

PD-ABT-956



FOOD FOR THE HUNGRY, INC

Final Report

(10 August 2000 – 31 May 2001)

**Eastern Congo Agricultural Relief Project
(ECARP)
September 4, 2001**

SUBMITTED TO:

**Cognizant Technical Officer
Timothy McRae
USAID/BHR/OFDA, Room 8.06
1300 Pennsylvania Ave, NW (RRB)
Washington, D.C. 20523-6001**

Submitted by:

**Keith Wright
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Benjamin K. Homan, *President*
Ted Yamamori, *President Emeritus*

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September 4, 2001

East

Mr. Timothy McRae
USAID/BHR/OFDA
Ronald Reagan Building
13000 Pennsylvania Ave., N.W. - Rm 8.06
Washington D.C. 20523-6001

Greenway

Road

Subject: Final Report for Grant No. AOT-G-00-00-00282-00

Scottsdale

Dear Mr. McRae,

Please find attached the Final Report for the FHI Eastern Congo Agricultural Relief Program, Grant No. AOT-G-00-00-00282-00. This report gives an accounting of activities conducted throughout the entire grant period, with the extension included.

Arizona

Feel free to contact me if you have any questions or need additional information.

On behalf of FHI and the beneficiaries, thank you for your long-term, continuous support.

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Sincerely,

Keith Wright
Washington Liaison Officer
Food for the Hungry, Inc.

Tel: (202) 547-0560

cc: Mr. Greg Gottlieb, ARO, OFDA-Nairobi
Mr. Shaun Walsh, FHI-IRO, VP of Relief
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EXECUTIVE SUMMARY

Organization: FHI (Food for the Hungry, Inc) Address: 7729 E. Greenway Road Scottsdale, AZ 85260 U.S.A.	Date: 31 August 2001 Contact: Merry Fitzpatrick Tel/Fax: 011(254)72-779-989 Email: mfitzpatrick@fhi.net
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Project: Eastern Congo Agricultural Relief Project (ECARP) Grant Number: AOT-G-00-00-00282-00 Country: Democratic Republic of the Congo Disaster: War and Population Displacement Area of Activity: South Kivu and Kantanga Provinces Period of Activity: 10 August 2000 to 31 May 2001 Total Number/Type of Beneficiaries: 18,000 vulnerable families (81,000-99,000 people) and 3 local organizations/communities
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Dollar amount requested from OFDA:	\$430,853
Dollar amount requested from others:	\$ 50,000 (FHI)
Dollar amount of in-kind contributions:	\$ 48,300 (FAO)
Total dollar amount of Project:	\$529,153

During this program period, both Katanga and South Kivu have seen the most violence and upheaval since the initial battles of this war, displacing nearly the entire population of Moba Territory. Every project area was inaccessible during at least part of this project period due to insecurity. FHI has overcome enormous obstacles to gain the impact this program has had on the target population.

The overall food security in Katanga, the primary target, has worsened over the project period and this project was one of the few positive factors. The areas with the most impact were Kalemie, Kalonge (South Kivu) and the high altitude areas around Moba. In these areas very high percentages of families planted the seed distributed. Low impact areas included the low altitude area immediately around Moba, and the Walungu/Kabare area on the western edge of the Kahuzi Biega Forest.

Goal: To measurably and sustainably increase the food security of the most vulnerable populations in South Kivu Province and the Moba region of Katanga province, isolated or affected by population displacement due to the war.

Objective #1: To increase food security in communities most affected by displacement by providing 18,000 families with the means to cultivate approximately 10,000 acres of land.

Indicator and Current Measure

FHI was successful to deliver 19,546 families with a total of 205MT of staple seed, 171kg of vegetable seed, and 19,346 hoes. Additionally, 3,000 families received a total of 32kg of vegetable seed, 20,000 sweet potato clippings and 3,000 hoes.

In an effort to prevent seed from being eaten, 3,000 families received seed protection packages totaling 75MT of maize flour, 1,140kg of salt, and 3,423L of cooking oil provided by the UNWFP.

The impact of this seed varies by location and seed type, with some areas planting significant percentages of seed and in other areas insignificant quantities. Peanuts, beans and wheat had the best yields rates, on the higher end of the average range. Soy gave yields on the low end of the average range. Areas receiving maize were inaccessible at harvest.

Resources:*

Budget for Objective 1:	\$251,965
Cumulative Expenditures:	\$228,867
Balance:	\$ 23,097

* See Shared Expenses in Annex C

Objective #2: To increase the quality of seed available in Minembwe territory of South Kivu by assisting three local organizations in re-establishing seed multiplication projects.

Indicator and Current Measure

FHI was successful to assist six local organizations in establishing seed multiplication projects. All six organizations were given technical training allowing them to receive government certification. FHI staff provided management training in management and accounting techniques. All received an initial seed stock totaling 1,439kg and supervision throughout this first season. The harvest, while less than hoped for, was sufficient to allow 2.5MT to be distributed to 217 vulnerable families in the communities as well as retaining sufficient quantities to replant for the next season. Interviews with the organizations lead FHI to predict that five of the six organizations will continue to multiply seed for at least one more season.

Resources:*

Budget for Objective 1:	\$8,980
Cumulative Expenditures:	\$8,546
Balance:	\$ 434

* See Shared Expenses in Annex C

Objective #3: To increase food security along the Moba-Kala axis by reducing the cost of transportation and increasing the profit per unit of produce to farmers through rehabilitating 1 bridge.

Indicator and Current Measure

The Kazinza Bridge, 14km from Moba on the Moba-Kala axis was successfully rehabilitated (though a portion of the tools were pillaged in the chaos when Moba was bombed). Transportation time to Moba port was reduced by an estimated 30 minutes on bicycle, allowing an increase in the number of trips per week per bicycle, the amount depending on the distance from the farmer to the port.

Resources:*

Budget for Objective 1: \$12,930

Cumulative Expenditures: \$3,212

Balance: \$9,718

* See Shared Expenses in Annex C

Program Overview

Goal: To measurably and sustainably increase the food security of the most vulnerable populations in South Kivu Province and the Moba region of Katanga province, isolated or affected by population displacement due to the war.

Objective #1: To increase food security in communities most affected by displacement by providing 18,000 families with the means to cultivate approximately 10,000 acres of land.

Objective #2: To increase the quality of seed available in Minembwe territory of South Kivu by assisting three local organizations in re-establishing seed multiplication projects.

