

MEMORANDUM

TO: Nick Luykx

February 1, 1983

FROM: Gary Smith 

SUBJECT: Erik Thorbecke's report concerning ECID/Honduras

1. The subject report speaks for itself; it's short and to the point. He recommends a no-cost extension of the project termination date to April 1984. Under the present circumstances, I concur. Unmentioned in the report is Zwila Giron's abrupt resignation from the project (which took place after Erik left); according to Ponce, Giron resigned because she assumed that the project would terminate September 30, and a lucrative FAO position was offered her. Ponce has had to work to keep others from leaving the project under the same impression. The time to look for work is before, not after, the termination of a project, and the September 30 date has loomed in everybody's mind, evidently. I told Ponce to reassure everyone that, as long as the work was progressing satisfactorily, no one need worry about being "rified."
2. CONSUPLANE's interest in the farm modelling is very encouraging. Erik's suggestion that the national model be built upon the foundation of the farm models is well taken. We were going to do that anyway, but it's nice to have others agree.
3. Salcedo-Norton have continued to cling to their linear programming/calorie-income model. I spoke to Norton about it in November in San Salvador, and he still defends it vigorously. Norton's a macro-man, however, and I side with Johnson, Roe, and Fletcher in insisting on a food choice model. Erik agrees in his report. It's only common sense, since a major objective of national models is to forecast commodity, not calorie, flows and shifts as incomes and prices change. I suspect that the income/calorie relationship has become something of a shibbolith to Salcedo, at least, since he spent so much time developing it.
4. On the subject of Salcedo, I'm coming to the reluctant conclusion we're going to have to either (1) get very tough with him, or (2) write him off completely. From what I know of Dan, both options boil down to the same thing, because, if we get "tough" he's likely to quit outright. I'm not happy about it, because he's an old friend and a very good man professionally--when he focuses on a job. He's evidently lost focus here.

Without Giron and Salcedo, I'm not sure whether or not Magdalena and Ponce can do the national modelling alone, even with Norton's consulting. Ponce says that Giron will be able to coordinate her work with the FAO (something to do with small farms in Honduras) and work underway at the project. I'm doubtful, but I'll keep in touch with Ponce over the next week or so; he's conferring right now with Delgado from SIECA.

5. The next evaluation: I do not recommend it take place in Washington. Things are confused enough in Tegucigalpa as it is. A major task for the next evaluation team will be to orient Ponce's group vis-a-vis the national model question and to hit institutionalization and policy analysis strongly, as recommended in Erik's report. "Show-and-tell" type evaluations in Washington would be more appropriate

once these other matters have been settled and we have something to show and to tell about. I'd say (1) October or November 1983--the last interim evaluation-- or (2) April 1984, the final evaluation would be good times for a Washington show.

I plan to sound out people about becoming evaluators before Bobbie's return from Sri Lanka. I need to get evaluators for the MSU/Sierra Leone review anyway, so I'll use two stones to kill a bird. What say you?

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ECID/SIECA/HONDURAS

PROJECT EVALUATION

STUDY OF THE EFFECTS OF  
AGRICULTURAL DEVELOPMENT POLICIES  
ON FOOD CONSUMPTION OF THE  
CENTRAL AMERICAN POPULATION

Erik Thorbecke

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Prepared for the United States Department  
of Agriculture, Office of International Cooperation  
and Development, Technical Assistance Division,  
Nutrition Economics Group under RSSA 3-77  
(Economic Analysis of Agricultural Policies),  
with the Agency for International Development  
Science and Technology Bureau, Office of Nutrition

Evaluation Report of Project on Study of the  
Effects of Agricultural Development Policies on  
Food Consumption of the Central American Population

by

Erik Thorbecke\*

I spent the period January 17-January 20, 1983 in Tegucigalpa discussing the project with the complete team. It was ascertained that the timetable for follow-up work which had been proposed at the last evaluation meeting (July 1982) was pretty much on schedule with the exception of the national model.

