Mid-Term Evaluation of OFDA Eastern Chad Horticulture Program
March 13-20, 2011

Acronyms

IDP- Internally Displaced Person
KNG- Kounoungou Refugee Camp
FAO- United Nations' Food and Agriculture Organization
FRA- Farchana Refugee Camp
MINURCAT- United Nations Mission in the Central African Republic and Chad
OCHA- United Nations' Office for the Coordination of Humanitarian Affairs
SECADEV- Secours Catholique de Development
USAID- United States Agency for International Development
WFP- United Nations' World Food Program

Table of Contents

Executive Summary

The mid-term evaluation of the Eastern Chad Horticultural Project assessed changes that have occurred in the food security situation of 749 producers (15% of the total 5,000) as a result of the project implementation. Through the project, refugee, returnee and local population have been supported with seeds, training and tools through a combination of seed fairs and direct seed and material distribution along with horticultural training. Under SECADEV and CRS/Chad guidance, participants have focused their agricultural efforts on the *wadis* (dry riverbeds).

The mid-term evaluation used a questionnaire as a primary data collection tool. The questionnaire was developed to measure changes in indicators of food security included in the original project proposal. A total of 15% (749) of the producer/participants were interviewed in 30 of the total 56 participating villages surrounding Guéréda (near to the Kounoungou and Mile refugee camps) and Adré (near the Farchana refugee camp). Nearly 77.71% of these producers interviewed were women and about 94% of the total interviewed belonged to "groups" which refers to vegetable producers who share a common workspace.

It was noted that with the support of the OFDA project, farmers have been able to strengthen their food stocks and eat garden produce almost year round, despite some difficulties. Conducting seed fairs rather than direct seed distribution improves the purchase value that each beneficiary receives by giving them the choice to purchase items which best meet their needs.

The evaluation highlighted a few important areas of improvement, such as increasing the amount of awareness raising amongst beneficiaries prior to seed fairs, providing pesticides at the same time as tool distribution, strengthening monitoring of producers after seeds are planted, as well as improving project communication materials so that illiterate populations can fully comprehend and participate.

I. Background

The arid and resource-poor area of Eastern Chad is currently home to an estimated 200,000 refugees from Sudan's Darfur region. The refugee influx has negatively impacted the livelihoods of local Chadian populations, and they have yet to recover. The Chadian host population initially demonstrated enormous generosity in hosting the refugees. From the time of their arrival in April 2003 until early 2004 when Kounoungou, Milé and Farchana camps were established, local communities opened their homes to the refugees, with whom they share ethnic ties.[1] Chadians shared their shelter, clothes, livestock and food with the refugees. In the process, the Chadian hosts depleted their foodstuff stocks. Droughts and the ongoing depletion of resources, intensified by the presence of the refugees, have impeded Chadians from replenishing their stocks and profiting from their agricultural livelihoods. Additionally, the relationship between the refugees and their Chadian hosts has deteriorated as the competition for the limited resources has intensified. More and more conflict is being recorded: refugees and villagers steal and sell

[1] Both Sudanese refugees from Darfur and local communities in eastern Chad belong to the ethnic groups Tama, Fur, Zaghawa and Massalit.

each other's livestock; refugees encroach on villagers' land to feed their own livestock, refugee women in search of firewood are beaten and/or raped by villagers.

Many persons have fled their natal villages to find security in neighboring villages or even IDP camps. As the tension slowly receded and a tenuous peace returned, some households are going back to their native villages or settling down in the villages to which they escaped. Progress has been made towards achieving this goal. However, as these populations begin their road to recovery, another obstacle has arisen that threatens to undermine the progress attained.

