area. Final Report. May, 2004.

_____. Competitive Analysis of Fish (Dagaa) Harvesting in Ruvuma Region. May, 2004.

_____. Competitive Analysis of the Paprika Industry in Tanzania. Final Report. May 2004.

_____. Competitive Analysis of Onions in the Iringa Region. May 2004.

USAID. Training Impact Assessment of DAI PESA Project. June, 2005.

Annex 4 Descriptions of Associations Visited

	Table 4. 1 Interviews of Association and Apex Members - DAI PESA Evaluation, April, 2006											
No.	**Association Name**	**Product**	**Date Established**	**Founder members**	**Current Members**		**Bank account**	**Will the association be sustainable after DAI PESA ends?**	**Will the Apex be sustainable after DAI PESA ends?**	**Does the Association have SACCOs? (how much deposited?)**	**Assn. paid Apex fees?**	**Registered**
					Male	Female						
	Tanga Region											
1	Tanga Orange Apex	Oranges							YES	YES	YES	
2	Kilongo	Oranges	1998		30	34	YES	YES		YES, 1.8 million		
3	Mailimoja	Oranges	April, 2005		63	7	NO	NO, unlikely		YES, small amount		
4	Kwamowo	Oranges	April, 2004	106	45	15	YES	NO		YES 600,000		
	Iringa Region											
5	Mkomnozi	Onions	2004	81	36	20	NO	NO		NO		YES
6	Uwawai	Onions	2004	7	33	8	NO	NO		NO		YES
7	Nyanzwa	Onions	2004	10	35	13	YES	NO		NO		YES
8	Mwuvilu	Onions	2003	81	35	10	NO	NO		NO		YES
9	Msosa	Onions	2004	138	63	40	NO	NO		YES		YES
10	Cchwai	Onions	2004	74	57	22	NO	NO		NO		YES
11	Kilolo Best Onion	Onions	2005	6 assn.			NO	NO			YES	YES
12	Mangalali	Paprika	2003	57	38	29	YES	YES, questionable	Apex is weak	YES, 800,000		NO
13	Ihemi	Paprika	April, 2004	87	88	40	NO	YES		NO		NO

	Table 4. 1 Interviews of Association and Apex Members - DAI PESA Evaluation, April, 2006 cont'd											
No.	**Association Name**	**Product**	**Date Established**	**Founder members**	**Current Members**		**Bank account**	**Will the association be sustainable after DAI PESA ends?**	**Will the Apex be sustainable after DAI PESA ends?**	**Does the Association have SACCOs? (how much deposited?)**	**Assn. paid Apex fees?**	**Registered**
	Mbeya Region											
14	Igumbilo / Isitu	Rice	1998	68	87	89	NO	NO		NO	NO	YES
	Morogoro Region											
15	Furaha	Rice	1998	18	9	9	YES	NO, will die	NO, will die	NO		YES
16	Uwaki	Rice	1995	46	28	18	YES	YES	YES	NO		YES
17	Nguvu kazi	Rice	1995	48	46	2	YES	YES	YES	NO		YES
18	Mngeta Farmers Assn.	Rice	2004	185	20	42	YES	NO	YES	YES		YES
19	Kichanga F.A.	Rice	1997	60	32	4	YES	NO	YES	NO		YES
20	Kapolo	Rice	1997	50	40	10	NO	YES	YES	NO		YES
21	Tupendane	Rice	1997	12	20	23	YES	YES	YES	NO		YES
22	Tegemeo	Rice	1997	12	21	32	YES	YES	YES	NO		YES
23	Mapambano	Rice	1996	12	7	27	YES	YES	YES	NO		YES
24	Mchombe F.A.	Rice	2004	30	20	15	YES	YES	YES	YES 300K/-		YES
25	Mkangawalo F.A.	Rice	2004	45	28	32	YES	YES	YES	YES 1.2M/-		YES
26	Njage F.A	Rice	2003	60	140	16	NO	YES with difficulty	YES with difficulty	Yes 130K/-		YES
27	Lukolongo F.A.	Rice	2003	70	20	30	YES	YES	YES	Yes 270K/-		YES
28	Igima F.A.	Rice	2003	60	140	16	NO	YES with difficulty	YES, with difficulty	Yes 800K/-		YES
29	Mzalendo	Rice	1996	20	60	80	YES	YES	YES, with difficulty	NO		YES
30	Mzalendo	Rice	1996	20	60	80	YES	YES	50/50	NO		YES

