PD-AAZ-293

A.I.D. EVALUATION SUMMARY PART I

(BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS)

IDENTIFICATION DATA

A. REPORTING A.I.D. UNIT: ORD/USAID/Guatemala (Mission or AID/W Office)

(ES# 88-10)

B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN? yes ☒ slipped ☐ ad hoc ☐

Eval. Plan Submission Date: FY 89 Q 2

C. EVALUATION TIMING: Interim ☒ final ☐ ex post ☐ other ☐

D. ACTIVITY OR ACTIVITIES EVALUATED (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report)

Project #	Project/Program Title (or title & date of evaluation report)	First PROAG or equivalent (FY)	Most recent PACD (mo/yr)	Planned LOP Cost ('000)	Amount Obligated to Date ('000)
520-0343	Cash flow Analysis of the Penny Foundation Land Purchase Project	1987	8/92	10,500	10,500

ACTIONS

E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

Action(s) Required	Name of officer responsible for Action	Date Action to be Completed
1. Amend current PROAG:		
a) to re-program Project line items to permit the Penny Foundation to cover funding needs.	RTsuji/USAID HQuan/Penny Foundation	9-89
b) include investment in infrastructure on Project farms in the calculation of couterpart contribution.		
2. Amend current PROAG to increase funding to cover cash flow short-fall.	RTsuji/USAID HQuan/Penny Foundation	9-89
3. Penny Foundation to arrange for alternative funding source	HQuan/Penny Foundation	9-89

(Attach extra sheet if necessary)

APPROVALS

F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION: mo 2 day 17 yr 89

G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:

	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director
Signature				
Typed Name	Rodney K. Tsuji	Hernán Quan	Terry Kellermann	
Date:	3-15-89	5-3-89	5-5-89	5/11/89

H. EVALUATION ABSTRACT (do not exceed the space provided)

The Pilot Project was initiated in order to address the increasing pressure for land distribution which has built up over the years within the rural sector caused by the distortion of the Guatemalan land tenure situation. The Penny Foundation was selected as the vehicle to execute the Pilot Project because of its experience in this activity. The goal of the Project was to demonstrate the feasibility of a private sector land commercialization program. The purpose of the Project was to establish a mechanism to permit small farmers to purchase arable land and provide production credit and expert technical assistance in a timely fashion to the participating small farmers.

The objective of this interim evaluation (8-88) was to determine the status of the cash flow of the Land Markets program and to assess its impact on the overall Project. As a basis for the cash flow projections, the team used actual financial information for the years 1985-1987 and projected forward to 1996 using assumptions and suppositions derived from current economic trends and the general implementation plan of the Penny Foundation. The major findings and conclusions are:

* The Foundation accelerated their purchase of land causing pressure on the production credit needs and certificate repayment.
* By changing the crop mix from the original Project design cash flow analysis, the Project cash flow timing was changed radically.
* The Project is extremely sensitive to the timing of land purchases, and the resulting rate of crop integration.
* By allowing the Foundation to request AID funds on the basis of total costs rather than net costs after re-flows, the Foundation was not obligated to re-invest re-flows back into the Project, thus digging themselves deeper and deeper into trouble as the land purchased required more production credit and certificate payment. Furthermore, this method of funding allows them to continue to purchase land even when in a precarious cash flow position.
* The Foundation has been changed into a land bank/production credit bank which makes it necessary that they understand that their role has changed and as a result requires a new strategic attitude toward this Project.

MAJOR RECOMMENDATIONS:

* AID must change how the Foundation requests funds. Making requests on a net cost basis will force the Foundation to be responsible for making the Project a self-sufficient entity. Without such responsibility, they can simply continue to purchase more land without planning for the consequences. The inflows must be re-invested in the Project to meet current obligations and not simply used to purchase more land.
* A careful evaluation of how the Penny Foundation formulates its planning for this Project must be made. The Foundation is now a financial intermediary and must plan in the long-term rather than short-term.
* As far as solving the cash shortfall problem, probably the best alternative is to allow AID funds to be used to repay guaranty certificates.
* Increasing interest rates is not a solution in and of itself, but it could be combined with the above solution to further increase net cash flow.
* The Foundation must realize that to change the crop mix spontaneously is disastrous without careful evaluation. The Project is too sensitive to cash flow timing to not have a carefully evaluated crop production schedule.

I. EVALUATION COSTS

1. Evaluation Team

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (US$)	Source of Funds
Jesse Reyes	Texas Tech University	LAC-0000-1-3046-00	5,600	PD&S (F&N)
James Graves	Texas Tech University			IQC-Texas Tech

2. Mission/Office Professional Staff Person-Days (estimate) 20

3. Borrower/Grantee Professional Staff Person-Days (estimate) 20

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A.I.D. EVALUATION SUMMARY PART II

J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided)
Address the following items:

- Purpose of activity(ies) evaluated
- Purpose of evaluation and Methodology used
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office: ORD/USAID/Guatemala Date this summary prepared: 3/10/89

Title and Date of Full Evaluation Report: 520-0343 Commercial Land Markets II - August 20, 1988

1. Purpose of Activities Evaluated: The Project was initiated in order to address the increasing pressure for land distribution which has built up over the years within the rural sector caused by the distortion of the Guatemalan land tenure situation. The Penny Foundation was selected as the vehicle to execute the Project because of their experience in this activity.

Since August 1984, USAID/Guatemala had provided three grants of $1 million each to the Penny Foundation (Fundación del Centavo) to implement a pilot Commercial Land Markets Project, and in July 1987 increased the funding to $10.5 million to expand the Penny Foundation land purchase/sale program. The grants provided funds for farmland purchase, technical assistance, and production credit, as well as covering part of the Foundation's administrative cost to the manage the Project.

The goal of the Project is to demonstrate the feasibility of a private sector land commercialization program. The purpose of the Project is to establish and expand the Penny Foundation's voluntary land purchase/sale program as a self-supporting activity capable of increasing agricultural productivity and incomes of the rural poor, and to identify and promote additional instruments to increase production and reduce pressure on agricultural land. The following objectives are to be achieved during the LOP which ends August 30, 1992:

a. Establish a mortgage guaranty program for the purchase of land, such that the land seller would receive a maximum of 50% of the purchase price of their land in cash and the reminder in the form of a promissory note from the Foundation.

b. Establish a small farmer purchase program where participants must provide at least a 10% down-payment of the selected land parcel and pay the balance in installments, leaving the land as a mortgage guaranty.

c. Establish a financial mechanism within the Foundation for the issuance and sale of Mortgage bonds, based on collateral provided by the small farmer mortgages, such that additional financial resources can be obtained from the private sector to continue the land commercialization program.

d. Provide approximately 2,420 participating small farmers with title to a minimum of 2.8 hectares of arable land per family for cultivation. An average of approximately 1,350 hectares of land per year are to be purchased and resold to the participating small farmers, with a target of 9,000 hectares to be purchased/sold during LOP.

2. Purpose of the Evaluation and Methodology: This interim evaluation was performed in order to determine the current status of the cash flow of the Land Markets program and its overall impact on the Project. The objective of the evaluation was to determine the causes and identify possible solutions to the cash flow problem. The cash flow evaluation was conducted by a two person team from Texas Tech University, led by Mr. Jesse Reyes, who participated in the original Project design. Their analysis was based upon the financial and implementation plans as described in the Project Agreement and the Project Paper. As a basis for the cash flow projections, the team used actual financial information for the years 1985-1987 and projected forward to 1996 using assumptions and suppositions derived from current economic trends and the general implementation plan of the Penny Foundation.

After having identified the causes of the prevailing cash flow problem, the Texas Tech team ran a series of alternative scenarios based on various assumptions in order to develop options for the consideration of the Penny Foundation and the Mission. The individual options presented are detailed below.

The Project cash flow is affected by the following principal factors:

1. The rate at which land is purchased which affects certificate amortization.
2. The rate at which land purchased is put into production affects production credit needs.
3. The crop mix on land purchased, chiefly concerned with the ratio of seasonal to permanent crops. This also effects production credit needs.
4. The amount of production credit that is needed as the beneficiaries become more self-sufficient.

Based upon these variables, the Texas Tech team analyzed a number of alternative scenarios to determine the amount of the cash flow deficit and to analyze the impact that the alternative courses of action would have on the project. The analyses were based upon the following key assumptions:

50% of direct crop costs were inflatable
Inflation was approximately 15%
Project was analyzed using 1988 exchange rate of Q2.70
Permanent crops can repay production credit beginning in the fourth year of production
Seasonal crops pay off their production credits yearly
Land credit was amortized over a ten year period
Land purchased was integrated into production over a 3 year period

Eventually beneficiaries will not need the Foundation for production credit needs as they will be self-sufficient and be able to find other sources of production credit. As they became more self-reliant they would depend less and less on the Foundation as a chief production credit.