Chad is currently in the grips of major food security crisis. In November 2009 at the World Summit on Food Security, FAO classified Chad as one of the 30 most food insecure countries in the world. It cited a significant drought, high prices of crucial food stuffs, and armed conflict (rebellion, inter-ethnic strife) as principal factors of the food emergency. Chad is ranked 166 out of 172 countries on the Human Development Index[2]. According to the 2010 Food Security Information Paper produced by the Food Crises Prevention Network (FCPN) the basic overall cereal need for Chad is 99,000 tons compared to the 60,500 tons available leaving a 39% food gap complete the basic caloric needs of the affected populations[3]. The 2010 FAO *State of Food Insecurity in the World* states that Chad currently has Global Hunger Index of 31.3% and a mortality rate for children under 5 of 20.9%.[4] The low precipitation in an already erratic climate has led to poor harvests, driving up food prices.

According to OCHA, nearly 2,000,000 persons—or 18% of the country's population—find themselves in a high to very high food insecure situation[5]. The dearth in rainfall has also negatively impacted livestock across the country by reducing pastureland and resulting in the death of some 780,000 animals[6]. Livestock loss has further contributed to food insecurity, as households have fewer animals to sell to off-set decreased household agricultural revenue.

While the most affected regions have been identified in the central and western parts of the country, eastern Chad is considered to have high food insecurity levels as well[7]. Home to 12% of the overall population (1,206,612), the departments of Assoungha and Dar-Tama, situated in the regions of Ouaddai and Wadi Fira respectively, are hosts to several refugee camps and thousands of internally displaced persons[8]. According to the Chadian national report *Deuxième Recensement général de la population et de l'habitat* there were roughly 98,790 refugees in five camps spread throughout the two regions as of 2009[9]. There are additional tens of thousands of IDPs located in the regions as well. The national total of Sudanese Refugees and IDP's are projected to show a reduction in the coming year. As of January 2011 the UNHCR recorded 262,900 refugees from Sudan in Chad along with 157,200 IDP's. However, the UNHCR has projected that in December 2011 the population of Sudanese refugees will be reduced to 249,000

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[2] http://hdr.undp.org/en/statistics/

[3] FCPN, *Food Security Information Paper, NISA-37.* 2010

[4] FAO, The State of Food Insecurity in the World, Addressing Food Insecurity in Protracted Crises. 2010

[5] **TCHAD- Crise alimentaire et nutritionnelle; *Rapport de situation #1* , 04 Mars 2010 ; *OCHA***

[6] http://www.wfp.org/content/emergency-food-assistance-drought-affected-population-chad

[7] **TCHAD- Crise alimentaire et nutritionnelle; *Rapport de situation #1* , 04 Mars 2010 ; *OCHA***

[8] *Deuxième Recensement général de la population et de l'habitat* ; INSEED, 2009

[9] *Deuxième Recensement général de la population et de l'habitat* ; INSEED, 2009

and that there will be 108,800 IDP's in Chad as of the end of the year[10]. Many households in these two departments, hobbled by an already difficult agricultural setting, have been further put at risk by the increased competition for natural resources (i.e. water, arable land) due to the presence of the refugees and IDPs. Additionally, farming households face many constraints to sustainable crop yields even in the best of times. They lack improved seed varieties resistant to the climatic inconsistencies of the arid zone. They face poor access and availability to arable land along wadis (dry river beds). Often they simply do not possess the means (tools, seed) to properly exploit the land they do have. The lack of water, both from precipitation and the ground, is particularly problematic.

To support these IDPs, returnees, and those villages giving refuge to these at-risk persons, CRS and SECADEV implemented activities that provided valuable and much-needed agricultural inputs and training with the goal helping them get back on their feet and become self-sufficient by increasing their overall food security. CRS has been supporting peace and justice, agricultural development, vocational training and HIV/AIDS activities in Chad since 1985.

In February 2004, CRS/Chad opened an eastern Chad sub-office in Abéché to support the only Chadian NGO playing a major role in responding to the needs of Sudanese refugees and their host communities – the Chadian Caritas development agency SECADEV. Founded in 1983, SECADEV is one of the strongest diocesan Caritas operations in Africa. In the past, the agency has maintained several offices throughout the Sahel region from which they have managed community development programs in agriculture, income generation, animal husbandry, health, water and sanitation, and microfinance. SECADEV was already an established presence in eastern Chad when the refugee exodus from Darfur began in 2003, and it now employs 300 staff to work on programming in the east.