	Table 4. 1 Interviews of Association and Apex Members - DAI PESA Evaluation, April, 2006 cont'd											
No.	**Association Name**	**Product**	**Date Established**	**Founder members**	**Current Members**		**Bank account**	**Will the association be sustainable after DAI PESA ends?**	**Will the Apex be sustainable after DAI PESA ends?**	**Does the Association have SACCOs? (how much deposited?)**	**Assn. paid Apex fees?**	**Registered**
31	Mbingu F.A.	Rice	2003	39	26	34	NO	YES with difficulty	YES with difficulty	Yes 1.4M/-		YES
32	Twende pamoja	Rice	1996	20	34	28	YES	YES	YES	Yes 250K/-		YES
33	Vijana mbasafa	Rice	1996	12	42	26	YES	YES	NO, will die	Yes 80K/-		YES
34	Matoke not present	Rice		793	524	1317						
35	Luholole	Oranges	2004	50	4	21	NO	YES	YES	YES 2.7M/=		
36	Kibwaya	Oranges	2003	105	8	25	NO	YES	YES	YES 2M/=		
37	Twangeganwe	Oranges	2003	80	20	40	YES	YES, with difficulty	YES, with difficulty	YES 38M/= (WARD)		
38	Nige	Oranges	2003	50	3	22	YES	YES	YES	NO		
39	Changa F.A.	Oranges	2003	28	24	24	YES	YES	NO	YES 2.178 M		
40	Kungwe F.A.	Oranges	2003	120	15	22	NO	YES	YES	YES 1.9M		
41	Tambuu	Oranges	2003	48	6	24	NO	YES	YES	NO		
42	Kivuma	Oranges	2003	50	22	18	YES	YES	YES with cum	YES 2.3M/= (WARD)		
43	Kiswira F.A.	Oranges	Dec, 2003	45	10	12	YES	YES	YES depend on FAS	VICOBA 2.3M		
44	Goza	Oranges	2003	43	7	14	YES	YES depend on Apex	NO	NO		

	Table 4. 1 Interviews of Association and Apex Members - DAI PESA Evaluation, April, 2006 cont'd											
No.	**Association Name**	**Product**	**Date Established**	**Founder members**	**Current Members**		**Bank account**	**Will the association be sustainable after DAI PESA ends?**	**Will the Apex be sustainable after DAI PESA ends?**	**Does the Association have SACCOs? (how much deposited?)**	**Assn. paid Apex fees?**	**Registered**
45	Mtombozi	Oranges	2003	61	18	45	YES	YES with difficulty	YES with difficulty	YES 500K		
46	Twisutie	Vegetables	Sept, 2003	143	70	73	YES	YES, questionable		YES	YES	NO
47	Twangehemwe	Vegetables	Sept, 2003	96			YES	YES		YES	YES	NO
48	Chawakibu	Vegetables	Sept, 2003	88	28	30	YES	YES, barely		YES	YES	NO
49	Chawakaki	Vegetables	Sept, 2003	60			YES	YES		YES	YES	NO