The following is a summary of six scenarios analyzed:

Current Situation

1. The Foundation will have a yearly shortfall of at least $1 million by 1990. On a cumulative basis, the shortfall after AID grants could be as much as $2.5M before the Project could begin to recoup the losses. This is due primarily to the dererred repayment of the permanent crop land and production credit.
2. At the current funding level and under the current method of requesting AID funds, the Foundation could purchase no more land, but would still have a negative cumulative cash flow position until 1993, while having $3.9 million in undisbursed AID funds that are unavailable because they are restricted to specific line items.

Alternatives

Alternative 1

USAID FUNDS ALL COSTS

1. This alternative basically re-structures how AID would finance the Project. It would finance all costs rather than just the specific costs outlined in the Project Agreement. Primarily this would mean allowing USAID funds to pay certificate re-payments.
2. Given the current funding level this scenario would allow them to buy 1,000 hectares per year starting 1991 without negative yearly or cumulative cash flow over the Project life.
3. What must be monitored closely is that the Foundation does not see the positive net cash flow as a windfall and then accelerate their purchases which would put them in a worse position.

Alternative 2

CURRENT FUNDING LEVEL AND METHOD OF REQUESTING USAID FUNDS
INCREASE INTEREST RATES TO 16%

1. This would use the current method of requesting USAID funds, but would attempt to increase net cash flow by increasing interest rates.
2. Project will still sustain yearly negative cash flows and this puts them in no better position, in that they still would require about $2.5 million to overcome their cumulative yearly shortfall.
3. Increasing income primarily through an interest rate increase is not the entire answer.
4. The Foundation still could not purchase any more land than they already have during 1985-88, and would still be trying to reduce the current deficit, while having $4.1 million in undisbursed AID funds.

Alternative 3

USAID FUNDS ALL COSTS AT INCREASED INTEREST RATES

1. This is basically the same as Alternative 1, but charging a higher interest rate.
2. Primary effect would be that they would be able to purchase up to 1,000 hectares per year starting in 1991.
3. The Project would still have a positive cash flow over the Project horizon.

Alternative 4

CURRENT METHOD OF REQUESTING USAID FUNDS
DEFERRING FURTHER LAND PURCHASE UNTIL 1990

1. This Alternative defers land purchases only for 1 year rather than the 2 years stipulated in Alternative 1.
2. This would allow the Foundation to purchase about 1,000 hectares per year starting in 1990 under the current conditions and be in a better position than they are currently, but the Foundation would still have a cumulative net shortfall of $2.5 million.

SUMMARY (continued)

Alternative 5

FINDING ANOTHER SOURCE OF PRODUCTION CREDIT

1. This is not the total solution as it would first appear. The Foundation does profit from some of the interest earned on the production credit.

2. This alternative is based upon the basic assumption that there would be another source of production credit available to these beneficiaries without some guaranty. The beneficiaries hold only provisional title to the land until the loan is totally amortized. The lien on land or an outside guaranty would be the minimum support required by a lender to provide production credit.

3. As the Foundation would forego the interest income from the production credit loans, there would be insufficient interest generated by the land purchase loans to pay the interest and principal of the guaranty certificates.

4. This would also have the doubling effect of restricting the amount of land that can be purchased (750 hectares/year) and decreasing the amount of the AID grant that could be used because only a portion of the costs can be funded under the current agreement. At PACD there would be $4 million of undisbursed AID funds that are unavailable because they are restricted to specific line items.

3. Findings

a. The foundation accelerated their purchase of land causing pressure on production credit needs and certificate payment.

b. The Project is extremely sensitive to the timing of land purchases, and the resulting rates of crop integration.

c. The Project has deviated from the original Project design cash flow analysis in terms of the ratio of permanent to seasonal crops planted on the land purchased.

d. By allowing the Foundation to request AID funds on the basis of total costs rather than net costs after re-flows, the Foundation has no responsibility to re-invest re-flows back into the Project, thus digging themselves deeper and deeper into trouble as the land purchased requires more funds for production credit and for certificate payments. Furthermore this method of funding allows them to continue to purchase land even when in a precarious cash flow position.

e. While it is true that permanent crops may be the most stable and sure investment for the beneficiaries and therefore most profitable, the Foundation must realize that it is really cash flow not profitability that is at stake in this Project. They have been very closely tied with the beneficiaries due to the nature of the organization and its goals. As a result the Foundation had been pushing for more coffee planting because it is so profitable.

f. However, what is profitable for the beneficiaries is not what maybe best for the Foundation. The Foundation does not accrue the profit of the land--only the interest payments on the land purchase agreement and the production credit interest. In this Project is is vital that planning be done on a longer-term basis. The viability and uncertainty involved in heavy reliance on permanent crops dictates the need for more careful and accurate planning.

4. Principal Recommendations

a. AID must change how the Foundation requests funds. Making requests on a net cost basis will force the Foundation to be responsible for making the Project a self-sufficient entity. Without such responsibility, they can simply continue to purchase more land without having to plan for the consequences. The inflows must be re-invested in the Project to meet current obligations and not simply used to purchase more land.

b. A careful evaluation of how the Foundation formulates its planning for this Project must be performed. The Foundation is now a financial intermediary and must plan in the long-term rather than short-term.

c. As far as solving the cash shortfall problem, probably the best solution is to allow AID funds to be used to repay the guaranty certificates. The current situation is really a two edged sword, on one hand the $9.5 million available for this Project allows some land to be bought but without some means for repaying the certificates, the Foundation will never be able to use all of the AID grant without putting themselves into a dangerous cash flow position. Other sources of production credit should be examined, but this is not a fruitful an ideas as it would first appear. The Foundation does profit from the interest payments on the production credit.

d. Increasing interest rates is not a solution in and of itself, but it could be combined with the above solution to further increase net cash flow.

e. The Foundation must realize that the re-flows from the Project are already spoken for, i.e. to repay certificates, interest, etc. and are not windfalls with which to purchase more land.

Cont. J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.

f. The Foundation must realize that to change the crop mix spontaneously is disastrous without careful evaluation. The Project is too sensitive to cash flow timing to not have a carefully evaluated crop production schedule.

5. Lessons Learned

a. Projects with PVO's that rely primarily on donations for counterpart contributions for project implementation must be carefully analyzed.

b. Consistent with the above, the financial analysis section of the Project Paper should not assume that new and innovative financial mechanisms can be relied upon to provide a major portion of the third party funding for the project.

c. The infrastructure requirements and the timing of their delivery must be carefully analyzed at the Project design stage to avoid delays resulting in bottle-necks in the overall project implementation.

d. Project funds should be disbursed on a net cost basis, after counterpart contribution, to ensure that counterpart requirements are met.

K. ATTACHMENTS (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier)

EVALUATION REPORT

L. COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRANTEE

XD-AA2-293-A

Texas Tech University

Department of Agricultural Economics
Box 4169/Lubbock, Texas 79409-2132/(806) 742-2821

August 20, 1988

Rodney Tsuji
Office of Rural Development
AID/GUATEMALA
Guatemala City, Guatemala, C.A.

Dear Rodney:

Find attached an executive summary of the enclosed report. I think you will be pleasantly surprised to find that the analysis is not as dire as it was when I left. As I thought when I left, there might be a logic error in the analysis that might change the results. I made the mistake of not totally accounting for the current AID grants. Sorry it's taken so long but I had to make sure the error was fixed.

To make a long story short, the shortfall under the current situation appears to be only (notice "only" is a four-letter word) $2.5 million cumulatively after AID grants. It appears the simplest solution is to allow AID funds to cover certificate payments; as the other scenarios do not appear to be quite as promising. I have found that the current agreement really reduces the amount of land that the Foundation can purchase simply because the interest off the land and production credit isn't enough to meet the certificate payments. If they purchase too much land too rapidly, the certs really become a problem.

Even if another source of production credit was available, the only way it would work is if AID funds could be used for partial or complete certificate repayment. Under the present funding criteria, even another source of production credit would not allow the Foundation to purchase much more land than they have now simply because they wouldn't accrue any interest income on production credit and the repayments on the land credit would accrue fast enough to pay off the certificates.

The Foundation must be accountable for the reflows from the project. All of this analysis assumes that the cashflows are reinvested in the project. They cannot simply view reflows as a way to purchase more land - part has to be earmarked for certificate repayment, production credit, etc.