II. Project Summary

Since 2005, through funding from OFDA, CRS/Chad and SECADEV have been implementing the Eastern Chad Horticulture Program in this region. The program supports the agricultural activities in the departments of Dar Tama and Assoungha by providing Chadian villages (targeting primarily locals as opposed to IDPs or Sudanese refugees) in the vicinity of Kounoungou and Farchana refugee camps with seeds, tools, horticulture training and technical support for pilot micro finance program attached to this year's project. Participants organized themselves into cooperatives for mutual assistance, information exchange and produce sharing. Under SECADEV and CRS/Chad guidance, participants focus their agricultural efforts on the *wadis* (dry riverbeds). OFDA funding has been renewed every year and adapted to the evolving socioeconomic, political, security, and meteorological conditions.

For the 2010-2011 program, the OFDA project covers 56 villages including 25 surrounding the towns of Adre and 31 in Guereda with a population of 5000 distributed among beneficiaries (Adre 2648, Guereda 2352). Apart from the direct distribution of seeds and gardening tools for producers, seed fairs were also organized and training workshops.

[10] http://www.unhcr.org/cgi-bin/texis/vtx/page?page=49e45c226, UNHCR, 2011

The program's goal is as follows: **"Chadian households affected by conflict have improved socio-economic conditions leading to a better quality of life."**

The program's approach for achieving this is ensuring that Chadian households affected by conflict increase their agricultural and horticultural production. A variety of activities have been carried out to achieve this, including:

- Organizing and conducting seed and tool distributions;
- Organizing and conducting seed fairs;
- Land and water management training for horticultural activities;
- Compost and bio-pesticide production training;
- Conducting awareness workshops on seed fairs for beneficiaries and vendors;
- Field agents providing agricultural technical assistance;
- Trainings on rainy season agricultural activities
- Training and offering technical support for the pilot microfinance groups

III. Survey Methodology

Eastern Chad Horticultural Program's midterm evaluation was undertaken to review progress on project goals and objectives from the inception of the project to the mid-term and to provide clear recommendations to the project on the changes to be made for specific activities as well as the project successes to be continued and possibly expanded. The primary data collection tool was a questionnaire that was developed to measure changes in project indicators of food security. The tools and analysis follows USAID food security concept. According to USAID, food security is **"When all people at all times have both physical and economic access to sufficient food to meet their dietary needs in order to lead a healthy and productive life."**

Project indicators are listed below:

- Projected increase in number of months of food self-sufficiency due to distributed seed systems/agricultural input for beneficiary families
- Number of people benefiting from seed systems/agricultural input activities
- Actual number of hectares planted with distributed seeds
- Number of farm fields planted with distributed seeds
- Number of gardens planted with distributed seeds
- Percentage increase in rainy season crop production
- Percentage increase in garden production

A questionnaire was developed to measure quantifiable indicators (age, gender, IDP/refugee/local status, hectares planted, and types of seeds received/planted) as well as qualitative indicators (positive aspects/challenges of project, suggestions for improvement). As much as possible, questions were designed to directly measure project indicators.

The survey was administered by two teams (one supervisor and three field agents per team) in the localities of Guereda and Adre. Fifteen villages in Adré were surveyed and fifteen villages in Guereda were surveyed. In each village, field agents met with roughly 25 producers who are beneficiaries for a total of 749 producers interviewed. Field agents met with traditional and administrative authorities to inform them of the evaluation. Villages were chosen on the basis of

easy accessibility, a regular presence of producers, and ease of communication with beneficiaries. The questionnaires were translated into the local languages, namely Tama Massalits and Arabic.

