



Intsormil

TRIP REPORT

SOUTHERN HONDURAS

BY

KATHLEEN M. DeWALT AND ALLYN WRITESSEL
UNIVERSITY OF KENTUCKY

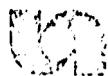
APRIL 11, to MAY 4, 1983

CONTRACT NO.: AID/DSAN/XII-G-1049

☆ International
Sorghum/Millet

☆ Collaborative Research
Support Program
(CRSP)

A Research Development Program of the Agency for International Development, Participating Land-Grant Universities, Host County Research Agencies and Private Donors.



Institute of Agriculture and Natural Resources
University of Nebraska-Lincoln



INTSORMIL TRIP REPORT - Kathleen M. DeWalt and Allyn Writsesel

Southern Honduras - April 11 to May 4, 1983

The Food Use Component of the University of Kentucky's Farming Systems Study in Honduras

CIMMYT and AID have recently emphasized the need to include dietary and nutritional components to farming systems research in subsistence or partially subsistence systems. The purposes of such research include three basic questions which concern us. The first is to provide information on the uses and methods of preparation of basic food stuffs in order to insure that new varieties of seed developed have the characteristics which make them acceptable foods for the families of small farmers. The second is to assess the impact of alternative farming systems already being followed on diets and the nutritional status of farming communities. Such information is important in predicting the probable impact of agricultural innovation on household diets and nutritional status. Finally there is an important need for baseline information on the dietary alternatives and nutritional status which is crucial for evaluating the effect of agricultural innovation on the quality of life of small farm families in the future. Data necessary for the evaluation of such projects has been sadly lacking in the past leaving no base for comparisons of quality of life after innovations have been introduced.

We have now collected dietary and nutritional information on households in six communities with different ecological settings and farming systems in the sorghum growing region of Southern Honduras. For three of these communities we have data from both the harvest season and the dry pre-harvest season. In the fifth and fourth communities data for the dry season only exists. Our Honduran field assistant will resurvey these communities late in the summer months after the first harvest. The sixth community will not be resurveyed due to problems of internal factionalism within that community. Community five was added to the sample to replace community six. They are ecologically similar.

Purpose of the Present Trip

The purpose of the field trip undertaken from April 11, 1983 to May 4, 1983 was to resurvey families in three communities: the lowland community of El Tular, (including the hamlets El Papalon and Pedrerito) in the municipio of Nacaome, Department of Valle and two communities in the municipio of Pespirc, Department of Choluteca, El Naranjito and Cacautare. These three communities were surveyed previously during the summers of 1981 and 1982. This was the first time we have surveyed them during the dry season.

In this field trip we recontacted approximately 130 families in three communities conducting dietary recall, market basket surveys and collecting growth data (height, weight and arm circumference) on all children under six years of age. We also interviewed female household heads concerning use of basic grains in the last year.

During this trip we visited with Dan Meckenstock in Choluteca and the experiment station at La Lujosa. Dan's program, to our untrained eyes, seems to be going well with some interesting results working with local varieties for use in hillside swidden agriculture. A recent fire at the station does not seem to have significantly set Dan back but is a cause for concern.

While we were in Southern Honduras, three other INTSORMIL P.I.'s were also visiting: Drs. Ralph Clark (Nebraska), and Lynn Gourley and Henry Pitre (Mississippi State). Henry and I discussed the possibility of collaboration between an entomology student at Mississippi State and Susan Duda, an anthropology student from Kentucky now finishing a study of slash and burn sorghum agriculture in one of our research communities. We made tentative plans for an evaluation of the effect of early and late burning and non-burning of fields on insect populations during the growing season. Clark, Gourley and Pitre accompanied us on a brief trip to the research community on the coastal plain (El Tular) during which we interviewed several families and collected anthropometric data on the children in those households.

While in Tegucigalpa we contacted Mario Contreras the INTSORMIL liason at USAID. Sr. Contreras expressed interest in doing some work with millet. He worked briefly with some materials from Kansas State several years ago and was excited by the results.

Results

Specific data on growth of children and dietary adequacy are not yet available from this trip. Data from earlier trips are available in the first report. However, some general impressions from our field notes may be of interest.

El Tular, surveyed last year, is located on the coastal plain in the cotton growing area of the Department of Valle. Cotton is a pesticide intensive crop which poses a number of potential health hazards to people growing it and living in the general area (see Adelski, 1983). Dan Meckenstock believes this is an area in which intensive cultivation of hybrid sorghums might be a viable alternative for cotton production. Some sorghum is grown in the area intercropped with maize. In our survey conducted during the growing season summer 1982, most households responded that they used maize almost exclusively during the year with sorghum use in tortillas restricted to a few weeks in March. Discussions with women's groups in a group setting yielded a consensus that while sorghum was an important staple in the hills of the highland area, it was rarely used on the plain and was not an acceptable alternative for maize. Due to the poor corn harvest as a result of the drought in Southern Honduras last summer, however, the price of sorghum is significantly lower than that of maize. The great majority of families have been using sorghum since early winter, some all year. Interestingly, while maize is still clearly the preferred grain, sorghum is spoken of much less negatively than it was last year. Sorghum as a food grain appears to be more acceptable in this region than we had concluded on the basis of last summer's survey.

Ironically, the drought was not as devastating in the highlands as in the plains so that somewhat fewer highland families, more traditionally sorghum consumers, are using sorghum. Most still were consuming grains both maize and sorghum from their own harvest, while lowland families were purchasing grains, almost uniformly sorghum.

Although we have not yet analyzed diets for vitamin and mineral content our impression for the communities we have surveyed is that ascorbic acid nutrition is much less problematical than Futrell, McCulloch and Jones report for the communities they surveyed. Our data on seasonality of local fruits shows few times of the year when fruits high ascorbic acid content are not generally available. During April of this year, for example, lowland households reported significant use of mangos and a wild fruit called tiguilote. Highland households

were using approximately 200 wild plums (jocote) per week. The harvest of acerola (nance), a wild fruit with one of the highest ascorbid acid contents, becomes available in May and is available until the end of June. A second harvest of mangos begins in August and extends through the early fall. The mangos harvested in the second season are wormy and not suitable for sale and are therefore somewhat more likely to be consumed in local households. A series of wild fruits are available through the fall until the rains stop. During the dry season some local citrus are available. This is the time of year when the most amount of cash is available and households appear to purchase more citrus and one of the dietary staples--cabbage. Cabbages are used all year round in soups and salads. In the end of the dry season in February and March cashew fruits become available. Finally, potatoes are included at least once a week in the diets of most of the families we surveyed.

In sum, then, we would revise our earlier conclusion that cultural blocks to sorghum consumption are stronger in the coastal area than the highlands. Introduction of more extensive sorghum production might in fact result in a more stable supply of an acceptable grain. The area of most concern, in this region, however, is the effect on wage labor opportunities of replacing labor intensive cotton production with production of a less labor intensive crop. Such a change would have to include a significant change in land tenure through redistribution in order to offset the loss of labor opportunities in rural families.

Finally, in the communities we have been working in, we do not see a lack of sources of ascorbic acid as a major dietary problem or one which would suggest reevaluation of role of sorghum as a basic grain in diets in these communities.