In particular, pay attention to the scenarios and graphs beginning on page 7 of the report. Each scenario includes a cover sheet with key points, a yearly and cumulative cashflow graph, and the last two pages from the summary worksheet.

I have enclosed a diskette with the LOTUS 1-2-3 spreadsheet that we used. This worksheet completely supplants the one I left with Sergio, it is extremely important that he use this updated model rather than the one that I left with him. It would be better to simply erase the old worksheet.

"An Equal Opportunity/Affirmative Action Institution"

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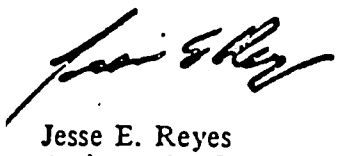
Tell Barry I am sending him the information and the book I promised you and him as soon as possible. I am leaving for Harvard around September 1 and will send the material before I leave. Presently my address at Harvard will be: Cronkhite Graduate Center, Room # 247, 6 Ash Street, Cambridge MA 02138. Contact me there if you need to.

Sincerely yours,



Jesse E. Reyes
Assistant Professor

Executive Summary

FINDINGS

* The foundation accelerated their purchase of land causing pressure on production credit needs and certificate repayment.

* By changing the crop mix from the original project cash flow analysis, the project cash flow timing was changed radically.

* The project is extremely sensitive to the timing of land purchases, and the resulting rates of crop integration.

* By allowing the foundation to request AID funds on the basis of total costs rather than net costs after reflows, the foundation has no responsibility to reinvest reflows back into the project, thus digging themselves deeper and deeper into trouble as the land purchased needs more production credit and certificate payment. Furthermore this type of funding mechanism allows them to continue to purchase land even when in a precarious cash flow position.

* The foundation has been changed into a land-bank, production-credit bank which makes it necessary that they understand that their role has changed and as a result requires a new strategic attitude toward this project.

RECOMMENDATIONS

* AID must change how the foundation requests funds. Making requests on a net cost basis will force the Foundation to be responsible for making the project a self-sufficient entity. Without such responsibility, they can simply continue to purchase more land without planning for the consequences. The inflows MUST be reinvested in the project to meet current obligations and not simply used to purchase more land.

* A careful evaluation of how the Penney foundation formulates it planning for this project must be made. The foundation is now a financial intermediary and must plan in the long-term rather than short-term.

* As far as solving the cash shortfall problem, probably the best route is to allow AID funds to repay guarantee certificates. The current situation is really a two edged sword-on one hand the 9.5 million dollars available for this project allows some land to be bought but without some means of repaying the certificates the foundation will never be able to use all of the AID grant without putting themselves into a dangerous cash flow position. Other sources of production credit should be examined but this is not as fruitful a idea as it would first appear. The foundation does profit from the interest payments on production credit.

* Increasing interest rates is not a solution in and of itself, but it could be combined with the above solution to further increase net cash flow.

* The foundation realize that the reflows from the project are already spoken for - i.e. to repay certificates, interest, etc. and are not windfalls with which to simply purchase more land.

* The foundation must realize that to change the crop mix spontaneously is disastrous without careful evaluation. The project is too sensitive to cash flow timing to not have a carefully evaluated crop production schedule.

XD-AAZ-293-A
61320

CASH FLOW ANALYIS OF THE PENNEY FOUNDATION LAND PURCHASE PROJECT

by

Jesse E. Reyes
James W. Graves

TEXAS TECH UNIVERSITY
LUBBOCK, TEXAS

AUGUST 20, 1988

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INTRODUCTION

This report summarizes the projected cash flow analysis of the AID Penney Foundation Land Purchase project in Guatemala conducted by contractors from Texas Tech University during July 18 - 23, 1988. The project was analyzed by Mr. Jesse Reyes and Dr. Jim Graves, both faculty at Texas Tech University. Mr Reyes was closely involved in the cash flow analysis of the original project proposal contractor team in 1987 and has been involved as a contractor in the Guatemala Land Purchase Project since 1984. Dr. Graves has had previous experience in farm project cash flow analysis in Guatemala through the Technical Support to Mission Contract between AID/Guatemala and Texas Tech University. This report will summarize findings as to the roots of the problem, its consequences and suggest some possible alternative solutions and recommendations.

THE PROBLEM

In the time since the original project design some financial cash flow problems have surfaced. The project has a net shortfall in 1988 and for at least the short term will continue to have a shortfall.

The problem appears not to be in the original project design but rather in its implementation. There is a misunderstanding in the difference in project profitability and cash flow on the part of the project participants. The Foundation is faced with a cash problem even thought the project appears to have a positive net benefit over the long run. The basic complication lies in how the purchase of land affects both land and production credit needs of the beneficiaries of the project as well as the ability of the Foundation to provide requisite technical assistance, production and land credit, and still remain solvent.

CAUSES OF THE PROBLEM

The problem can be attributed to some major deviations from the original project cash flow plan and to several other factors that were not addressed in the original design.

PROJECT DESIGN DEVIATIONS

Accelerated purchase of land

The chief cause of the cash flow shortfall can be attributed to the accelerated purchase of land. The Foundation was probably correct in assuming that land should be purchased at low prices (which they did) but the project cash flow is very sensitive to the timing of land purchases. As more land is purchased then more land has to be put into production requiring more production and land credit than was programmed in the original design. Already the Foundation accelerated their purchases to the point they would have been in 1991 under the original plan.

One could ask (as the Foundation management has): "well doesn't that mean that all we have to do is defer additional land purchases until 1991 and then resume with the original plan." The answer is "no, it's not that simple" because deviating from the original project cash flow creates a series of domino effects on the debt service capacity of the Foundation to meet certificate payments, production credit needs, as well as primary land credit needs. The project is extremely sensitive to the TIMING, not the amounts, of the cash flows and a small deviation sets up a tremendous dynamic cumulative effect on cash flow deficits primarily due to inability to meet certificate payments since AID does not fund the Foundation's certificate obligations.

Crop Mix
A second serious source of cash flow deficit has been the crop mix selected on the land purchased. Under the original project design, only about 30% of the land purchased was to be put into permanent crops. This is extremely critical since permanent crops would require deferred payment of both production and land credit for at least three years while the crop is established. Overall the land that has been purchased since 1985 has about 78 percent in coffee; and of the new land purchased in 1988, 98 percent has been programmed to put into coffee production. To make matters worse some land was purchased at a premium because it had an established coffee plantation however it was found that the farm will have to be replanted.

Infrastructure costs
Another deviation from the project design is that original project design didn't include infrastructure costs. Now the Foundation wishes to build houses, schools and processing plants with project funds.

OTHER FACTORS

Costs
One additional source of the problem discovered was in the manner the Foundation requests grant aid from AID. When the Foundation needs a grant from AID under the present agreement for the land purchase project, it presents AID with the budget of projected costs. AID then authorizes the disbursement on the basis of these costs. The preferred method would be for the Foundation to request only the net shortfall of the project i.e. Project inflows minus projected outflows. If for example a project costs $3 million, then the Foundation currently requests $3 million. If however the project has estimated inflows of 1 million then AID should only grant the shortfall of 2 million rather than the entire 3 million estimated cost.

The effect that the current funding mechanism has is that even though the Foundation is in a negative cash flow position, AID can continue to fund further land purchases accelerating the cash flow problem. Only by making the Foundation responsible for budgeting outflows AND inflows can the Foundation be made to realize that the reflows of the project must be reinvested into the project and are not simply a windfall.

The current mechanism for budgeting funding requests is typical of a non-profit organization that focuses on the cost side of an income statement, but as will be discussed later, the Foundation has been transformed into financial intermediary and must now be responsible for projecting BOTH inflows and outflows from its project. This is the only way that the Foundation can transform the project into a self-sustaining entity. While realizing that part of the costs are capital investments for the project that AID wishes to finance, it must be understood that unless grant requests are analyzed on a net cost basis, it will be impossible to reach self-sufficiency -- the Foundation will continue to request funds on the basis of costs and has no responsibility for the reinvestment of reflows from the project.

Strategic Attitude
The Foundation has been a non-profit organization that has been very closely tied to small farmer agricultural production in Guatemala since its inception. This project has basically changed the mission of the Foundation, especially now that this land purchase project is the most important project they have.

The Foundation has been transformed from a non-profit quasi-philanthropic organization that relied heavily on grants and donations for operations into a financial intermediary. In effect the Foundation has been turned into a land bank and production credit bank. This necessitates several changes in how it views its role, mission and the product it provides.