Limitations

There were several limitations which constrained the data collection process and results. One of the primary limitations is the difficulty of traveling and communicating with the beneficiaries. The infrastructure of Chad is very poorly developed, which makes traveling in the field very difficult, especially during the rainy seasons when some of the bush "roads" become impassable. Furthermore, there is a communication barrier as well, as the majority of the beneficiaries only speak the local dialect. SECADEV does have a few agents who are from the local area and can speak the dialects but in general the availability of local people with the capacity and the language abilities to hire is unfortunately low.

Additionally, the fact that villages were selected on basis of accessibility and have a regular producer presence means that the data sample provides an incomplete picture of the project, since more remote villages with possibly less producers were excluded.

IV. Producers' Composition and Distribution

A. Localities and Populations Surveyed

Table 1: Zones and Populations Surveyed

No	Number of Villages Surveyed	Zones	Number of Producers Surveyed		
			Men	Women	Total
01	15	Adré	78	320	398
02	15	Guereda	89	262	351
	30		**167**	**582**	**749**

Comments :

-Producers surveyed: 749
-Gender breakdown: 582 Women (77.71%) and 167 Men (22.29%).

The disproportionate amount of women producers in the localities mirrors the gender imbalance in the local population. Given the climate of insecurity caused by raids by the Janjaweed and other rebel groups from Chad and Sudan, able-bodied men in the East are often afraid of residing in the villages, choosing instead to visit periodically to remain in contact with their families and acquaintances but living outside of them. Thus, few men remain to cultivate the land.

B. Group Membership

Group membership varies among producers. Not all producers belong to a group of producers. ~~-G~~Groups" refer to vegetable producers who share a common workspace.

Table 2: Group Membership Status:

Locality	Numbers of Producers who belong to a group	Number of Producers who are not group members	Number of Producers who did not identify with either choice
Adré	364	34	0
Guereda	341	10	0
Total out of 749	**705**	**311**	**0**

Comments:

Out of a total number of 749 producers surveyed:

-94.13% producers belong to a group;
-5.87% producers do not belong to a group;
-0% producers did not respond to the question.

C. Amount and Types of Seeds Received at Seed Fairs

Producers listed the kinds of seeds received at the seed fairs.

Table 3: Types and Kinds of Seeds Received at East Fair According to Producers

	Number	Types of seeds at the fair	Estimate of total seeds received (kg)	Estimate of seeds received by each beneficiary (kg)	Comments
Producers surveyed in Adré	351	Onion, tomato, garlic, okra, Corrette, arugula, turnip, black pepper, cucumber, lettuce, watermelon, potatoes, cabbage, beets, peppers	39 577 kg	113	Each beneficiary was able to choose which seeds to purchase from a variety available
Producers surveyed in Guereda	398	Tomato, garlic, okra, onion, courgette, arugula, turnips, black pepper, cucumber, lettuce, watermelon, potatoes, cabbage, beets, peppers	8 308 kg	21	

Comments:

Separate from and prior to the mid-term evaluation questionnaire, limited follow-up interviews were conducted with seed fair beneficiaries, vendors, and field agents to compare them with the seed distributions. Two vendors shared their general impressions:

- Had very positive experiences working with the fair and felt that they are very effective way to distribute aid to the local population.
- Felt the fairs were well organized aside from one village where the location of the fair was not clearly expressed and the vendors had to move all of their seeds and tools at the last moment.
- The farmers preferred the imported seed varieties for gardening but tended to buy local seeds for their primary farming activities (millet, sorghum, peanuts etc.)
- Happy that the beneficiaries had the choice of the variety and quantity of seeds and tools. Although there are a generous amount of local tools produced, beneficiaries generally have trouble saving enough money to buy the tools they need for the growing seasons.
- The beneficiaries were not obligated to accept seeds they did not need or use. They were free to choose the seeds and tools they wanted and were free choose which vendor to buy from as well.
- The fair site locations were comfortable in general; under trees and shade accept for one site which was addressed immediately.
- Vendors asserted they will continue to participate in seed fairs as long as they are being implemented in the region. They view them as a great opportunity, where they can benefit greatly in a short period of time (100 persons at a fair, compared to 10-15 persons at a daily market) meant that they garnered considerable revenue for one day.