Table 4. 2 USAID Evaluation, Alliance Meeting, Morogoro Attendance		
S/N	**Name**	**ORGANIZATION**
1	ANNA DAUDI	MBUNGE TAMBUU FAMAS
2	GODIFREY HERMANI	MWENYEKITI TWANGEHAMWE, MGETA
3	MALISA E.T.N.	ASSISTANT PROJECT COORDINATOR - UMADEP, SUA
4	BATINA SITHARA	USAID/TZ
5	AMIA M. BAKARI	INTERMON OXFAM - PROGRAM COORDINATOR
6	JACOB J. MWIMBE	KIVUMA FARMERS ASSOCIATION
7	JUMANNE MFAUME	MBUNGE - LUHOLOLE FARMERS ASSOCIATION
8	ISSA MKWAMA	MWENYEKITI LUHOLOLE FARMERS
9	ADAMTI TASIANI	KATIBU MVIWATA MOROGORO MGAZI YA KAT
10	NICOLAUS RAFAEL	MWENYEKITI KISWIRA FARMERS
11	ANNA MARY PAULO	MJUMBE KISUYA FABIS
12	OMARI TANDIKA	MTOMBOZI FARMERS ASSOCIATION
13	TWAIBU ABDUL NIGA	MTOMBOZI FARMERS ASSOCIATION/KATIBU
14	LIGUMULU J. SADDA	DCDO-DED MOROGORO
15	HUSSENI J. DILUNGA	MJUMBE WA BODI KTK KUNGWE F.A.
16	MAJESHI HUSENI	MWENYEKITI WA TAMBUU FAMAS
17	AKHUSERI KIVA	MWENYEKITI KWIGWE FARMERS
18	EZEKIEL CHANUAMAR	CHAWAKAKI MBUNGE
19	SKOLASTIKA BALTAZARI	MBUNGE CHAWAKABU KATA BUNDUKI
20	EUSTAKI A. MOSHI	CDO - MKUYUNI-MOROGORO
21	SOLOMON MHANGO	MULTIFLOWER LTD - SALES REPRESENTATIVE
22	ABDALLAH P. KAMBI	MBUNGE KIBWAYA F.A.
23	HEMEDI M. CHAMALI	MWENYEKITI KIBWAYA F.A.
24	CHARLES J.GENDAEKA	MBUNGE NIGE FARMERS ASSOCIATION
25	HERRIEL KISUMO	AFO - MATOMBO
26	MDOGWA KAMPENI	AFISA MTENDAJI TCCIA MOROGORO
27	GANUTE A. LUKUMBO	MWENYEKITI NIGE FARMERS ASSOCIATION
28	ELISA PAWANAYE	WEST-ENVIRONMENTAL / ED OFFICER
29	MSAKI	USAID/TZ
30	STEPHEN	USAID/TZ
31	HANS MHELELA	CONSULTANT REAL SUPPORT SYSTEMS MOROGORO
32	AMDANI MUSTAFA	GOZO FA
33	IDDI KINDAMBA	DAI PEA FO MOROGORO
34	LAMECK KIKOKA	SNV MOROGORO
35	LOGART A. ALPHONCE	GOZO FA