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As an example of how the Foundation currently views its traditional role, let's examine how the Foundation chose a higher permanent crop ratio than was originally intended. The Foundation chose permanent crops because crops like coffee are more profitable for the beneficiary. The question of profitability is really not the issue from the standpoint of the project viability. Almost any crop that is being considered is profitable enough to service the production credit and land credit needs, the better question from the Foundation's point of view -- is the timing of the inflows adequate to keep the project solvent? Again the Foundation must begin to understand that the Foundation is NOT in the business of producing crops but is simply a facilitator in that process, so a much more important concern is crop cash flow not crop profitability.

As a result the Foundation must change its attitude toward this project. It must see itself as a financial intermediary. Because of the background of the Foundation and its original plan and design, they plan on a year by year basis, however this project has a projected horizon of at least ten years and trying to budget and plan on only yearly basis could mean that there could a greater price to pay down the road for what may seem to be a small change in the project structure currently.

The biggest question that a simple cash flow analysis cannot answer is: can the Foundation make this type of strategic change and remain intact in terms of its own structure, and mission?

Economic factors

One contributing factor to the cash flow bind is that The Foundation is lending money at 12% with inflation at better than 15% thus decapitalizing their funds.

CONSEQUENCES

The major consequence of the current situation brought about by the current cash flow situation is that even if the Foundation does not purchase any more land they will not be able to meet certificate payments in the short-term without finding additional sources of revenue. Even if they were to manage to acquire cash flow to meet these certificate payments it does not mean they can simply purchase more land.

CASH FLOW ANALYSIS

The project cash analysis tried to incorporate several complicating factors that could change the results of this project. It is specifically these factors that make the project so sensitive to the timing of land purchases. These factors include:

* The rate at which land is purchased which affects certificate amortization
* The rate at which land purchased is put into production affecting production credit needs
* The crop mix on land purchased, chiefly concerned with the ratio of seasonal to permanent crops. This also affects production credit needs.
* The amount of production credit that is needed as the beneficiaries become more self-sufficient.

These factors were incorporated in the analysis under different scenarios. For each scenario analyzed in the accompanying section on alternatives have included three items are included: (1). A summary spreadsheet of the key financial and cash flow needs. (2) yearly net cash flows and 3) cumulative yearly cash flows for the project. The yearly and cumulative cash flows found on the last lines of the second page of the summary sheet and on the graphs are the key items in this analysis. The full spreadsheet model used is included in the appendix and the accompanying software.

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Some definitions are in order to understand how the model was developed. Following the definitions is a line-by-line description of the summary worksheet to explain some of the key items to be monitored.

DEFINITIONS

"Current funding criteria or level" - This describes the current way AID funds the Foundations requests - AID only funds specific costs not including infrastructure, certificate principal & interest some equipment such as jeeps

"AID funds all costs" - An alternative in which AID would amend agreement to pay not only specific costs but also include the aforementioned excluded items

SPREADSHEET SUMMARY DESCRIPTION

Price/Hectare	Derived and projected from actual costs paid from 1985-1988
Hectares bought per year -	Derived from actual costs incurred - projected by back-solving i.e. finding out how much land can be purchased and still remain profitable
Cumulative hectares purchased -	Self-explanatory
Cash inflows -	Inflows from the project to the Foundation
Production credit interest -	Interest on all production credit loaned
Production credit principal -	Self-explanatory
Land sales down payment -	The down payment paid by the beneficiaries prior to sale
Land sales principal & interest -	Self-explanatory
Cash expenses -	Cash expenses are broken down into AID funded - specific costs as detailed in the definitions -- and Counterpart funded - those costs paid by the Foundation through reflows and other sources. NOTE: after 1992 ALL expenses will be counterpart funded as AID project involvement will end
AID funded	
Cash purchase of land -	Half of the land purchase price is paid in cash and half is paid in a guarantee certificate that is repaid over a three to five year time period currently a 12 percent interest.
Production credit loans -	Outflows for production credit on both short-term and permanent crops

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Administrative costs -	Direct administrative costs of the Foundation to the project,
Equipment (motorcycles) -	Self-explanatory
Technical assistance -	Salaries for technicians and agronomists helping with the farms purchased - presently includes one technician per farm and 1 agronomist per approximately three farms
Counterpart funded -	Those costs not covered by the AID agreement - after 1993 would include all costs
Certificate principal and interest	See explanation of certificates above
Equipment(jeeps) -	One per agronomist
Infrastructure -	Schools, processing plants, and buildings - see full worksheet in appendix a for detail
Cash flows Cash inflows -	Total cash inflow from project
Cash outflow -	Total cash flow, broken into AID-funded and counterpart- funded
Net cash flows -	Total net cash flow from project (total cash inflow - total cash expenses)
Above AID funded expenses	Total cash inflow - AID specific expenses
Above Counterpart funded expenses	Total cash flow - Counterpart funded expenses
Net Foundation cash position	
Cash position (Beginning of Year)	Cash available at the beginning of the year
Net cash flow	Net income from the project over the year
AID grant	Assuming AID funds net cash expenses then this would be calculated as follows: if the net cash flow is negative the AID grant would match the loss, otherwise the AID grant would be zero for the year)
Cash position after grant =	Net cash position beginning of year + net cash flow + grant
Counterpart funded expense =	Total counterpart funded expenses on page 1
Cash pos after c p expenses =	Cash position after grant -counterpart funded expense
Yearly shortfall =	Total Inflow - Total Expenses
Cash position after c/p expenses =	Cash position after counterpart expenses +other grant sources

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AID funds Available -	T.the balance of AID funds available after expenses
Available at beginning year	-self explanatory
New AID funds =	New funds when available
Total AID funds available =	Beginning of year balance + New AID funds
Aid funds used =	AID funds disbursed during year
Available funds at end of year =	Total funds available - Aid funds used
Cumulative AID grant used =	Accumulated AID funds disbursed

Yearly Net cash flow after all expenses

Before AID grant =	total inflow - total expense
After AID grant =	total inflow - total expense + AID grant disbursed
Cum net cash flow a/all expenses	Above net cash flow before and after AID grant accumulated year by year

ASSUMPTIONS:

Key assumptions to the analysis were:

* 50% of direct crop costs were inflatable.
* Inflation was approximately 15%
* The project was analyzed using 1988 2.70 exchange rate.
* Permanent crops can repay production credit beginning in the fourth year of production.
* Seasonal crops pay off their production credit yearly.
* Land credit was amortized over a ten year period
* Land purchased was integrated into production over a three year period
* Eventually beneficiaries will not need the Foundation for production credit needs as they will be able self-sufficient and be able to find other sources of production credit. As they became more self-reliant they would depend less and less on the Foundation as a chief production credit source

Other assumptions are identified on the graphs and tables and the Appendix includes the full project worksheet used in deriving the cash flow analysis including the phasing in of projected land purchase and the complication involved in amortizing loans that occur in different points of time.

The following pages summarize the cash flow analysis for the current situation as well as for the following alternatives:

1. AID funding all costs rather than just the specific costs outlined.
2. Increasing production credit interest rates to 16%
3. Funding all costs and increasing interest rates.
4. Delay further land purchases until later.
5. Finding some other production credit source and just use the Foundation for land credit needs.

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CURRENT SITUATION

(Table 1 - Figures 1 & 2)

- The Foundation will have a yearly shortfall of at least 1 million dollars by 1990. Cumulatively the shortfall after AID grants could be as much as 2.5 million dollars before the project would begin to recoup the losses. This is due primarily to the deferred repayment on the permanent crop's land and production credit.

- At the current funding level and under the current funding criteria the foundation could purchase no more land, but would still have negative cumulative cash flow position until 1993.