Objective #3: To increase food security along the Moba-Kala axis by reducing the cost of transportation and increasing the profit per unit of produce to farmers through rehabilitating 1 bridge.

Target Population:

All three objectives combine to address the problems of food security for the targeted, vulnerable farming families of South Kivu and northern Katanga Provinces.

For objective one, the target population were the most vulnerable farmers in South Kivu and Katanga Provinces that were not being assisted by other agencies.

For objective two, the target population was the isolated communities of Minembwe who were using increased cultivation as a coping strategy to counter the lack of secure grazing for their cattle.

Objective three targeted the farming communities along the Moba-Kala access who must deliver their produce to market by bicycle.

Geographic Locations of Major Activities:

General distributions were conducted throughout the accessible areas of Moba and Kalemie Territories of northern Katanga Province, and the areas bordering the east and west boundaries of the Kahuzi Biega Forest in South Kivu.

Seed multiplication projects were conducted in Minembwe, the Hautes Plateaux of South Kivu.

Kazinza Bridge, the subject of the rehabilitation project, is located 14km west of Kirungu Town, on the Moba-Kala road.

Summary of Events

The period October 2000 to February 2001 saw the most violence, disruption and insecurity in the program area since the front line stabilized in December 1998. The front line shifted from 120 km south of Moba to 60 km south of Moba. Simultaneously, the city of Moba was attacked from both air and the lake through numerous bombing raids. Almost the entire population was displaced within days of the initial bombardment of 22 October 2000, only days before FHI was set to begin the seed distribution for season 2001A. Only two weeks of work was left on the Kazinza Bridge.

The FHI activities were obviously suspended. Non-local FHI staff were evacuated. All FHI material except basic furniture in the residence was removed to the Catholic Mission in Kirungu. A certain amount was still on board a boat in Moba Port waiting to be unloaded. Most of this material was recovered. A vehicle purchased with USAID/OFDA funding through a previous grant was stolen by the Rwandan Military and still has not been recovered, despite promises by leadership in Kigali to the US Government.

With the first bombardments, the Rwandan Military refused any communications by radio or telephone between Moba and the rest of the world. Because of this, return to Moba was delayed as a flight into Moba could not be coordinated without direct communications. If any national staff was to take communications equipment into Moba, it would have been immediately confiscated. After three unsuccessful tries, the Directors of FHI and ACF-USA, together with other critical staff, were forced by this Rwandan policy to take a boat from Kalemie to Moba in order to ensure that a communications link was established. Only then could program activities recommence.

By this time, the original grant was nearing its end. Most of the funds were left unspent and nothing had yet been accomplished for objectives 1 and 2. The initial visit confirmed that although few families had returned to Moba center, most families remained within the territory and some had begun to return.

A NCE approved by OFDA allowed an extension of the program period from 10 March 2001 to 31 May 2001 and allowed FHI the option of distributing some seed and tools to families in South Kivu in recognition of the reduced numbers of families accessible in Katanga.

Program Performance

Objective 1: To increase food security in communities most affected by displacement by providing 18,000 families with the means to cultivate approximately 10,000 acres of land.

FHI has attempted to measure both the implementation and the impact of this objective. Measuring the impact of a seed distribution in an emergency situation, especially an active complex emergency is an inexact science to say the least, and continues to be an

experimental issue. FHI feels that it is important to continue to develop a method of measuring impact. Below are analyses of both FHI's Implementation and Impact Performance.

Implementation Performance

A total of 19,546 families received a total of 205MT of seed plus 195kg of vegetable seed, plus an additional 3,000 families received a total of 32kg of vegetable seed and 20,000 sweet potato clippings, as opposed to 18,000 families receiving a total of 234MT of vegetable seed.

As for hoes, 22,450 families received one hoe each, whereas 18,000 families were proposed.

In an effort to prevent 3,000 of the above families from eating their seed, they were also given 75MT of maize flour, 1,140kg of salt and 3,423 liters of cooking oil.

Table 1 below shows the numbers of families as well as the amounts of seed and tools distributed by base.

	families	hoes	staple seed(kg)	veg. seed(kg)	sweet pot. clippings
Moba	12,300	12,300	115700	11780	
Kalemie/Nyunzu	5246	5126	34889	240	20000
Bukavu	5000	5024	54155	670	
Total	22,546	22,450	204744	12690	20000

Table 1

Table 2 below show the amount of food that was distributed by site.

ZONE	Groupement	# homes	Maize Flour (kg)	Salt (kg)	Oil (L)
Kabare	Luhago	550	13750	210	368
	Ihembe	550	13750	210	685
Kalonge	Cifunzi	600	14975	220	750
	Fendula	600	15000	230	750
	Caminunu	350	8750	130	435
	Rambo	350	8750	140	435
TOTAL		3000	74975	1140	3423

Table 2

A more detailed account of the seed distribution is given at Annex A.

Seed packages, as warned in the NCE, were smaller than initially hoped in the original grant (10.5kg on average). The primary factor was the lack of peanut seed available in Katanga. In the lower altitude areas of Moba, where 7,000 families were served, only peanut and soy were still in the planting season by the time FHI was able to reenter Moba and procure the seed. Due to the limited amount of peanut seed available and the uncertainty of whether or not families would plant the soy, these families received only 8kg of staple seed, supplemented by 11g of vegetable seed.

In the higher altitude areas around Moba, where peanuts were not a factor, FHI was able to deliver 13kg of staple seed plus 10g of vegetable seed. Because wheat seed is tiny and a small amount will plant a large area, the amount of wheat seed was limited to 5kg per family, estimating that to give more would not increase production, as labor would then become the limiting factor. The balance of the package was bean seed.

Peanut seed availability was also a problem in the Kalemie area. The bean planting season normally ends before the peanut season, so the amount of bean given to each family was limited to 5kg, while 6.7kg of peanuts were given. The balance for some families was irrigated rice seed.

During the implementation of this program, the very isolated and needy town of Nyunzu became accessible by plane, but was still not considered stable enough to have a long-term presence. Transportation to Nyunzu and within Nyunzu was also extremely difficult. Only the AirServ Twin Otter was available, able to carry no more than 800kg of cargo per load from Kalemie to Nyunzu. Once in Nyunzu, the Rwandan Military would not permit civilian bicyclists to transport supplies from the air strip to town and the only other alternative was the Rwandan military vehicle. Unwilling to use the military transport, FHI arranged alternative transport with the local Administrator, though found out later that the local Rwandan Captain had overruled the Congolese Administrator. In view of these obstacles, FHI could not deliver the needed staple seeds to Nyunzu. A compromise was to deliver hoes, vegetable seeds, and sweet potato clippings in a series of flights. Due to security, FHI worked primarily through the Inspector of Agriculture and the local Administrator. Most clippings were distributed and planted. Some clippings were given to the Inspector of Agriculture and the local agronomists to multiply. These clippings then provided more clippings, allowing the continued distribution to an ever-widening selection of beneficiaries. This same group was given 80kg of peanuts to do likewise with.