Annex 5 Cost Effectiveness Analysis Tables

Annex Table 5.1 Present Value of Project Costs and Projected Incremental Sales																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		USAID Cost			**Disc. Rate**	**P.V. Project Cost**	**G.R.**	**Total Sales w.g.**	**Incremen-tal Sales**	**P.V. of Incr. Sales**	**Incr. Sale Less Proj. Cost**	**Net Present Worth**	**Incremen-tal Gross Revenues**	**Pre. Value Incr. G.R.**	**Incr. Sale Less Proj. Cost**	**Net Present Worth**
Year		Labor	Direct	Total	0.2	0.2	1.05	$	$	$	$		$		$	
0				0	1.000	0				D.R.=20%		D.R=20%				
1	2003	1,136,528	1,004,643	2,141,171	0.833	1,783,595		1,595,795	0	0	-2,141,171	-1,783,595	0		-2,141,171	-1,783,595
2	2004	919,103	1,138,701	2,057,804	0.694	1,428,116		7,709,136	6,033,551	4,187,285	3,975,747	2,759,169	0		-2,057,804	-1,428,116
3	2005	864,463	1,138,701	2,003,164	0.579	1,159,832		12,497,151	10,737,787	6,217,179	8,734,623	5,057,347	4,442,000	2,571,918	2,438,836	1,412,086
4	2006	1,058,785	1,138,701	2,197,486	0.482	1,059,188		13,122,009	11,274,676	5,434,394	9,077,190	4,375,206	4,442,000	2,141,044	2,244,514	1,081,856
5	2007				0.402	0		13,778,109	11,838,410	4,759,041	11,838,410	4,759,041	4,442,000	1,785,684	4,442,000	1,785,684
6	2008				0.335	0		14,467,014	12,430,331	4,164,161	12,430,331	4,164,161	4,442,000	1,488,070	4,442,000	1,488,070
7	2009				0.279	0		15,190,365	13,051,847	3,641,465	13,051,847	3,641,465	4,442,000	1,239,318	4,442,000	1,239,318
8	2010				0.233	0		15,949,883	13,704,440	3,193,134	13,704,440	3,193,134	4,442,000	1,034,986	4,442,000	1,034,986
9	2011				0.194	0		16,747,378	14,389,662	2,791,594	14,389,662	2,791,594	4,442,000	861,748	4,442,000	861,748
10	2012				0.162	0		17,584,746	15,109,145	2,447,681	15,109,145	2,447,681	4,442,000	719,604	4,442,000	719,604
		3,978,879	4,420,746	8,399,625		5,430,732			108,569,849	36,835,935	100,170,224	31,405,203		11,842,372		6,411,640
	Scenario #1. Comparison of Gross Sales and USAID Project Costs										**Scenario #2. Incremental gross revenues less cost to implement**					
		Benefit-Cost Ratio	=	6.78							Benefit-Cost Ratio	=	2.18			
		IRR	=	253							IRR	=	57			
		Net Present Worth	=	31,405,203							Net Present Worth	=	6,411,640			

Annex Table 5.2 Reported Sales by Commodity Sub-projects											
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9		
Total Sales	Oranges	Onions	Paprika	Paddy	Sugarcane	Sunflower Seed	Sunflower Oil-Cake	Vegetables			
	US$	US$	US$	US$	US$	US$	US$	US$			
Year 1	119,539	70,146	197,674	1,387,605							
Year 2	254,135	152,773	261,533	8,038,696	2,483,745	18,790	293,907				
Year 3	699,932	226,295	568,274	7,233,457	3,129,307	25,136	956,269	224,615			
Total	1,073,606	449,214	1,027,481	16,659,758	5,613,052	43,926	1,250,176	224,615	26,341,828	Tot. Sale	
									22,272,810	Sugar/Paddy	
									84.50	Percent	
Total Incremental Sales	Oranges	Onions	Paprika	Paddy	Sugarcane	Sunflower Seed	Sunflower Oil-Cake	Vegetables	Total		
	US$	US$	US$	US$	US$	US$	US$	US$			
Year 1	0	0	0	0							
Tear 2	134,596	82,627	63,859	6,651,091							
Year 3	580,393	156,149	370,600	5,845,852	645,562	6,346	662,362				
Total	714,989	238,776	434,459	12,496,943	645,562	6,346	662,362	0	15,199,438	Tot. Inc. Sales	
									13,142,505	Sugar/Paddy	
									86.47	Percent	
This table is copied from Annex Table 5.1 and Financial Summary											

Annex Table 5.3 Sub-Project Analysis of Incremental Net Revenues With and Without DAI PESA Project								
Commodity	Production/ acre (kg)	Acre/ MSE	Production Kg/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Commodity % of Total
Oranges - Tanga								
Without project		2.5	5415	0.03	162.45			
With project		4.72	8383	0.082	687.406			
Additional cost per producer								
Additional cost per acre for production and marketing					236.069			
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					288.887	1048	302753.89	0.06847214
Oranges - Morogoro								
Without project		0.75	8293	0.022	182.446			
With project		1.2	6862	0.068	466.616			
Additional cost per producer								
Additional cost per acre for production and marketing					236.069			
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					48.1013	588	28283.563	0.00639673