PENNEY FOUNDATION LAND PURCHASE PROJECT
CURRENT FUNDING LEVEL
0 HECTARES PURCHASED 1989 - 1996
(12% PRODUCTION INTEREST)

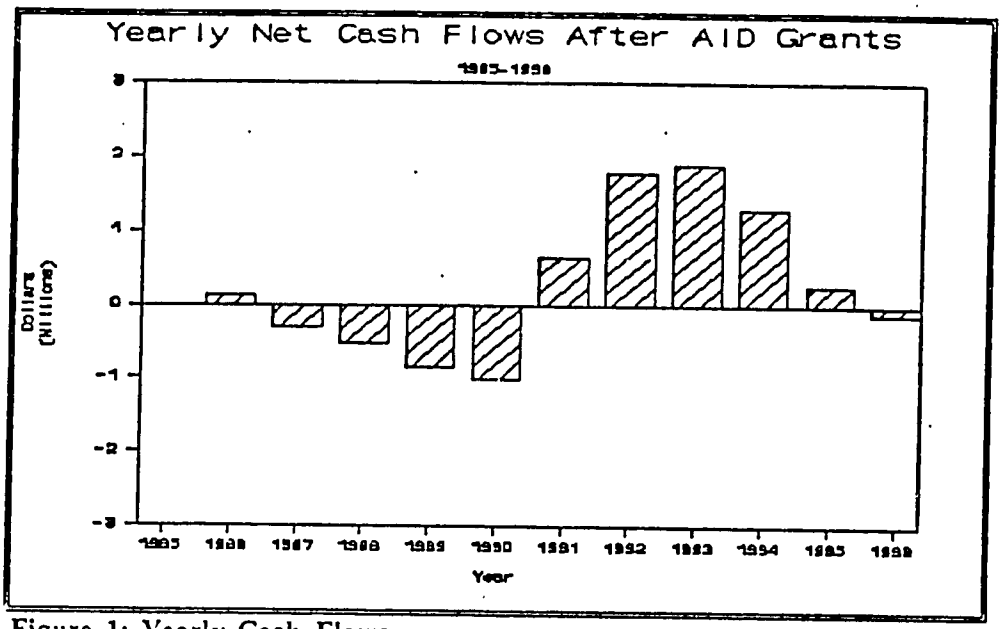

Figure 1: Yearly Cash Flows

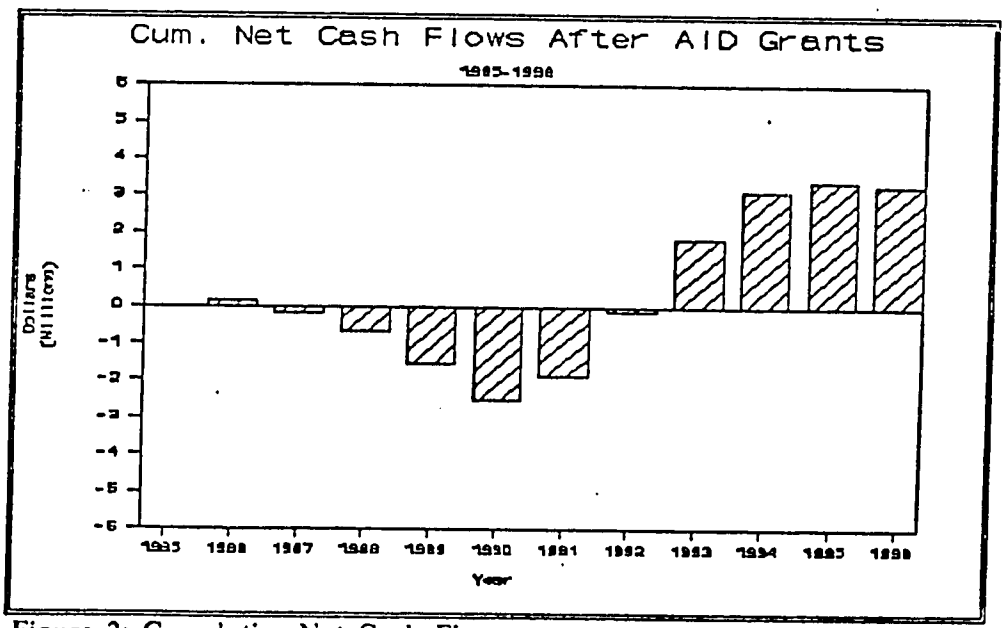

Figure 2: Cumulative Net Cash Flows

ASSUMPTIONS:

Inflation rate:	15%
Exchange Rate (1988):	2.70
Production Credit Interest:	12%
Land Credit Interest:	12%
Certificate Interest:	9%
Years to Crop Integration:	3

Pct of Variable costs Inflatable: 50%

Percent of Production costs financed

Year 1:	100%	Year 6 on: 0%
Year 2:	75%	
Year 3:	60%	
Year 4:	50%	
Year 5:	40%	

TABLE 1: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- Current Funding Level -- Assume no more land purchased

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	199
PRICE/HECTARE	377	1,028	662	706	900	900	900	900	900	900	900	900
HECTARES BOUGHT PER YEAR	1,209	1,548	1,827	1,573	0	0	0	0	0	0	0	0
CUMULATIVE HECTARES BOUGHT	1,209	2,757	4,584	6,157	6,157	6,157	6,157	6,157	6,157	6,157	6,157	6,157
CASH INFLOWS												
PRODUCTION CREDIT INTEREST	0	2,339	10,529	10,159	53,456	128,019	227,020	282,023	235,156	135,241	22,265	0
PRODUCTION CREDIT PRINCIPAL	13,938	17,861	31,904	84,656	445,468	1,066,825	1,891,837	2,350,196	1,959,633	1,127,009	185,541	0
LAND SALES DOWN PAYMENT	9,116	31,827	120,947	111,054	0	0	0	0	0	0	0	0
LAND SALES PRINCIPAL	0	7,966	45,560	71,866	142,660	293,371	410,726	518,482	518,482	518,482	518,482	518,48
LAND SALES INTEREST	0	54,695	244,700	384,370	519,843	537,728	529,780	505,520	443,302	381,085	318,867	256,649
TOTAL CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,025,943	3,059,364	3,656,221	3,156,573	2,161,816	1,045,155	775,131
CASH EXPENSES												
AID-FUNDED												
CASH PURCHASE OF LAND	227,897	795,672	604,737	555,269	0	0	0	0				
PRODUCTION CREDIT LOANS	95,593	411,223	818,480	1,333,389	1,670,034	1,709,687	1,422,409	1,009,455				
ADMINISTRATIVE COSTS	13,239	19,859	67,816	107,019	120,772	138,887	159,721	183,679				
EQUIP. (MOTORCYCLES)				4,500	0	0	0	0				
TECHNICAL ASSISTANCE	24,585	36,879	162,960	183,840	211,416	243,128	279,598	321,537				
TOTAL AID-FUNDED EXPENSES	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	1,861,727	1,514,671	0	0	0	0
COUNTERPART FUNDED EXPENSES												
CERTIFICATE PRINCIPAL PMT	0	45,579	204,714	325,661	436,715	436,715	391,136	232,001	111,054	0	0	0
CERTIFICATE INTEREST PMT	0	20,511	88,019	124,021	144,686	105,381	66,077	30,875	9,995	0	0	0
EQUIP. (JEEPS)				8,000	0	0	0	0	0	0	0	0
INFRASTRUCTURE	0	0	0	57,074	261,561	469,781	86,803	99,823	0	0	0	0
SPECIAL CERT. AID GRANT		(200,000)										
CASH PURCHASE OF LAND									0	0	0	0
PRODUCTION CREDIT LOANS									548,372	185,541	0	0
ADMINISTRATIVE COSTS									211,230	242,915	279,352	321,25
EQUIP. (MOTORCYCLES)									0	0	0	0
TECHNICAL ASSISTANCE									369,768	425,233	489,018	562,371
TOTAL COUNTERPART OUTFLOW	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	362,699	1,250,419	853,689	768,370	883,62
CASH FLOWS												
CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,025,943	3,059,364	3,656,221	3,156,573	2,161,816	1,045,155	775,131
CASH EXPENSES	361,314	1,129,723	1,946,726	2,698,773	2,845,183	3,103,581	2,405,742	1,877,370	1,250,419	853,689	768,370	883,62
AID-FUNDED	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	1,861,727	1,514,671	0	0	0	0
COUNTERPART-FUNDED	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	362,699	1,250,419	853,689	768,370	883,62
NET CASH FLOWS												
ABOVE AID-FUNDED EXPENSES	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(840,794)	(65,760)	1,197,637	2,141,550	0	0	0	0
ABOVE ALL EXPENSES	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,077,638)	653,622	1,778,851	1,906,154	1,308,127	276,784	(108,495

TABLE 1: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- Current Funding Level -- Assume no more land purchased