A group of ten beneficiaries also shared their general impressions:

- The beneficiaries were very satisfied with the seed fairs and appreciated the added food stocks the fair would eventually provide.
- They were pleased to be able to choose the seeds and tools appropriate for their situation rather than the traditional aid distribution.
- The fairs were able to provide all the seed varieties usually preferred in local markets.
- The vast majority of beneficiaries interviewed preferred the seed fairs for the reason that it allowed them to have a level of choice and power in the aid being provided to them. It gave them the sense of being involved in the assistance they are being provided.

The overall sense by the beneficiaries and vendors continues to be very positive regarding seed fairs compared direct distributions. The beneficiaries often remarked on how much more they appreciated the sense of choice, empowerment and participation they felt by participating in the seed fairs. The vendors conversely asserted that not only was the level of profit attractive to them, but they also appreciated being able to increase their earnings by participating in an event that would help those living in their communities.

Using local seed vendors (even if they have to import seeds), has the secondary benefit of injecting funds into the local economy. This will further stimulate local economy generating activities and increases the likelihood that vendors will build or purchase things with their revenues which expand their businesses, including expanding their seed stocks and means of transport.

D. Seed Preferences

The producers surveyed ranked their preferences of seeds. The table below illustrates their preferences as well as how accessible each variety is in terms of cost, availability, and adaptability.

Table 4: Seed Preferences of Producers by Ranking

Ranking (most to least desirable)	Vegetable Seeds	Comments
01	Millet	Easily available locally, good market value, good adaptability to local climate and conditions
02	Peanut	
03	Sesame	
04	Cowpea	
05	Okra	
06	Cucumber	High rate of consumption and sales ; vulnerable to decay and fungal attacks
07	Onion	Easily available locally, good market value, good adaptability to local climate and conditions
08	Watermelon	Very high market value ; high rate of consumption ; rots easily, hard to maintain and vulnerable to rats and stray animals
09	Bisap	Has a good commercial value at the markets
10	Sorghum	Easily available locally, good market value, good adaptability to local climate and conditions
11	Squash	High rate of consumption and sales ; vulnerable to decay and fungal attacks
12	Tomato	Easily available locally, good market value, good adaptability to local climate and conditions
13	Melon	Good market value, average consumption rate
14	Peppers	High rate of consumption, storage, and sales ; good adaptability to local climate and conditions ; vulnerability to insect infestation

This table underscores the food security concepts of access and availability. Beneficiaries were able to purchase seeds (access) of a wide variety which are not always available locally (availability). It is important to note that the highest ranked seeds are not the ones with the highest market value (millet, peanuts and cowpeas), which are harder to grow due to vulnerability to insects, fungus, rot and/or high water needs, but the varieties that combine good market value with adaptability to local climate conditions and are available locally (onion, okra, courgette).

E. Production, Yield, and Land Area Estimate

Table 5: Production, Yield, and Land Area Cultivated Last Year and This Year

Locality	Land Area Cultivated (hectares)		Production (kg)		Yield (kg/acres)	
	Last Year	This Year	Last Year	This Year	Last Year	This Year
Adré	26.01	47.21	16 760	27 585	355.01	584.30
Guereda	28.42	52.16	16 020	26 289	307.13	504.01
Total	**54.43**	**99.37**	**32 780**	**53 874**	**662.14**	**1 088.31**

Comments :

The producers surveyed stated that they were able to increase their production and contribute to their household nutritional needs thanks to the support of the OFDA project. This year, 749 vegetable growers produced a total **55 874 kg** of vegetables with a yield of **1 088.31 kg/hectare** compared to **32 780 kg** produced and a yield of **662.14 kg/hectare** last year. As a reference point, the OFDA project has 5 000 direct beneficiaries for 2010-2011. Thus, **production increased by 64.4 percent over last year** (This year's production figure [53 874] minus last year's production figure [32 780] equals 21 094. This figure divided by last year's production figure [21 094/32 780 = .6435] equals a percentage increase of 64.4%) and **yield increased by 64.4 percent over last year** (This year's yield figure [1 088.31] minus last year's yield figure [1 662.14] equals 426.17. This figure divided by last year's yield figure [188.6/1702.7 = .11] equals a percentage increase of 11).

