



Intsormil

TRIP REPORT

CHOLECTUCA, HONDURAS

by

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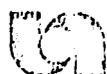
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Institute of Agriculture and Natural Resources
University of Nebraska-Lincoln



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Field work including interviews of families previously contacted in June - July 1981 in Pavana and Corpus was accomplished. This completed interviews both in the planting and harvest season. The results of these interviews are now published in a dissertation by Eunice McCulloch at Mississippi State University. The title is "Optimum Resource Use or Inadequate Social Strategies: A Systematic Assessment of Social Factors and Diet of Subsistence Farmers in Southern Honduras", May 1983. A copy of this dissertation is available in Dr. Leng's office or Mary Futrell's office.

Children age 5 and under living in Pavana and El Corpus were weighed, measured and blood and hair taken for analysis of vitamin A, immunoglobulins, hemoglobin, zinc, copper, iron. These results have been conducted for three different years (Table A). In May 1982, A.I.D. published a new policy paper on nutrition. They stress the importance of monitoring and evaluating nutrition impacts of projects that will affect nutrition, food consumption, or food production. Through this research we have identified the causes of malnutrition in both the lowlands and mountain areas of southern Honduras. We cooperated with Dr. Mario Caceres with the Ministry of Public Health Laboratory in Tegucigalpa by actually analyzing vitamin A and immunoglobulins in their laboratories. They were very anxious to use this data in their national nutrition planning. Anemia is a widespread problem and has been recently found to be prevalent in areas such as Honduras where cereals and beans are the staple diet (Table B). We find the diets of the southern Honduran very low in ascorbic acid which if added to the diet in the form of fresh vegetables would enhance bio availability of the iron. Many of the women interviewed were interested in vegetable gardens as well as the Ministry of Agriculture.

The corn crop in southern Honduras was a failure. Because of the severe drought, we found that even the sorghum yield was low. Beans also were very scarce and expensive. This was just after harvest where there should have

been an abundance of grain. Instead we interviewed many families that were eating only tortillas and salt. Here is an excellent opportunity for the agronomist to work with the people on other varieties of sorghum that produce more food.

Other factors influence the nutritional status of a community and if ignored we would never know if better sorghum varieties introduced into the village would improve the nutrition of its people. We contacted Dr. David Harms, who is a Professor of Parasitology at the Medical School. He, along with two Corps workers accompanied us to the villages and stool samples for each village and under was examined for parasites. This was still the dry season and they did not expect to find many parasites, especially in the higher elevation areas. However, nine different parasites were identified and some children in Corpus had as many as seven different parasites. This data was also shared with the Ministry of Health for future health planning.

We spent some time with Dan Mecklenstock and observed the testing of different varieties of sorghum for making tortillas and also for taste testing. We are continuing to update slides and methods of all products made from sorghum in Honduras. We have documented amounts with both weights and measures and these are available to other INTSORMIL members.

A complete report on all the nutritional status studies as well as biochemical analysis will be published soon in a dissertation by Robert Jones.

While observing the preparation of tortillas and other products in several of the homes, I was asked by the Food Science Researchers at Michigan State University to document the cooking and preparation of beans. This was very important to their research as a way of cooperating with the Beans and Cowpeas Project. Samples of beans were also collected for them.

Several women's organizations have also contacted us and we are sharing data concerning women's activities in Honduras that were documented in interviews over a three year period. These results point up the need for nutrition education, vegetable gardening, clean water, health education, and eradication of parasites which was one of our research objectives.

TABLE A.

MALNUTRITION IN CHILDREN OF PAVANA AND CORPUS DURING TWO SEASONS

Location	Harvest (1982)			
	Malnutrition classification (Gomez)*			
	Normal	First degree	Second degree	Third degree
	----- % -----			
Pavana	18.50	52.00	18.50	11.00
Corpus	20.50	50.00	27.50	2.25

Location	Planting (1981)			
	Malnutrition classification (Gomez)*			
	Normal	First degree	Second degree	Third degree
	----- % -----			
Pavana	35.0	36.0	24.0	5.0
Corpus	33.0	28.0	33.0	6.0

* Gomez Classification

Normal	Normal
I. Slight Malnutrition (90-76 Percent of Standard)	Delgada
II. Moderate Malnutrition (75-61 Percent of Standard)	Desnutrida
III: Severe Malnutrition (Less than 60 Percent of Standard)	Muydesnutrida

Location	Harvest (February 1983)			
	Malnutrition classification (Gomez)*			
	Normal	First degree	Second degree	Third degree
	----- % -----			
Pavana	37.0	44.0	16.0	3.0
Corpus	39.0	37.0	24.0	0.0

TABLE B.

HEMOGLOBIN DISTRIBUTION OF CHILDREN FROM PAVANA
AND CORPUS ACCORDING TO AGE GROUP

Age	Location	Hemoglobin status		
		Defi- cient ^a	Mar- ginal ^b	Accept- able ^c
		- - - - -	%	- - - - -
0 to 23 mo	Corpus	25	25	50
	Pavana	0	17	83
2 to 5 yr	Corpus	24	20	56
	Pavana	0	20	80
6 to 12 yr	Corpus	6	18	76

^a <9 g/100 ml for 0 to 23 mo and <10 g/100 ml for 2 to 5 yr and 6 to 12 yr groups.

^b 9 to 9.9 g/100 ml for 0 to 23 mo and 10 to 10.9 g/100 ml for 2 to 5 yr and 6 to 12 yr groups.

^c \geq 10 g/100 ml for 0 to 23 mo and \geq 11 g/100 ml for 2 to 5 yr and 6 to 12 yr groups.