Objective 1 was by far the largest objective and will receive a much more in-depth analysis. The analysis of Objective 1 does not just describe what families received, but also what they did with the inputs received, and the results of those inputs as well as an exploration into why some areas and seed types were more successful than others. The analysis will first look at impact by geographical areas, then by seed type.

Summary of Impact Analysis of Objective 1

In an effort to quantify time impact of the seed on beneficiary families, FHI systematically selected and followed 300 beneficiary families. These families were visited at least twice each, some three times. Within a month of the distribution, the families were interviewed on the amount of seed they planted versus the amount they had received. A 2 meter by 2 meter square in each field was systematically selected and marked out. Families were requested not to eat any of the produce in this square to ensure the total benefit to the family would be counted. Where possible, a FHI agent visited the beneficiary mid-season to ensure the square was being maintained similarly to the rest of the field. At the harvest, a FHI agent visited, measured the entire field and the amount of harvest from that square. This was then extrapolated to the entire field. We understand that there are numerous factors not accounted for in this methodology, such as the possibility that this square was not representative of the field, and that letting a product mature to harvest will give more benefit than eating green.

As this was FHI's first effort at using such a system, it was the first effort at training the agents, and resources such as transportation were limited, FHI felt it was best to start simply in order to test if this system was even possible. The results therefore are estimations at best, but still give a basis and a general understanding of how families used and benefited from the inputs delivered.

Interviews with beneficiaries support the quantified findings in all but one case. For this reason, FHI will use the data extrapolated from these surveys as a basis for the follow-up analysis. The one case where beneficiary responses contradicted the numerical data will be discussed below.

Due to the large amount of data and the reader's limited time, the analysis will be presented in bullet format.

More detailed data derived from the surveys are included at Annex B.

Impact Analysis of Objective 1 by Geographical Area

For the purposes of analysis, there are five geographical areas based on micro-climates and/or security situations.

Two areas were served from the Bukavu Base, distinguished by two different security situations.

- Kalonge Area (Cifunzi, Fendula, Caminunu, and Rambo Groupements) on the eastern boundary of the Kahuzi Biega Forest, in the Territory of Bunyakiri
- Walungu/Kabare Area (Kaniola, Luhago, Ihembe, and Kajeje Groupements) on the western boundary, in the Territories of Walungu and Kabare

The area served from Kalemie Base is taken as a single area.

Two areas were served by the Moba Base, distinguished by two different micro-climates.

- Moba, Low Altitude (Kasenga, Mulonde, Kala, Kirungu Groupements) – warmer slightly drier climate, altitudes between 800-1200m
- Moba, High Altitude (Lyapenda, Kiluya Groupements) – cooler slightly wetter climate, altitudes between 1200-2200m

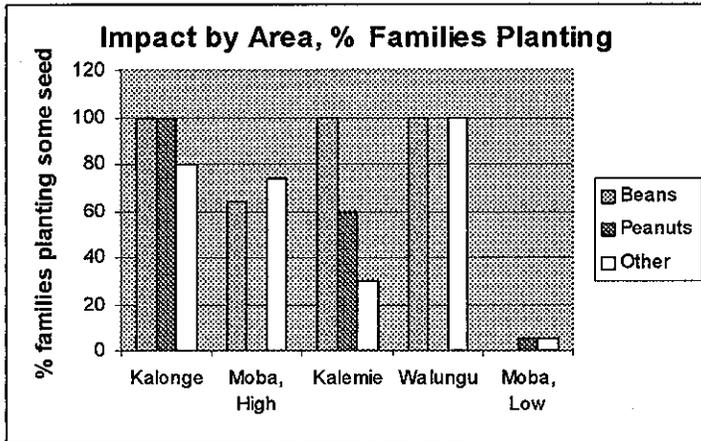


Table 3

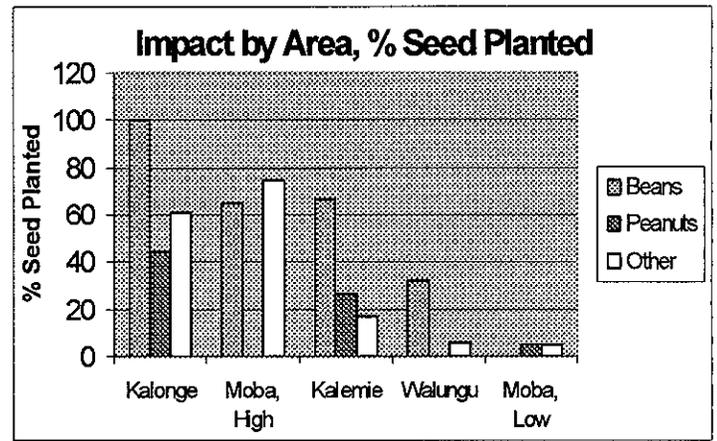


Table 4

Overall, most families outside of the Moba Low Altitude area planted some of the seed distributed. All families interviewed had retained their hoes. The amount each family planted varied by location, with those in Kalonge, Moba High Altitude, and Kalemie planting the largest percentages, and those in Walungu/Kabare and Moba, Low Altitude planting the least. Many families interviewed in the Moba, Low Altitude area and the Kalemie area volunteered that they had set aside a significant portion of the seed for the following season.

Bukavu Base

- In the original proposal, a distribution in South Kivu was not scheduled.
- By the time the Moba Base re-opened, access in Katanga was severely limited but increased around Bukavu. The NCE approved by OFDA allowed FHI to redirect inputs away from Katanga for the Bukavu area.
- Donations from UNFAO in both seed and tools increased the number of families reached.
- Areas near both sides of the Kahuzi Biega Forest had the highest levels of need, but had received little or no aid. At the time of distribution they were accessible and relatively stable.
- After the planting season, half-way to harvest, the Interhamwe and Mai-Mai increased their activity in the forest area. After a couple of incidences involving NGO vehicles and personnel, these areas were called off-limits by the humanitarian community. In accordance with our "Security Indicators and Responses" outlined in the proposal, FHI agreed to follow this limitation. For this reason we have planting but not harvest information for these areas. Harvest information for this area is based on yields in similar areas and the amount of seed known to have been planted.