This data shows progress on two critical project indicators:

- Actual number of hectares planted with distributed seeds
- Percentage increase in garden production

F. Use of Vegetable Products

Vegetables from garden plots are sold, stored, or eaten. The table below summarizes the trends for various types of vegetables.

Table 6: Vegetable Products Eaten, Stored, and Sold

Types of Vegetables			Quantity of vegetables (kg)		
Eaten	**Stored**	**Sold**	**Eaten**	**Stored**	**Sold**
Garlic, onion, tomato,okra,cucumber turnip, courgette, arugula, pepper	Tomato, okra, onion, garlic, courgette, pepper	Watermelon, turnip, lettuce, courgette, arugula, tomato, onion, garlic	26 937	10 774.8	13 468.5

Comments :

-Rate of consumption of vegetables grown: 50%
-Rate of storage of vegetables grown: 20%
-Rate of sale of vegetables grown: 25%
-Rate of social assistance: 5% (defined as assistance given in the form of vegetables)

The way vegetables are used is tied to the third component of food security, utilization, which is defined as ―Food is properly used: existence of proper food processing and storage practices, adequate knowledge and application of nutrition and child care, and adequate health and sanitation services." Vegetable use in this table falls under the first part of this definition, focusing on food processing and storage. A relatively limited small percentage of food is stored (20%) for the lean season according to the producers. However, this figure is an encouraging sign because it indicates some measure of improved food security, since virtually no storage would take place on the extreme end of food insecurity. Compared to the previous midterm evaluation, 87% of beneficiaries are storing at least one product for consumption during the lean season, compared to the 13% conserving at least one product the previous year.

G. Technical assistance provided by agricultural field agents

Throughout the vegetable season, producers are monitored by the agricultural agents, who also provide technical assistance to producers in the vegetable plots.

Table 8: Field Agent Visits

Locality	Number of producers visited	Number of total visits by agents	Types of assistance provided by agents to producers
Adré	398	452	Technical assistance, trainings, tools, seeds, seed fairs
Guereda	351	434	Vegetable fair, trainings, tools, seeds, technical assistance
Total	**749**	**886**	

As one can see from the table, the number of visits by field agents was relatively equal, with only slightly fewer in Guéréda. SECADEV field agents conducted 886 out of the 1152 during this period mainly due to difficult traveling conditions and beneficiary availability during planting periods.

H. Seed Storage

Some producers decided to store seeds for the next planting phase.

Table 9: Types of Seeds and Number of Producers Who Stored Seeds for Next Planting Cycle

Locality	Number of producers who stored seeds
Adré	359
Guéréda	291

Comments :

In their awareness workshops, the field agents told the producers to save seeds to strengthen their stocks for the coming vegetable seasons. During the survey, producers were questioned about this but they were unable to accurately quantify seeds stored because they were in the middle of the harvest.

As stated before, seed storage is tied to the utilization component of food security. Despite the smaller sample group of Guereda compared to Adré, more producers are storing food in the former locality. It is unclear whether this is the result of more visits and technical assistance by field agents in Guereda due to better transportation or there is another underlying motive. Although the fact there is some level of storage taking place shows progress, it is critical to understand what accounts for the significant difference in figures.

I. Improved Food Security in the project areas

During the evaluation, producers commented on the long duration of the lean periods and the problem of securing food in the project areas. The question was whether or not the project's support can enable beneficiary's food security.