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
NET FOUNDATION CASH POSITIONS												
CASH POSITION (BEG. OF YEAR)	0	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,528,419)	(1,874,797)	(95,946)	(1,346,365)	(2,200,054)	(2,968,424)
NET CASH FLOW- AID FUNDED	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(840,794)	(65,760)	1,197,637	2,141,550	0	0	0	0
AID GRANT	338,260	1,148,945	1,200,353	1,521,912	840,794	65,760	0	0	0	0	0	0
CASH POSITION AFTER GRANT	0	0	133,910	(158,823)	(673,579)	(1,516,541)	(1,330,782)	266,753	(95,946)	(1,346,365)	(2,200,054)	(2,968,424)
COUNTER-PART FUNDED EXPENSE	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	362,699	1,250,419	853,689	768,370	883,626
CASH POS. AFTER C/P EXPENSE	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,528,419)	(1,874,797)	(95,946)	(1,346,365)	(2,200,054)	(2,968,424)	(3,852,050)
OTHER GRANT SOURCES												
YRLY SHORTFALL A/ALL SOURCES	0	133,910	(292,733)	(514,756)	(842,962)	(1,011,878)	653,622	1,778,851	(1,250,419)	(853,689)	(768,370)	(883,626)
CASH POSITION AFT ALL SOURCES	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,528,419)	(1,874,797)	(95,946)	(1,346,365)	(2,200,054)	(2,968,424)	(3,852,050)
AID FUNDS AVAILABLE												
AVAILABLE (BEGINNING OF YEAR)	0	8,726,740	7,577,796	6,377,443	4,855,530	4,014,737	3,948,977	0	0	0	0	0
NEW AID FUNDS	9,065,000											
TOTAL AID FUNDS AVAILABLE	9,065,000	8,726,740	7,577,796	6,377,443	4,855,530	4,014,737	3,948,977	0	0	0	0	0
AID FUNDS USED	338,260	1,148,945	1,200,353	1,521,912	840,794	65,760	0	0	0	0	0	0
AVAILABLE (END OF YEAR)	8,726,740	7,577,796	6,377,443	4,855,530	4,014,737	3,948,977	3,948,977	0	0	0	0	0
CUMULATIVE AID GRANTS USED	338,260	1,487,204	2,687,557	4,209,470	5,050,263	5,116,023	5,116,023	5,116,023	5,116,023	5,116,023	5,116,023	5,116,023
YEAR NET CASH FLOW AFTER ALL EXPENSES												
BEFORE AID GRANT	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,077,638)	653,622	1,778,851	1,906,154	1,308,127	276,784	(108,495)
AFTER AID GRANT	0	133,910	(292,733)	(514,756)	(842,962)	(1,011,878)	653,622	1,778,851	1,906,154	1,308,127	276,784	(108,495)
CUMULATIVE NET CASH FLOW AFTER ALL OUTFLOWS												
BEFORE AID GRANT	(338,260)	(1,353,294)	(2,846,380)	(4,883,049)	(6,566,804)	(7,644,441)	(6,990,820)	(5,211,969)	(3,305,815)	(1,997,688)	(1,720,903)	(1,829,398)
AFTER AID GRANT	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,528,419)	(1,874,797)	(95,946)	1,810,208	3,118,335	3,395,119	3,286,624
			0									

INPUT SECTION

AID funds for all outflows (Y/N)		Percent of inflatable costs	
or just Land & Production Credit	N	VEGETABLES	50.00%
Years to fully integrate Production	3	CORN	50.00%
Total Funds Available	9,065,000	SESAME	50.00%
Exchange rate	2.70	WHEAT	50.00%
Inflation rate	15.00%	PINEAPPLE	50.00%
Production credit Interest rate (1988 - 19xx	12.00%	COFFEE	86.00%
Land credit interest rate (1988 - 19XX)	12.00%	COCOA	50.00%
certificate interest rate	9.00%	MANGOS	50.00%

ALTERNATIVE 1

AID FUNDS ALL COSTS

(Table 2 - Figure 3 & 4)

- This alternative basically restructures how AID would finance the project. It would finance all costs rather than just the specific costs outlined. Primarily this would mean allowing AID funds to pay certificate repayment.
- Given the current funding level this scenario would allow them to buy 1,000 hectares per year starting in 1991 without negative yearly or cumulative cash flow over the project life.
- What must be monitored closely is that the foundation does not see the positive net cash flow as a windfall and then accelerate their purchases which would put them in a worse position.

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PENNEY FOUNDATION LAND PURCHASE PROJECT
ASSUMING AID FUNDS ALL COSTS
1,000 HECTARES PURCHASED BEGINNING IN 1991
(12% PRODUCTION INTEREST)

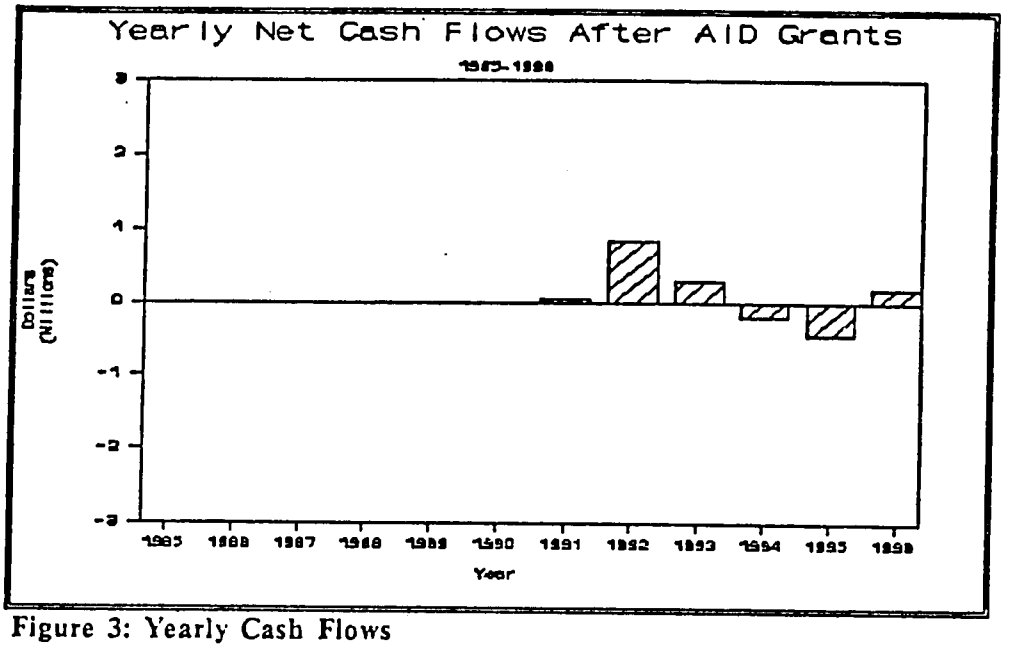

Figure 3: Yearly Cash Flows

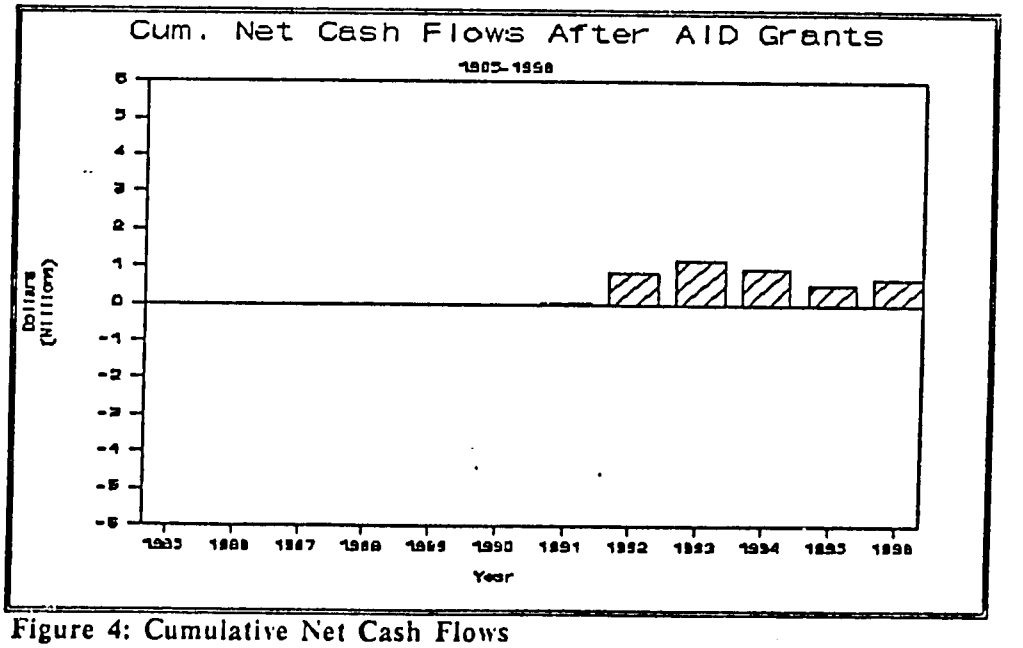

Figure 4: Cumulative Net Cash Flows

ASSUMPTIONS:

Inflation rate:	15%
Exchange Rate (1988):	2.70
Production Credit Interest:	12%
Land Credit Interest:	12%
Certificate Interest:	9%
Years to Crop Integration:	3

Pct of Variable costs Inflatable: 50%

Percent of Production costs financed

Year 1:	100%	Year 6 on: 0%
Year 2:	75%	
Year 3:	60%	
Year 4:	50%	
Year 5:	40%	

TABLE 2: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- AID funds All Costs -- 1,000 HA/year purchased beginning in 1991

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PRICE/HECTARE	377	1,028	662	706	900	900	900	900	900	900	900	900
HECTARES BOUGHT PER YEAR	1,209	1,548	1,827	1,573	0	0	1,000	1,000	1,000	1,000	1,000	1,000
CUMULATIVE HECTARES BOUGHT	1,209	2,757	4,584	6,157	6,157	6,157	7,157	8,157	9,157	10,157	11,157	12,157
CASH INFLOWS												
PRODUCTION CREDIT INTEREST	0	2,339	10,529	10,159	53,456	128,019	227,020	283,861	240,587	146,069	103,885	174,908
PRODUCTION CREDIT PRINCIPAL	13,938	17,861	31,904	84,656	445,468	1,066,825	1,891,837	2,365,506	2,004,895	1,217,246	865,708	1,457,565
LAND SALES DOWN PAYMENT	9,116	31,827	120,947	111,054	0	0	18,000	18,000	18,000	18,000	18,000	18,000
LAND SALES PRINCIPAL	0	7,966	45,560	71,866	142,660	293,371	410,726	538,057	557,632	577,207	596,782	596,782
LAND SALES INTEREST	0	54,695	244,700	384,370	519,843	537,728	529,780	613,520	656,953	698,038	746,914	685,441
TOTAL CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,025,943	3,077,364	3,818,944	3,478,068	2,656,559	2,331,288	2,932,696
CASH EXPENSES												
AID-FUNDED												
CASH PURCHASE OF LAND	227,897	795,672	604,737	555,269	0	0	450,000	450,000				
PRODUCTION CREDIT LOANS	95,593	411,223	818,480	1,333,389	1,670,034	1,709,687	1,592,053	1,545,156				
ADMINISTRATIVE COSTS	13,239	19,859	67,816	107,019	120,772	138,887	159,721	183,679				
EQUIP. (MOTORCYCLES)				4,500	0	0	0	0				
TECHNICAL ASSISTANCE	24,585	36,879	162,960	183,840	211,416	243,128	279,598	321,537				
TOTAL AID-FUNDED EXPENSES	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	2,481,371	2,500,372	0	0	0	0
COUNTERPART FUNDED EXPENSES												
CERTIFICATE PRINCIPAL PMT	0	45,579	204,714	325,661	436,715	436,715	391,136	322,001	381,054	360,000	450,000	0
CERTIFICATE INTEREST PMT	0	20,511	88,019	124,021	144,686	105,381	66,077	71,375	123,395	129,600	137,700	450,000
EQUIP. (JEEPS)				8,000	0	0	0	0	0	0	0	97,200
INFRASTRUCTURE	0	0	0	57,074	261,561	469,781	86,803	99,823	0	0	0	0
SPECIAL CERT. AID GRANT		(200,000)							0	0	0	0
CASH PURCHASE OF LAND									450,000	450,000	450,000	450,000
PRODUCTION CREDIT LOANS									1,662,658	1,257,380	967,266	856,769
ADMINISTRATIVE COSTS									211,230	242,915	279,352	321,255
EQUIP. (MOTORCYCLES)									0	0	0	0
TECHNICAL ASSISTANCE									369,768	425,233	489,018	562,371
TOTAL COUNTERPART OUTFLOW	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	493,199	3,198,105	2,865,128	2,773,336	2,737,595
CASH FLOWS												
CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,025,943	3,077,364	3,818,944	3,478,068	2,656,559	2,331,288	2,932,696
CASH EXPENSES	361,314	1,129,723	1,946,726	2,698,773	2,845,183	3,103,581	3,025,386	2,993,571	3,198,105	2,865,128	2,773,336	2,737,595
AID-FUNDED	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	2,481,371	2,500,372	0	0	0	0
COUNTERPART-FUNDED	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	493,199	3,198,105	2,865,128	2,773,336	2,737,595
NET CASH FLOWS												
ABOVE AID-FUNDED EXPENSES	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(840,794)	(65,760)	595,993	1,318,572	0	0	0	0
ABOVE ALL EXPENSES	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,077,638)	51,977	825,373	279,962	(208,569)	(442,048)	195,100

TABLE 2: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- AID funds All Costs -- 1,000 HA/year purchased beginning in 1991

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
NET FOUNDATION CASH POSITIONS												
CASH POSITION (BEG. OF YEAR)	0	0	0	0	0	0	0	51,977	877,350	1,157,313	948,744	506,696
NET CASH FLOW- ALL FLOWS	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,077,638)	51,977	825,373	279,962	(208,569)	(442,048)	195,100
AID GRANT	338,260	1,015,034	1,493,085	2,036,669	1,683,755	1,077,638	0	0	0	0	0	0
CASH POSITION AFTER GRANT	0	0	0	0	0	0	51,977	877,350	1,157,313	948,744	506,696	701,796
COUNTER-PART FUNDED EXPENSE	0	0	0	0	0	0	0	0	0	0	0	0
CASH POS. AFTER C/P EXPENSE	0	0	0	0	0	0	51,977	877,350	1,157,313	948,744	506,696	701,796
OTHER GRANT SOURCES												
YRLY SHORTFALL A/ALL SOURCES	0	0	0	0	0	0	51,977	825,373	279,962	(208,569)	(442,048)	195,100
CASH POSITION AFT ALL SOURCES	0	0	0	0	0	0	51,977	877,350	1,157,313	948,744	506,696	701,796
AID FUNDS AVAILABLE												
AVAILABLE (BEGINNING OF YEAR)	0	8,726,740	7,711,706	6,218,620	4,181,951	2,498,196	1,420,559	0	0	0	0	0
NEW AID FUNDS	9,065,000											
TOTAL AID FUNDS AVAILABLE	9,065,000	8,726,740	7,711,706	6,218,620	4,181,951	2,498,196	1,420,559	0	0	0	0	0
AID FUNDS USED	338,260	1,015,034	1,493,085	2,036,669	1,683,755	1,077,638	0	0	0	0	0	0
AVAILABLE (END OF YEAR)	8,726,740	7,711,706	6,218,620	4,181,951	2,498,196	1,420,559	1,420,559	0	0	0	0	0
CUMULATIVE AID GRANTS USED	338,260	1,353,294	2,846,380	4,883,049	6,566,804	7,644,441	7,644,441	7,644,441	7,644,441	7,644,441	7,644,441	7,644,441
YEAR NET CASH FLOW AFTER ALL EXPENSES												
BEFORE AID GRANT	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,077,638)	51,977	825,373	279,962	(208,569)	(442,048)	195,100
AFTER AID GRANT	0	0	0	0	0	0	51,977	825,373	279,962	(208,569)	(442,048)	195,100
CUMULATIVE NET CASH FLOW AFTER ALL OUTFLOWS												
BEFORE AID GRANT	(338,260)	(1,353,294)	(2,846,380)	(4,883,049)	(6,566,804)	(7,644,441)	(7,592,464)	(6,767,091)	(6,487,129)	(6,695,698)	(7,137,746)	(6,942,645)
AFTER AID GRANT	0	0	0	0	0	0	51,977	877,350	1,157,313	948,744	506,696	701,796

1

INPUT SECTION

AID funds for all outflows (Y/N) or just Land & Production Credit	Y	Percent of inflatable costs	
Years to fully integrate Production	3	VEGETABLES	50.00%
Total Funds Available	9,065,000	CORN	50.00%
Exchange rate	2.70	SESAME	50.00%
Inflation rate	15.00%	WHEAT	50.00%
Production credit interest rate (1988 - 19xx	12.00%	PINEAPPLE	50.00%
Land credit interest rate (1988 - 19XX)	12.00%	COFFEE	86.00%
certificate interest rate	9.00%	COCOA	50.00%
		MANGOS	50.00%

ALTERNATIVE 2

CURRENT FUNDING CRITERIA AND LEVELS BUT INCREASE INTEREST RATES

(Table 3 - figures 5 & 6)

- This would use the current funding criteria but would attempt to increase net cash flow by increasing interest rates.
- However, the project still sustains yearly negative cash flows and this puts them in no really better position in that they still would require about a 2.5 million dollars to overcome their cumulative yearly shortfall.
- Increasing income primarily through an interest rate increase is not the entire answer.
- The foundation still could not purchase any more land than they already have in 1985-88 and would still be trying to reduce the current deficit.