- Apparently there were subtle signals among the population of increased insecurity that FHI missed, even at distribution time. The farmers on the Walungu/Kabare side of the forest reported that they did not plant all of their seed because of the “incertitude de lendemain” which roughly translates to the uncertainty of the future. They were too unsure of being around to harvest, so they ate the seeds.
- Even though little of the seed distributed in Walungu was planted, every family surveyed had planted at least some.

Seed Protection Packages

- Certain sites in both of the areas served by the Bukavu Base received seed protection packages. Each of 3000 families received 25kg of maize flour, 380g of salt, and .67L of cooking oil.
- There is little to no correlation between seed protection packages and percentages of families planting or the amount planted per family. Indeed, the sites with the lowest and the sites with the highest percentages both received food.
- In many cases the potential impact of the packages was reduced because the food was delivered after the seed, due to UNWFP logistical problems
- For many families, the package was too small to affect their planting behavior. Multiple packages, even if small would have had more impact. Unfortunately, this was not an option.

Kalemie

- All families interviewed in Kalemie planted some bean seed. About 60% of families planted some peanut seed, but very few planted rice seed.
- Approximately 67% of bean seed distributed in Kalemie was planted and 27% of peanut seed was planted, while a very small amount of rice was planted, though many families reported having saved a significant portion of their seed for the following season.
- The low percentages for both the peanut and rice seed was reportedly the late distribution of the seed. However, the rice was an irrigated variety and families reported that they can plant irrigated rice well beyond both bean and peanut planting seasons. Also, as in Moba, the high peanut yields showed that they received the seed within the planting period. Other factors are suspected, such as the ease in eating the peanut seed raw and the uncertainty of the security situation.

Moba

- The impact of the seed varied tremendously between the low and high areas.
- High areas were successful, with 65% of the bean seed and 75% of the wheat seed planted. The yields harvested from this seed were also good.
- Low areas were not successful. Only 5% of the peanut and 5% of the soy was planted. There are numerous reasons suspected for this.
 - The seed was distributed toward the latter end of the planting season, though still within the limits given by the farmers in the pre-distribution investigations. This is supported by the good yields of those who did plant.
 - In the low areas around Moba, the families were displaced for the longest time. Families throughout the territory were displaced with the shifting of the front and

the bombardments of Moba town. Well after the front had been moved back to and beyond its original position, Moba was still being bombed. Because of this, families in the higher areas, more distant from Moba, were able to return home sooner, though lost more material possessions initially. Families displaced for longer periods were more immediately food insecure and more likely to eat the seeds.

- Many villages were burned out in the low areas. In interviews to assess the impact of burned-out villages for a different program, we found an additional factor that discouraged many families from planting. Families that were displaced from the lower areas and had their villages burned ran first to their fields. Once it was clear the bombing on Moba town had subsided, they moved from their fields to Moba town where they currently rent solid shelter. They are still far from their fields, and so are cultivating far less than normal due to the distance, theft in unguarded fields and harassment by soldiers on the road.
- Many families reportedly set aside a portion of the seed for the next season, understanding from the previous distribution that FHI seed gives a higher output than what they normally have.

Impact Analysis of Objective 1 by Seed Type

Seeds for beans, peanuts, soy, maize, rice and wheat were distributed, the types and amounts depending on the appropriateness and availability.

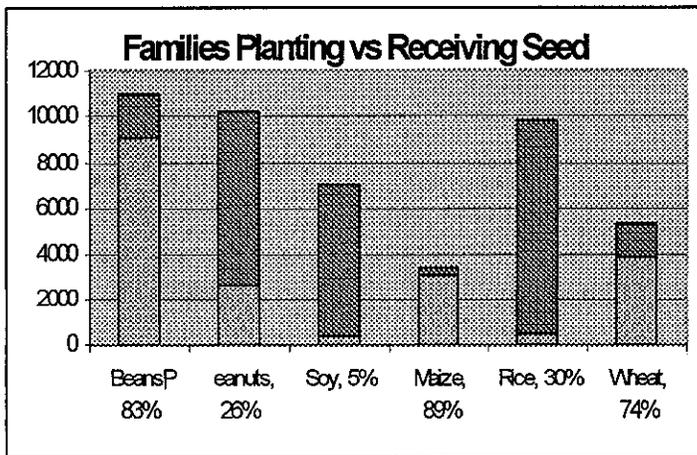


Table 5

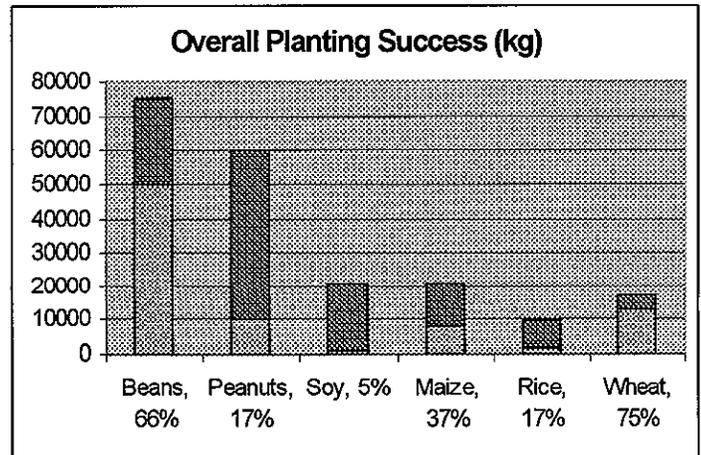


Table 6

Historically, in eastern Congo, an average distribution will have between 65% and 75% of families planting 60% to 70% of the seed distributed.

As can be seen above, the success of each type of seed varied greatly. High percentages of families receiving beans, wheat and maize planted at least some. Low percentages of the families receiving peanuts, soy and rice planted. Although a very high percentage of families planted maize each family planted a very small amount, due to the uncertainty of

security in the areas receiving maize, its relatively long growing cycle and ease of being pillaged.