Magdalena Garcia has completed a thorough descriptive report on the Pattern of Food Consumption by households in Honduras. Lic. Mario Ponce has written a report on the effects of policies on food consumption. What remains to be done—in addition to the formulation and construction of the national model to which we return shortly—is i) the completion of estimates of demand elasticities for food commodities (should be completed by March 1983); ii) an analysis (partially qualitative-descriptive and partially quantitative) of specific policy issues which could be within a policy-matrix relating potential policy instruments and policy objectives (e.g. economic growth; income distribution and poverty alleviation, employment, minimal nutritional intake and balance of payments); iii) the completion of the regional model; iv) applying the farm-model to a few additional prototype groups of producers.

It is my impression that these activities should be completed at the latest by the beginning of April 1983. All of these activities are crucial inputs into the construction of a national model. In particular, a good understanding of the pattern of production by different producers-group (e.g. small subsistence farmers in different regions) should provide the building blocs upon which the national model should be built.

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The major issue with regard to the formulation and construction of the national model is one of time. If the project is to terminate in October 1983, as presently planned, it appears very doubtful to me and the project team that a worthwhile and operationally useful model can be realized.

Alternatively if the project can be extended (without new funds) to March of 1984, I would feel reasonably confident that such a model could be produced. Under the first alternative at most six months (from April to October 1983) would be available compared to almost one year under the second alternative. I recommend strongly that an extension to March 1984 be approved. My reasons, which follow, are based on a realistic appraisal of what could be achieved in each of the two cases. More specifically, I wonder if the quality of a model—produced under great time pressure—would be more than a pro forma exercise to meet the expectations of the donor agencies. I doubt that it would lead to a technically defensible and operationally useful model. Conversely, I do expect a worthwhile model to be forthcoming if the present team can extend its work by six months.

#### Alternative National Model Formulations

Much of the discussion during my visit was focussed on the possible form of the national model. Essentially two possible alternative approaches were reviewed, i) a consistency type model, and ii) a linear programming model based on a modification of MOCA. Before reviewing these two approaches briefly, it is important to summarize the total agreement of the participants concerning a number of major features which any formulation of a national model should contain. These key features are: i) the model should be built upon the structure of production of prototype groups of farmers with most of this information coming from the farm-models; ii) the model should be able to incorporate income distribution and, in particular, generate as endogenously as possible the

income levels and nutritional intakes of relatively poor farmers-groups; iii) the effects of a number of policy instruments (such as local and regional projects affecting the production of different groups of farmers, changes in subsidies on inputs and terms of credit) on different objectives (such as nutrition of poor producers, agricultural and national GNP and employment) should be capable of being simulated realistically within the model; iv) as much as possible, the model should be specified in collaboration with government representatives to try to insure that it addresses issues of current interest and relevance to policymakers and to ease the process of institutionalization; and v) the required informational and data basis is likely to be very similar regardless of the model formulation ultimately selected.

The consistency-type model would attempt to capture the major production and demand relationships for the major farmers' groups and products by way of a system of simultaneous equations.

It would approximate a general equilibrium model and would solve for the equilibrium product prices equating total demand and supply. Producers would be subdivided into a small number of relatively homogenous groups based on criteria such as size of farm, pattern of production and region. These groups would produce for self-consumption and for the market (i.e. the marketable surplus). An attempt would be made to capture the income levels of each of these groups and their consequent food demand (hence their incomes would be linked to their production and endogenously determined prices which, in turn, would determine their consumption). Thus demand for these producer groups would be endogenously determined. In contrast, urban food demand and rural food demand by landless people would be taken as exogenously given.

An alternative national model formulation would be to take the existing Norton-Salcedo L. P. format and insure that the following issues be addressed;  
i) production activities should correspond to those grown by prototype groups

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of farmers (subsistence, small, ... large) so that the same products grown by different types of farmers under somewhat different technologies appear as different activities. Again, this information should be based upon the farm models; ii) the calorie-income relation could be used for the poorer subsistence farmers but the range beyond which it is not likely to hold should be specified and an alternative procedure to estimate food demand formulated; iii) total demand should in some way be linked back to incomes of different producers groups and their resulting demand pattern (in particular, even for those groups where the calorie-income relation is supposed to hold a change in income is bound to lead to a change in demand for purchased food in addition to consumption out of self-production. This changed monetary food demand should be linked back to total demand.)

