

Hurricane Felix

Dry Season Cultivation on the Rio Coco

Project Update
January 31, 2008



Prepared by: Christian Reformed World Relief Committee, Canada



1. Background

Hurricane Felix made landfall as a category 5 hurricane at 8:00am EDT on September 4. Most of these communities are made up of indigenous Miskitos who subsist on low input agriculture. The hurricane's winds and rainfall delivered a fatal blow to the rice harvest that typically begins in September. Fallen trees, flying debris and flooding left the harvest submerged and rotting.



2. Project Purpose

The purpose of this project is twofold. The first purpose is to mobilize farmers to plant a rice crop during the window between the end of the Hurricane season and the end of the “Apante” (dry season). The second purpose is to promote MIDPA (“Mayordomia de Patio”), a system of intensive agriculture that AMC has been successfully promoting in other parts of the country. Essentially, the idea is to intensively grow vegetable and medicinal plants within close access to the home and away from the floodplain. Both strategies will require irrigation and intense management that what is typically applied in their traditional cropping cycles. The ultimate goal is that the communities will be in a better position to mitigate the risk of flooding with respect to food security in the future

3. Project Update

a) Feasibility Study

- A feasibility study was conducted by Dr. Lazaro Naruis (National Institute of agricultural technology) and Rolando Samaroro (Centro Experimental de los Cocos) in November.



- It was recommended to involve the Ministry of Agriculture (MAGFOR) in the research and testing
- The varieties of rice recommended are ‘INTA Dorada’ and ‘ANAR 97’ donated by MAGFOR.
- A demonstration plot in Waspam was also recommended
- Three seeding methods were also recommended to be tested (in line, traditional and broadcast)

b) Training

- Two AMC technicians spent a week being trained at the ‘Centro Experimental de los Cocos’
- A technician from ‘Centro Experimental de los Cocos’ spent two weeks with the technician in the Rio Coco
- The AMC technicians did non formal training in the communities with the local leadership



c) Land in Production and Community Participation

	# families	# hectares	Land prep (days)	Seeding (hrs)	Vegetables (Hectares)	# of women
Andres	251	5	1	2	1	6
Boom	68	8	2	4	1	6
Klampa	109	6	2	3.5	1	6
Sawa	198	8	3	3	1	6
Waspam		18				

- As opposed to just involving 30 families per community, each community decided to have 100% participation with the entire community. Massive work brigades of both men and women were organized
- AMC also distributed 18 lbs of rice seed (also supplied by MAGFOR) to 10 additional communities for 370 individual family plots
- AMC also planted 18 hectares in a AMC managed demonstration plot in Waspam
- Vegetables promoted include melons, squash, cucumber, tomatoes, cabbage, carrots, peppers, onions

d) Early successes and challenges overcome

- The biggest challenge was to convince the communities to plant rice as the dry season was approaching. By working closely with community leaders, AMC and the communities agreed the share the risks.
- The cleaning of the rice land coincided with the bean planting. This is one of the reasons why the community leaders decided to make the projects a community effort. In this way, many hands were available to prepare the land in just a couple of days and the seeding was done in hours (see production table)
- Growing rice under intensive cultivation is quite different from traditional methods. An agreement with the ‘Centro Experimental de los Cocos’ made the transfer of technology possible by a two way exchange between technicians from both institutions.

e) Concerns

- Late planting due to an unusual amount of heavy rainfall December delayed land preparation until January. This pushed back the planting cycle by more than a month and the rice crop could not take advantage of the December rains. This means that more irrigation will be required if the rains stop as normal by the middle of February.
- It is unknown what will be involved in terms of pest management in the dry season with a crop under irrigation.



4. Financial Information.

a) Projected Expenditures vs. Actual to Date

	Budget US\$	Actual US\$
Purchase of rice and vegetable seeds	\$1,757	2,243.70
Purchase and installation of irrigation equipment	\$12,980	5,363.93
Purchase of basic tools	\$2,508	2,595.57
Training of farmers	\$6,912	2,669.10
Supervision and follow-up	\$1,405	572.57
Field support	\$4,350	2,258.68
total	\$29,912	\$15,703.55

Disbursements to AMC	\$20,000.00
Expenses to date	\$15,703.55
Difference held by AMC	\$4,296.45

b) Explanation of Variations

- \$20,00.00 of the \$29,703.55 has been advanced to AMC
- The project is at its midway point and the expenses are approximately on track
- Seed prices were 20% higher than budgeted, will be compensated by some savings in other areas.