Overall, beans and wheat did the best

- 60-100% of families planted at least a portion of their seed in all areas receiving beans
- 60-100% of bean seed was planted in each area but Walungu/Kabare areas
- Even in Walungu/Kabare areas, all farmers planted at least some of the bean seed, though on average little more than 30% each
- For those that planted, bean yields were average to high and wheat yields were average

Rice and soy did the worst

- 17 and 5% respectively of the seed distributed was planted
- Many families receiving rice reported saving a significant portion of it for the 2002A season. This will be verified as that planting season approaches
- Only 3kg of soy was given to each as this was a somewhat experimental crop
- Farmers reportedly traditionally grew soy for consumption, but in recent years have replaced it with peanuts as that crop has a better market. Due to a lack of peanut seed available, FHI supplemented peanut seed with soy seed. Those few that planted their soy received average production rates. There is evidence that some families who did plant, supplemented their ration with soy from other families' rations to plant.

Peanut and maize success was in the middle, with lower than average results

- Peanut results varied wildly by area, ranging from 100% of the families planting some peanuts in Kalonge, to 5% of the families in Moba planting some
- The amount of peanut seed planted also varied, with 44% of distributed seed planted in Kalonge to 5% in Moba
- The peanut seed was distributed within the planting window given by farmers in interviews before the seed procurement, albeit at the latter end of the window. Ironically, a higher percentage of beans were planted than peanuts, though peanuts have a later planting window. This coupled with the fact that the peanuts that were planted in Kalemie gave some of the highest yields leads us to believe that it was not necessarily the lateness of the distribution that created such low planting percentages. Rather the high levels of immediate food insecurity, coupled with the high munchability of peanut seed, are suspected as the primary factors.
- Maize was only distributed in the areas near the forest where the rainy season is the longest.
- High numbers of families planted at least some maize, varying from 80 to 100% by area.
- The amount of maize planted by each family varied dramatically by location, with 61% of distributed maize being planted in Kalonge and only 6% in the Walungu/Kabare area. Farmers did report having planted a small amount of their own maize seed, though FHI was not able to measure this amount.
- Maize has the longest growing cycle of any crop, plus it is the most easily pillaged from the fields. As the areas with the lowest planting percentages were much more insecure, this is the reason attributed to the difference. Farmer interviews confirm this.

- As all areas where maize was distributed were called off-limits to humanitarian access shortly after the initial follow-up survey and remains off-limits due to increased Interhamwe activities, we have no harvest results.

In summary, the overall results of the distribution were below average due to the myriad difficulties faced by FHI, but outside of FHI's control. That being said, certain areas did have higher success while the dismal results in areas like the low altitude areas around Moba brought the overall average down.

The high altitude areas around Moba, the Kalonge area had good results and FHI feels positively impacted the food security of those areas. The Kalemie area had slightly below average results. The Walungu area showed many people planting, but in small amounts. In the low altitude areas around Moba, the results were insignificant.

Bean, maize and wheat appeared to be the most successful. Peanuts had mixed success. Soy and irrigated rice did the worst, though many families reported retaining rice seed for the following season.

Hoes were very successful everywhere and all families interviewed had retained their hoes. These tools will continue to positively affect the food security of the beneficiary families, not only increasing the amount of terrain they can cultivate, but also providing an opportunity for wage labor in some areas.

Objective 2:

To increase the quality of seed available in Minembwe territory of South Kivu by assisting three local organizations in re-establishing seed multiplication projects.

The local organizations in Minembwe had less organizational capacity than originally estimated. For this reason, FHI selected six organizations, each to receive half as much input as originally planned. The major training costs were fixed, so this added little financial cost, but increased the supervisory needs.

Each partner was trained in a formal seed multiplication course sponsored by FHI. Other agencies working in agriculture in South Kivu were invited. One international organization and two local groups sent representatives, in addition to the original six organizations.

The seminar included three days technical information about multiplying seeds, presented largely by INERA, watched by the obligatory SENASEM representative (governmental body charged with seed issues). Following the technical lessons, FHI presented material about general management and accountability.

When appropriate ground had been selected and obtained, FHI delivered the tools and the first of the seeds to be planted. Once the terrain had been completely prepared, the rest of the seed was delivered.

New local regulations in South Kivu state that a SENASEM representative must visit a field a minimum number of times spanning from the initial planting until the harvest. This supposes that the local SENASEM office is functional with representatives living locally. The only SENASEM office in South Kivu with representatives is the office in Bukavu. For those sites in Minembwe, we were required to fly a representative, along with a FHI agronomist to the sites, pay for his room and board, plus a fee of \$30 per day (for comparison, normal salaries are \$3 per day) of work, and \$15 per day of travel. We were required to do this three times during the season.

These policies are strictly to extract more money from humanitarian agencies as no commercial multiplier could possibly support these costs. There is no gain to the process by their attendance, and the requirements inhibit the sustainability of local efforts to produce certified seed. For this reason, this will be FHI's last attempt at seed multiplication projects, regardless of the need.

Table 6 below gives the amount of inputs given to each partner.

Partner	Maize (kg)	Beans (kg)	Potatoes (kg)	Hoes	Machete	Total Ha	Labor(\$)
ADEPAE+AFECO PE	30	100	550 (500)	32	9	3	180
37 CADC +AFEC	45	100	100	32	9	3	180
EVOMI	45	75	50	27	8	2.5	150
UGEAFI	30	75	500 (300)	27	8	2.5	150
Total	150	350	1200 (950)	118	34	11	660

Table 6

All seed for multiplication purposes was purchased from INERA, the governmental seed research agency, as they were the only supplier of pure, non-hybrid seed available and the government restricts the imports of seed. Most seed was good, but the potato seed was found to be very poor. It is suspected that INERA ran out of their stock of potato seed, so sold us potato seed they bought from a normal vendor. Whereas we had planned to plant 1200kg of potato seed, after taking out the defective seed, we were left with only 950kg. INERA then reimbursed us for the bad seed. The shortfalls were spread among the agencies receiving the most.

For the initial labor to prepare a field, FHI paid for half of the labor. The beneficiaries and the organization provided the other half.

Two sets of partners initially planned to work together as a single project, but during implementation, divided out the materials between themselves and worked separately.

On the first visit after the seed had been planted, the FHI agronomist reported that a fungus was attacking the potatoes. After a discussion with the local OFDA representative, it was agreed that FHI would purchase an approved fungicide with non-OFDA funds. This was purchased and sent to the partners along with the equipment necessary. The FHI agronomist accompanied the materials and taught the partners

instructions how to apply it. After the departure of the FHI agronomist, DGM, the local government security representative, seized the materials and wouldn't release them until a bribe was paid. With the support of the Inspector of Agriculture, FHI was able to get DGM to release the materials a couple of weeks later. This delay in the application of the products severely reduced the yield.