Table 11: Producers' Assessment of Nutritional Self-Sufficiency

Bases	Nutritional Self-Sufficiency		Off-season (lean period)
	Yes	No	
Adré	289	93	August, september and october
Guereda	226	73	
Total	**515**	**166**	**(68 no response)**

As previously stated, food security is defined by USAID as a point **"When all people at all times have both physical and economic access to sufficient food to meet their dietary needs**

in order to lead a healthy and productive life." It is based on three components: availability, access, and utilization.

Following the harvest, households will eat, sell, or store their vegetables (with a negligible amount providing social assistance by donating vegetables to family and friends). However, at a certain point in the year, most households exhaust their storage and have nothing to eat or sell. Thus, none of the three elements of food security exist. This point signals the beginning of the lean season or lean period and runs until the next harvest. Beneficiaries responded to a number of questions to measure their level of food security throughout the year. According to the figures, most households consider themselves lacking nutritional self-sufficiency. Out of 398 producers who responded to the question in the Adré sample group, 64.4% (289) considered themselves in the category of having improved food security while the figure for Guéréda was 56.8% (226 out of 351).

In future evaluations, in addition to the number of households who rank themselves as having improved food security, an important measure will be the length of the lean period. A steady, measurable decrease in the length of the lean season according to each household will indicate progress towards the project goal and provide a second data point in addition to Table 11.

V. Beneficiaries' Perceptions of Project

During the evaluation, producers expressed their views on the positive and negative aspects of the seed fairs and seed distributions as well as providing suggestions.

Table 12: Producers' Views on Seed Fairs and Preference versus Seed Distributions

Aspects		**Suggestions**	**Number of producers who prefer each**			
Positive	**Negative**		**Fair**	**Distribution**	**No Opinion**	**Total**
Freedom of choice, access to good local seeds in large quantities, good germination	Value of coupon inadequate (5 000f), hard to read coupon, lack of pesticide products	Increase time for raising awareness, make pesticides and tools available at the same time, build pumps	80.90% 606	19.10% 143	0% 0	100% 749

VI. Challenges

The mid-term evaluation questionnaire was useful in getting quantitative and qualitative data on the challenges towards achieving the program's goal based on project indicators.

Communication

As the field agents noted, they often had trouble communicating with the producers surveyed for the mid-term evaluation, given that many of the beneficiaries only speak local dialects. Although perhaps some of the more abstract concepts in the survey were more difficult to explain then basic hands-on agricultural concepts, this issue poses a challenge for providing an effective level of technical assistance. This also includes the fact that most producers are illiterate and had trouble reading the seed fair coupons.

Transportation

As Table 8 illustrates, field agents made almost the same number of visits in Guéréda and Adré. Out of the 1152 visits, the project completed 886, missing 266 visits. Some of the most common factors for being unable to meet the quarterly technical visit goals were poor condition of the rural roads and the lack of availability of the beneficiaries during key production times. Although the project was unable to complete all of the planned visits, the implementing partner showed a marked improvement completing 76.9% of planned visits compared to only 50% recorded in the previous midterm evaluation.

Security

Security has improved throughout the region. As of the last midterm evaluation, the UN Security Council has removed its peacekeeping force (MINURCAT) which had been deployed to protect Chadian IDPs and Sudanese refugees. Although the departure of MINURCAT raised concerns that there would be serious impacts on the operating environment for both NGO's and beneficiaries. Aside from a few isolated incidents the Chadian Security force (DIS) has been able to maintain an acceptable level of security in the Region.

Petty crime remains an issue for NGOs working in the region and during the April – June quarter NGO's have reported petty theft, bandits and vehicle theft as some of most common security issues in the region. There has been some activity amongst bandits in the region but the local Chadian Security force has recently made several arrests in the past month.