Annex Table 5.3 continued								
Commodity	Production/ acre (kg)	Acre/ MSE	Production Kg/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Commodity % of Total
Onions								
Without project	1200	0.81	972	0.06	58.32			
With project	2500	0.81	2025	0.092	186.3			
Additional cost per producer								
Additional cost per acre for production and marketing					51.7818			
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					76.1982	548	41756.604	0.00944386
Paprika								
Without project	0	1	0	136.4	136.364			
With project	200	1	200	0.795	159.091			
Additional cost per producer								
Additional cost per acre for production and marketing								
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					22.7273	1415	32159.091	0.00727324

Annex Table 5.3 continued								
Commodity	Production/ acre (kg)	Acre/ MSE	Production Kg/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Commodity % of Total
Paddy - Chimala								
Without project	1600	2.3	3680	0.082	300.769			
With project	1800	2.9	5220	0.191	996.545			
Additional cost per producer								
Additional cost per acre for production and marketing					210.909			
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					484.867	4149	2011713.7	0.45497795
Paddy - Mbirali								
Without project	2000	2.5	5000	0.202	1009.62			
With project	2000	3.2	6400	0.215	1373.09			
Additional cost per producer								
Additional cost per acre for production and marketing					181.818			
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					181.657	3082	559867.93	0.12662217

Annex Table 5.3 continued								
Commodity	Production/ acre (kg)	Acre/ MSE	Production Kg/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Commodity % of Total
Paddy - Ifikara								
Without project	720	1	720	0.033	23.5385			
With project	1350	1.5	2025	0.073	147.611			
Additional cost per producer								
Additional cost per acre for production and marketing								
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					124.072	574	71217.532	0.01610687
Sugarcane - Kilobero	Production/ HA (MT)	HA/ MSE	Production MT/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Project % of Total
Without project	19	1.6	30.4	0.013	380			
With project	27	1.6	43.2	0.017	719.476			
Additional cost per producer								
Additional cost per acre for production					90.9091			
Additional cost per acre for marketing					24.6212			
Incremental Gross Revenue per producer					223.946	3156	706773.77	0.15984704

Annex Table 5.3 continued								
Commodity	Production/ HA (MT)	HA/ MSE	Production MT/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Project % of Total
Sugarcane - Turini								
Without project	15	3	45	0.008	360			
With project	15	3	45	0.008	360			
Additional cost per producer								
Additional cost per acre for production and marketing					0			
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					0	520	0	0
Sunflower Seed - Subawanga	Production/ acre (kg)	Acre/ MSE	Production Kg/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Project % of Total
Without project	291	1.46	424.86	0.175	74.3505			
With project	275	1.46	401.5	0.165	66.2475			
Additional cost per producer								
Additional cost per acre for production					3.31818			
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					-11.4212	441	-5036.741	-0.0011391

Annex Table 5.3 continued								
Commodity	Production/ proc/yr	Produc-tion in …	Price	Price per	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Project % of Total
Sunflower Processing Subawanga								
Without project	4000	lt	0.7727	lt	3090.91			
	15000	kg	0.0363	kg	545.455			
With project	14000	lt	0.7727	lt	10818.2			
	23200	kg	0.0363	kg	843.636			
Additional cost per processor					583.091			
Additional cost per acre for production								
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					7442.36	82	610273.82	0.13802219
Vegetables - Morogoro	Production/ acre (kg)	Acre/ MSE	Production Kg/ Producer	Price per Kg	Revenue/ Producer	MSEs by Commodity & Projects	Revenue per Project	Project % of Total
Without project	1370	0.75	1027.5	0.064	87.68			
With project	1600	2	3200	0.139	222.4			
Additional cost per processor					11.12			
Additional cost per acre for production								
Additional cost per acre for marketing								
Incremental Gross Revenue per producer					123.6	500	61800	0.01397696

Annex Table 5.3 continued								
Summary Statistics						MSEs by Commodity & Projects	Revenue per Project	Project % of Total
Total Adjust Incremental Gross Revenues							4,421,563	1
Estimated Number of MSEs						16,103		
Average per MSE (US$)							275	
Total Adjust Incremental Gross Revenues Without Sunflower processors							3,811,289	
Estimated Number of MSEs Without Sunflower Processors						16,021		
Average per MSE (US$)							238	