A combination of ill timed heavy rains, the DGM seizure, inexperience on the part of the partners, the extremely high altitude, and social difficulties in keeping cows out of the fields all led to low yields. It is expected that with the experience gained in the first season, yields will be higher in the second season.

Below in Table 7 is a summary of Table 8, giving the overall results. Table 8 gives the harvest results and the disposition of those harvests, broken out by seed type and partner.

Summary	
Received	1500
Planted	1439
Harvested	3967
Distributed	2553
Replanted	1414

Table 8

Partners	Maize (kg)			Beans (kg)			Potatoes (Kg)			Ben.s
	Harv.	Dist.	Replant	Harv.	Dist.	Replant	Harv.	Dist.	Replant	
ADEPAE	350	175	175	200	100	100	988	657	331	73
AFECOPE	63	33	30	12	0	12	150	90	60	41
37 CADC	154	90	64	25	0	25	300	250	50	31
AFEC	15	0	15	20	0	20	180	135	45	15
EVOMI	350	200	150	50	0	50	210	128	82	16
UGEAFI	250	150	100	0	0	0	650	545	105	41
Total	1182	648	534	307	100	207	2478	1805	673	217

Table 7

While the overall harvest results were low, enough high quality seed was harvested that an almost equal amount was set aside by each agency to replant in the next season. Additionally, a certain amount was distributed among the more vulnerable families in the community to begin improving the generally quality of seed in the area.

Visual inspection of the multiplied seed when compared with other produce grown in the area demonstrably showed the much better quality of the multiplied seed. Not only were the bean pods and ears of maize much larger, but the plants showed more resistance to local diseases. Potatoes were virtually non-existent, so this input of nearly two tons of potato seed into the local community should begin to show benefits in the next season.

Through interviews with the partners, we predict that five of the six organizations will continue to multiply seed through at least one more season. In true Congolese fashion, they will ignore the SENASEM requirement of needing to pay for their visits, and will

simply sell the seeds locally, advertising them as improved seed, and just not have the paperwork.

The sixth agency, AFEC, gave us difficulties right from the distribution. It is suspected that both AFEC and AFECOPE had a much higher yield of both maize and beans, but refused to report it. Unfortunately, the day the plane was scheduled to take the agronomist to observe the harvest in Minembwe, it was diverted for an evacuation. For this reason, we were unable to ensure the maize and bean harvests were accurately reported. It is suspected the seed was distributed among a portion of the members.

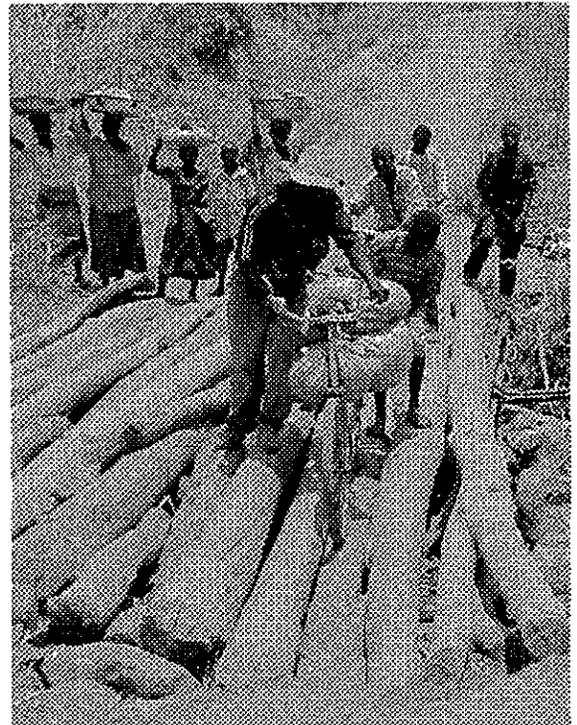
Objective #3: To increase food security along the Moba-Kala axis by reducing the cost of transportation and increasing the profit per unit of produce to farmers through rehabilitating 1 bridge.

This bridge was completed in March 2001, though final inspection showed the engineer had done a poor job of cutting and placing the wood planks. Proper planks were purchased and placed in June.

Below are before and after photographs of the bridge.

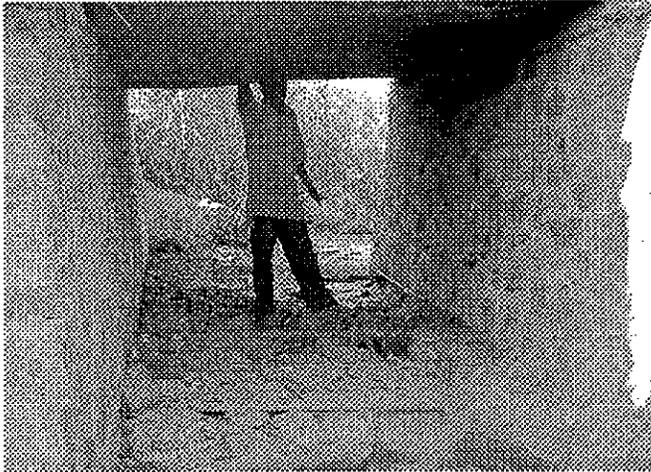


View below bridge showing fallen logs blocking the flow of water and worsening erosion.



View from above showing the difficulty in passing over the bridge with a loaded bicycle.

Originally, a pick-up truck was sent to Moba to assist with the construction of this bridge as the materials needed in the construction of the bridge would need to be transported from the boat in Moba Port (1000ft below), up the rotten escarpment, to the warehouse in Kirungu. Then from the warehouse to the bridge 14km outside of town. Unfortunately, this vehicle was stolen by the Rwandan military and not reimbursed. Instead, each morning we hired two teams of three men each to push carts full of enough cement for the day's work across a tremendously hilly terrain to the bridge site.



View from below showing the clear passage for water to flow.

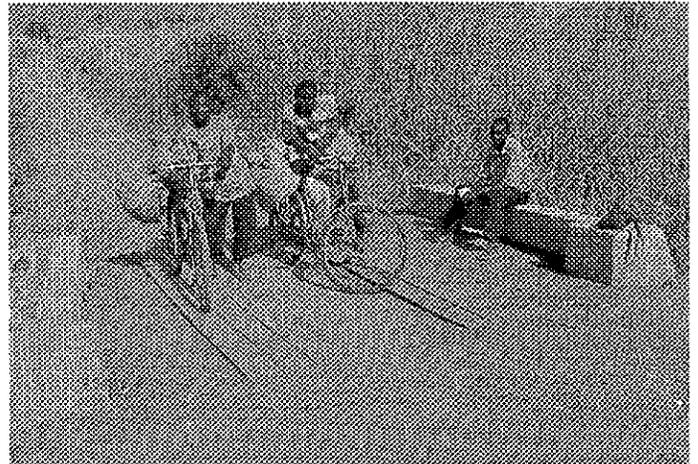
Locally cut boards were used to provide a surface conducive to both bicyclists and trucks. The construction was engineered to allow the bridge to support up to a loaded 6 ton truck.