#### Institutionalization and Policy Usefulness

*("CONSULPLAN")*  
Perhaps one of the more interesting recent developments is the interest which Consulplan has exhibited with respect to the work of the project. In particular, Consulplan appears interested in the farm level models. A dialogue has been established between team members and professionals at Consulplan to acquaint the latter with farm level models and their potential policy usefulness. Consulplan indicated that it would like to learn more about these models to use them in estimating the effects of specific projects at the local level.

Another possible important policy use of the farm-level models (and sub-regional models) is in providing guidance to the European Economic Community in the allocation of a \$16 million project earmarked to help small farmers. The EEC representatives in Honduras have been contacted and appear to be interested in exploring how the existing farm level and subregional models can be used to design a rural integrated development program benefitting the poor farmers.

In general, the project team felt that there was much more interest in farm level and perhaps subregional level models and planning than in a national model and national planning on the part of the GOH. This was one of the reasons for some reluctance to embark on a national modelling exercise which would be very unlikely to be institutionalized.

These issues were extensively discussed during my visit and we concluded that the only type of national model formulation which would make sense would be one which would be built upon the foundations of the farm level models. This would improve the likelihood that the model will be understood, useful for policy purposes and hopefully institutionalized. Alternatively, a macro economic model of the MOCA-type appears to elicit very little interest among the Honduran planners and would be very unlikely to be used and institutionalized. A further advantage of a national model built on the basis of the farm level models is that the quality of the latter can be continuously improved upon and used independently of the national model to explore the effects of specific projects such as rural road construction, increased storage capacity, and increased availability of inputs at the local level. To the extent that the planners seem to be interested in the economic and social impact of projects at the local level, it appears essential to take advantage of this fact and design the modelling effort accordingly.

I AGREE  
GHS

#### Possible Future Timetable, Scenario and Problems

As was previously indicated, it is expected that the tasks and activities identified during the second interim project evaluation should be completed by March or April, 1983. This means that the work on the national model could start immediately thereafter. One possible scenario for the team would be to spend two to three months thinking through and specifying the proposed formulation of the national model. This first stage would not necessarily

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have to decide on one and only one formulation. It could consider alternative specification for the whole model or modules of it. During this stage, it would be important to try to rely as much as possible on the advice of professionals at Consulplan and other government agencies regarding the type of issues they are interested in to improve the realism and potential operational usefulness of the model.

3<sup>rd</sup> INTERIM EVAL. IN MAY?

The second step could be a meeting, presumably in Tegucigalpa, where the project team would present its ideas and pick the brain of a small group of experts in agricultural sector modelling and planning. It would also be desirable to have a few key government professionals participating in this meeting. The ultimate outcome of this meeting would be the reaching of some firm decisions regarding the format and specification of the national model. Assuming that this meeting would take place some time during the summer, this would leave six to nine months to the team to actually build the model, assuming that an extension of the project to March, 1984 had been approved.

OR AT THIS MEETING

The major problem which I can see looming on the horizon is the absence of an experienced model builder within the team. Daniel Salcedo became a consultant to the project after the second evaluation meeting and has worked very little, if at all, on the project for the last two or three months. It is questionable how much time he will have, or be willing to devote to this project, in the upcoming year. Much of the burden of modelling will consequently rest upon Magdalena Garcia, who together with Zoila Giron, is absolutely first rate but lacks in experience in the area of national modelling. I believe that Ms. Garcia and Giron do possess the technical competence to build a national model. They should be provided as much technical help as would be possible under the circumstances. This would mean trying to get some commitment from Salcedo regarding the extent and timing of his involvement, and

SHE'S LEFT THE PROJECT

whatever assistance a person like Roger Norton may be willing and able to provide. However, I believe that it would be quite unrealistic to think that some outside expert should have the ultimate responsibility for the construction of the model. At best, a few experts might be called upon to help the team in the overall conception of the model and on specific issues which might spring up from time to time in the process of finalizing it, but the ultimate responsibility for completing the model rests with Ms. Garcia and Giron.

In summary, my recommendation would be to trust Ms. Garcia and Giron to try their hand at building such a model under the overall supervision of Lic. Ponce but only if the project can be extended through March 1984. Even if the national model did not prove to be operationally very useful, the continued work on improving the farm level production relationships, which are key inputs into the former, should prove valuable to the Honduran planners and as such be more likely to be institutionalized.