Finally, beneficiaries had listed the political environment in Sudan, Darfur specifically, as a security concern. As of June and July, beneficiaries were concerned about remaining border disputes between North and South Sudan following the impending independence of Southern Sudan. Beneficiaries and Refugees have expressed to the projects field agents a concern if there was influx of refugees fleeing violence across the border, rebels and opportunistic bandits as possible future effects on the security of the region.

Irrigation

Producers also mentioned irrigation as a major challenge. This refers to the lack of adequate hoses/nozzles for effectively irrigating crops and is coupled with the ongoing drought. Beneficiaries have further expressed an interest in including motorized water pumps for their horticultural activities, especially with the current rainy season not meeting expectations.

Crop Failure

Combined with irrigation issues and a lack of rainfall, insect infestation, withering, fungus and destruction by wild animals are responsible for another challenge, crop failure.

All of these challenges have led to continued food insecurity and harsh lean periods in which a vast majority of households lack nutritional self-sufficiency and deplete their seed and vegetable supplies before the next harvesting season begins. As of August, 2011 Chad is already recording pockets of droughts in the country and forecasting poor harvests throughout the country (including Eastern Chad).

VII- Recommendations

Communication

Ensure seed fair coupons and other materials and technical assistance are appropriate for illiterate beneficiaries. The project has improved the capacity of the Seed Fair agents, which has improved their ability to monitor that fair prices are being given to the beneficiaries from the local vendors.

Transportation

Have SECADEV conduct an inventory and status of the motorcycle fleet and further work with them to improve the schedule of use and maintenance to best exploit this valuable resource of the project.

Security

Continue to closely monitor the security situation in the east. Participate in security meetings with other NGOs and continue to build professional information networks in Abeche and N'Djamena to get as accurate information as possible about the evolving situation.

Explore strategies for improving security at the grass-roots level among women, including doing daily activities within a larger group, among other possible strategies.

Purchasing Power Parity

Find a way to achieve purchasing power equity among Adré and Guéréda given the higher costs of imported seeds in the latter. Look into using a greater proportion of locally sourced seeds to balance out costs of imported ones. Also, the project will attempt to incorporate local vendors from participating villages and to negotiate prices at each location. This will ensure a more fair representation of local prices instead of the sometimes more expensive regional prices for locally produced seeds and tools.

Seed Fairs

Conducting seed fairs has proven to be successful and preferred by beneficiaries in the project areas. Giving beneficiaries the choice to buy seeds and items according to their own needs ensures that project funds are used more efficiently in supporting each beneficiary. For this reason seed fairs are highly recommended versus general seed distribution where seed types and amounts are often fixed with low level of beneficiary partcipation.

Focusing on seeds that beneficiaries prefer and that adapt well to local climatic conditions should also be used.

Irrigation

Explore the possibility of having tool fairs with emphasis on irrigation-related products. Provide more specific technical assistance on appropriate canal building and irrigation techniques that will in turn increase the rate of crop success.

Crop Failure

Provide more technical assistance on agricultural techniques for growing vegetables. Provide pesticides in conjunction with seeds.

Future Evaluations

For the next study, include age and gender information and find if any correlation exists between age/group, membership and productivity/yield.

VIII- Conclusions

It was noted that with the support of the OFDA project, farmers have been able to strengthen their food basket and eat garden produce almost year round, despite some difficulties mentioned above. Beneficiaries listed an increase in horticultural production of 64.4% compared the previous year. The project recorded an increase in the number of beneficiaries both conserving (87% compared to the previous 13%) and selling (88% compared to the previous 12%) a portion of their harvest. The carrying out of seed fairs versus general seed distribution improves the purchase value that each beneficiary receives by giving them the choice to purchase items which best meet their needs.

The evaluation highlighted a few important areas for improvement, such as increasing the amount of awareness- raising amongst beneficiaries prior to seed fairs, providing pesticides at the same time as tool distribution, strengthening monitoring of producers after seeds are planted as well as improving project communication materials so that illiterate populations can fully comprehend and participate.