Bicyclists can now coast down the hills too either side without dismounting, pass easily over the bridge and use the momentum to pass quickly up part of the hill on the other side. Previously, bicyclists were forced to walk their bikes down one slope, somehow manage to work the bike slowly across the bridge, and then start up the next slope without momentum. The the bridge will now save them a minimum of 30 minutes each time they pass the bridge with a load. If they trade the grain for goods in Moba Port to take back to the village, they will save 1 hour on a round trip voyage.

Bicyclists working from village not far beyond the bridge might then be able to increase from two trips per day to three trips per day. Those from farther areas would have less impact per day, but still some overall impact.

Approximately 100,000 families live on the road served by this bridge.

The area beneath the bridge was cleared of all debris. The stone from the old, fallen foundation was reused in the new foundation. The floor was lined with stone to prevent erosion, and the walls were extended to prevent water from getting behind them and repeating the same problem.



View from above showing the final condition of bridge surface.

Security Considerations

When choosing this project, FHI considered the security implications of improving the transportation infrastructure in an operational area. We surveyed the three roads serving Moba.

The northern axis was inaccessible as it was insecure with allies from both sides constantly pillaging the villages. Not only was there no access, there was little bicycle traffic, so there would be little impact by improving the roads or bridges.

The southern axis, leading toward Pepa and Lyapenda, had by far the most commercial/bicycle traffic and the worst bridges. Unfortunately, this also had a significant amount of military traffic. This road was the strategic link between Moba, the most southern Congolese port on lake Tanganyika and the front. For this reason, FHI avoided this road. This decision was proven correct as during the project period, the Rwandan seized a half dozen or so tanks and armored vehicles from the Zimbabwean army and brought them up that road. Any bridge we might have built would have been destroyed by the weight of the tanks. This road was also used to transport tens of thousands of soldiers, their equipment and their supplies during the offensives of late 2000.

The Moba-Kala Axis, on the other hand, had significant numbers of bicyclists carrying produce and negligible military traffic. This road eventually connects with the road leading to Kalemie which may potentially make this road a strategic road, but the Kalemie road has been controlled by the Mai-Mai and FAC since the start of the war and the military use the lake instead. The high amount of small-farmer producing passing over the bridge and the lack of military traffic convinced FHI that to rehabilitate this bridge would serve the farmers but have no effect militarily.

Financial Explanations

The ECARP Final Financial Report Summary is included at Appendix C.

Expenditures for Objectives 1 and 2 are within 9% and 5% of the budgeted costs.

Expenditures for Objective 3, on the other hand were only approximately 25% of the original budget. This was due largely to the price of cement dropping from \$15 per sack to approximately \$11. Other factors were: being able to find a Congolese engineer able to supervise the projects as opposed to importing one, and being able to salvage more of the original bridge materials than originally thought possible.

Shared costs were exceeded by 23%. This is primarily due to the extended length of the program. During the period from the evacuation from Moba until the reopening of the Moba office, there was little program activity, but legally, we were expenses that could not be immediately stopped. Costs of rental for the house and office in Moba continued.

All personnel contracts in Moba except one were suspended to reduce costs, though small payments were still required by law. Expenses were incurred in trying to re-enter Moba unsuccessfully twice. While monitoring the situation, trying to re-enter Moba, personnel and facility rental costs were incurred in Bukavu.

When the program was able to restart, it was in three bases instead of only in Moba, so extra warehouses and offices were required in the implementation.

The total expenditures are within 1% of the budgeted amount. FHI did incur expenses beyond the budget, but charged those to FHI's internal account.

The NICRA charges are not included in Annex C, as they will be determined after the 2001 financial audit.

**ANNEX A-1
2001B Seed Distribution Summary**

	Type and Quantity of Seed (kg/g)											Sweet Pot. Clippings
	families	hoes	beans	peanuts	maize	soy	wheat	rice	onion	cabbage	amaranth	
Moba	12300	12300	42400	35000		21000	17300		51000	26500	52500	
Kalemie/Nyunzu	5246	5126	9996	15068				9825	27110	16993	14235	20000
Bukavu	5000	5024	23000	10170	20985				7500	7500		
Total	22546	22450	75396	60238	20985	21000	17300	9825	85610	50993	66735	20000

Total Staple Seed	204744	kg
Total Vegetable Seed	203.3	kg
Total Clippings	20,000	each

2001B Seed Protection Package Summary

	families	Maize Flour (kg)	Salt (kg)	Oil (L)
Bukavu	3000	74975	1140	3423

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ANNEX A-2

Details of Kalemie/Nyunzu Seed distribution 2001B

Axis	Site	homes	hoes	Type and Quantity of Seed (kg)						Sweet potato clippings
				beans (kg)	peanuts (kg)	rice (kg)	onion (g)	cabbage (g)	amaranth (g)	
Nyunzu	Amisi	344	344	1720	2305		1720	1720		
	Tundwa	273	273	1365	1848		1365	1365		
	Nsango	613	613	3065	4107		3065	3065		
Lake Side	Mutakuya	391	391			3910	1955	1955		
Kabimba	Tabac	1152	952		300	5510	6410	5510	380	
Kalemie	CNT	973	973	3776	6188		4635	973	4865	
Nyunzu	Nyunzu	1500	1500		80		7500	2000	7500	20000
Special Groups			80	70	240	405	460	405	1490	
Totals		5246	5126	9996	15068	9825	27110	16993	14235	20000

Total Staple Seed	34889 kg
Total Vegetable Seed	58338 g
Total Cuttings	20000 each

ANNEX A-3

Details of Bukavu Seed distribution 2001B

ZONE	Groupement	Partner	#homes/hoes	Type and Quantity of Seed				
				beans	peanuts	maize	onion	cabbage
Walungu	Kaniola	PIAD	400				2000	2000
		SODEKA	400				2000	2000
	Kaniola	AMI	400	2800		2400		
Subtotal			1200	2800	0	2400	4000	4000
Kabare	Luhago	AEO	550	3929		3300		
	Ihembe	ASOP	550	3921		3300		
Subtotal			1100	7850	0	6600	0	0
Kabare	Kajeje	ACAM	350				1750	1750
	Kajeje	CODEKA	350				1750	1750
Subtotal			700	0	0	0	3500	3500
Kalonge	Cifunzi	GRAM	600	3000	6000	3000		
	Fendula	GRAM	700	5000		4690		
	Caminunu	GRAM	350	1750	3500	1750		
	Rambo	Ass. Femmes	350	2500		2345		
Subtotal			2000	12250	9500	11785	0	0
Total			5000	22900	9500	20785	7500	7500
Special Groups		Radio kahuzi	15	50	500	100		
		CEFEVO Miti	9	50	170	100		
		TOTAL	24	100	670	200		
Grand Total			5024	23000	10170	20985	7500	7500

Total Staple Seed	54155 kg
Total Vegetable Seed	15000 g

ANNEX A-4

Details of Moba Seed distribution 2001B

Type and Quantity of Seed (kg)									
Site	# localites	#homes/hoes	beans (kg)	peanuts (kg)	Soy (kg)	wheat (kg)	onion (g)	cabbage (g)	amaranth (g)
Lyapenda	21	3255	26040			16275	16275	16275	
Kiluya	16	2045	16360			1025	10225	10225	
Kasenga	8	1258		6290	3774		4403		9435
Mulonde	18	1399		6995	4197		4896		10493
Kala	25	1987		9935	5961		6955		14902
Kirungu	21	2356		11780	7068		8246		17670
Total	109	12300	42400	35000	21000	17300	51000	26500	52500

Total Staple Seed	115700 kg
Total Vegetable Seed	130000 g

ANNEX A-5
Seed Protection Packages

ZONE	Groupement	# homes	Maize Flour (kg)	Salt (kg)	Oil (L)
Kabare	Luhago	550	13750	210	368
	Ihembe	550	13750	210	685
Kalonge	Cifunzi	600	14975	220	750
	Fendula	600	15000	230	750
	Caminunu	350	8750	130	435
	Rambo	350	8750	140	435
TOTAL		3000	74975	1140	3423

ANNEX B
2001B General Harvest Analysis

Planting Success By Weight		Beans			Peanuts			Soy			Maize	
		Distributed	Planted	% planted	Distributed	Planted	% planted	Distributed	Planted	% planted	Distributed	Planted
Bukavu	Kalonge	12350	12350	100	10170	4474.8	44				11985	7311
	Walungu/Kabare	10650	3408	32							9000	540
Kalemie	Kalemie	9996	6664	67	15068	4122	27					
Moba	High Areas	42400	27645	65								
	Low Areas				35000	1750	5	21000	1050	5		
	Total	75396	50067	66%	60238	10346.8	17%	21000	1050	5%	20985	7850.85

Planting Success By family		Beans			Peanuts			Soy			Maize	
		Received	Planted	% planted	Received	Planted	% planted	Received	Planted	% planted	Received	Planted
Bukavu	Kalonge	2000	2000	100	950	950	100				2000	1600
	Walungu/Kabare	1500	1500	100							1500	1500
Kalemie	Kalemie	2203	2203	100	2260	1356	60					
Moba	High Areas	5300	3392	64								
	Low Areas				7000	350	5	7000	350	5		
	Total	11003	9095	83%	10210	2656	26%	7000	350	5%	3500	3100

Harvest Results		Beans			Peanuts			Soy			Maize	
		per 2x2m	total ha.	total harv	per 2x2m	total ha.	total harv	per 2x2m	total ha.	total harv	per 2x2m	total ha.
Bukavu** (estimated)	Kalonge	<i>0.47</i>	<i>45</i>	<i>52312.5</i>	<i>0.5</i>	<i>14.3</i>	<i>17812.5</i>				<i>0.25</i>	<i>72</i>
	Walungu/Kabare	<i>0.47</i>	<i>33.75</i>	<i>39234</i>							<i>0.25</i>	<i>5.4</i>
Kalemie	Kalemie	0.33	49.6	40893	0.5	20.3	25425					
Moba	High Areas	0.6	127.2	190800								
	Low Areas				0.38	7.9	7481.25	0.26	2.94	1911		
	Total Harvest(kg)			323240.1			50718.75			1911		

**Note: Figures in italics are estimations based on yields in similar areas, and planting data. Insecurity prevented access to obtain actual data

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ANNEX B
2001B General Harvest

Planting Success By Weight		Rice				Wheat		
		% planted	Distributed	Planted	% planted	Distributed	Planted	% planted
Bukavu	Kalonge	61%						
	Walungu/Kabare	6%						
Kalemie	Kalemie		9825	1684	17			
Moba	High Areas					17300	12975	75
	Low Areas							
	Total	37%	9825	1684	17%	17300	12975	75%

Planting Success By family		Rice				Wheat		
		% planted	Received	Planted	% planted	Received	Planted	% planted
Bukavu	Kalonge	80						
	Walungu/Kabare	100						
Kalemie	Kalemie		1543	463	30			
Moba	High Areas					5300	3922	74
	Low Areas							
	Total	89%	1543	463	30%	5300	3922	74%

Harvest Results		Rice				Wheat			
		total harv	per 2x2m	total ha.	total harv	per 2x2m	total ha.	total harv	
Bukavu** (estimated)	Kalonge	<i>45000</i>							
	Walungu/Kabare	<i>3375</i>							
Kalemie	Kalemie		no data						
Moba	High Areas				0.2	313.76	156880		
	Low Areas								
Total Harvest(kg)		48375					156880	581,125	

**Note: Figures in italics are e

ANNEX C

ECARP Final Financial Report

Period: August 2000 to May 2001

Line Item	Line Item Description	Budget Amount (US\$)	Actual Direct Costs (US\$)	Budget Remaining Amount (US\$)
OBJ1A	Seeds/Tools Distribution Season A	251,965	228,867	23,098
OBJ2A	Seeds Multiplication Project A	8,980	8,546	434
OBJ3A	Infrastructure Rehabilitation Project A	12,930	3,212	9,718
ECARP	Costs shared by all objectives	123,224	151,984	(28,760)
	Total Expenditure on ECARP	397,099	392,609	4,490

Notes:

1. The actual direct costs does not include NICRA which will be determined after 2001 financial audit.
2. This project was initially designed to come to an end early February and but it was extended to end of May2001. This extension stretched the budget of costs shared by all objectives such as personnel, facility rentals and communication costs.