PENNEY FOUNDATION LAND PURCHASE PROJECT
CURRENT FUNDING LEVEL
0 HECTARES PURCHASED 1989 - 1996
(16% PRODUCTION INTEREST)

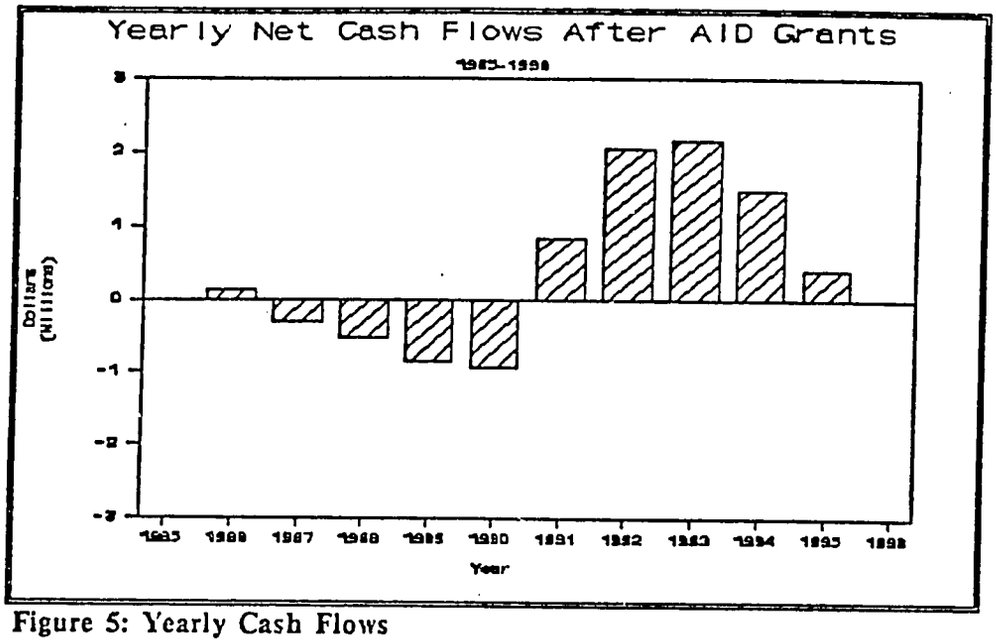

Figure 5: Yearly Cash Flows

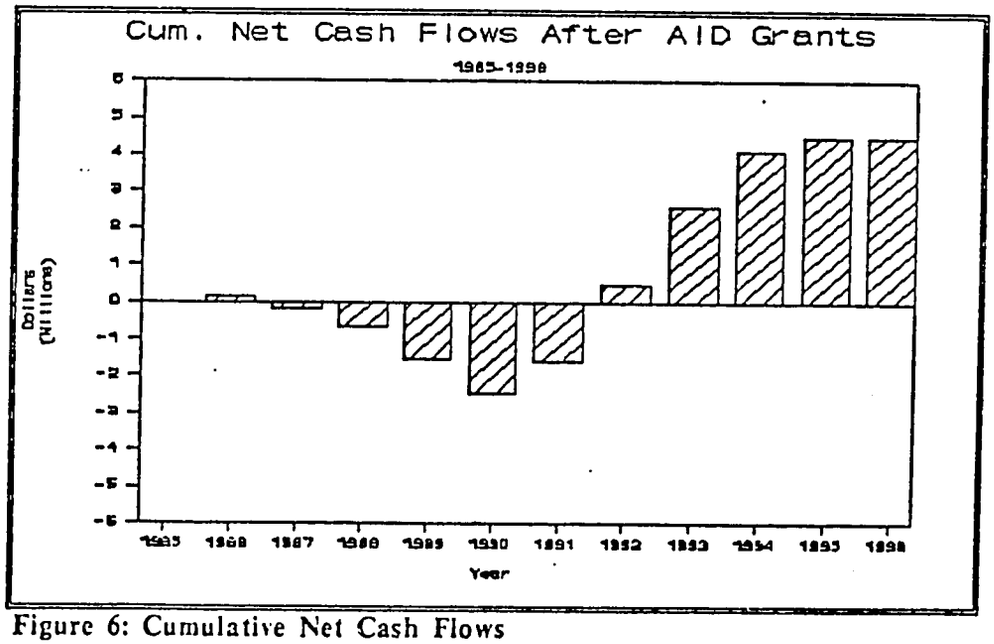

Figure 6: Cumulative Net Cash Flows

ASSUMPTIONS:

Inflation rate:	15%
Exchange Rate (1988):	2.70
Production Credit Interest:	16%
Land Credit Interest:	16%
Certificate Interest:	9%
Years to Crop Integration:	3

Pct of Variable costs Inflatable: 50%

Percent of Production costs financed

Year 1:	100%	Year 6 on: 0%
Year 2:	75%	
Year 3:	60%	
Year 4:	50%	
Year 5:	40%	

TABLE 3: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- Current Funding Level -- Assuming no more land purchased -- Higher Interest Rates

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PRICE/HECTARE	377	1,028	662	706	900	900	900	900	900	900	900	900
HECTARES BOUGHT PER YEAR	1,209	1,548	1,827	1,573	0	0	0	0	0	0	0	0
CUMULATIVE HECTARES BOUGHT	1,209	2,757	4,584	6,157	6,157	6,157	6,157	6,157	6,157	6,157	6,157	6,157
CASH INFLOWS												
PRODUCTION CREDIT INTEREST	0	2,339	10,529	10,159	58,706	137,085	240,713	376,031	313,541	180,321	29,687	0
PRODUCTION CREDIT PRINCIPAL	13,938	17,861	31,904	84,656	445,468	1,066,825	1,891,837	2,350,196	1,959,633	1,127,009	185,541	0
LAND SALES DOWN PAYMENT	9,116	31,827	120,947	111,054	0	0	0	0	0	0	0	0
LAND SALES PRINCIPAL	0	7,966	45,560	71,866	142,660	293,371	410,726	525,434	525,434	525,434	525,434	525,434
LAND SALES INTEREST	0	54,695	244,700	384,370	606,651	679,114	706,374	685,150	601,081	517,011	432,942	348,873
TOTAL CASH INFLOWS	23,054	114,688	453,641	662,104	1,253,486	2,176,395	3,249,650	3,936,811	3,399,688	2,349,775	1,173,603	874,306
CASH EXPENSES												
AID-FUNDED												
CASH PURCHASE OF LAND	227,897	795,672	604,737	555,269	0	0	0	0				
PRODUCTION CREDIT LOANS	95,593	411,223	818,480	1,333,389	1,670,034	1,709,687	1,422,409	1,009,455				
ADMINISTRATIVE COSTS	13,239	19,859	67,816	107,019	120,772	138,887	159,721	183,679				
EQUIP. (MOTORCYCLES)				4,500	0	0	0	0				
TECHNICAL ASSISTANCE	24,585	36,879	162,960	183,840	211,416	243,128	279,598	321,537				
TOTAL AID-FUNDED EXPENSES	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	1,861,727	1,514,671	0	0	0	0
COUNTERPART FUNDED EXPENSES												
CERTIFICATE PRINCIPAL PMT	0	45,579	204,714	325,661	436,715	436,715	391,136	232,001	111,054	0	0	0
CERTIFICATE INTEREST PMT	0	20,511	88,019	124,021	144,686	105,301	66,077	30,875	9,995	0	0	0
EQUIP. (JEEPS)				8,000	0	0	0	0	0	0	0	0
INFRASTRUCTURE	0	0	0	57,074	261,561	469,781	86,803	99,823	0	0	0	0
SPECIAL CERT. AID GRANT		(200,000)										
CASH PURCHASE OF LAND									0	0	0	0
PRODUCTION CREDIT LOANS									548,372	185,541	0	0
ADMINISTRATIVE COSTS									211,230	242,915	279,352	321,255
EQUIP. (MOTORCYCLES)									0	0	0	0
TECHNICAL ASSISTANCE									369,768	425,233	489,018	562,371
TOTAL COUNTERPART OUTFLOW	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	362,699	1,250,419	853,689	768,370	883,626
CASH FLOWS												
CASH INFLOWS	23,054	114,688	453,641	662,104	1,253,486	2,176,395	3,249,650	3,936,811	3,399,688	2,349,775	1,173,603	874,306
CASH EXPENSES	361,314	1,129,723	1,946,726	2,698,773	2,845,183	3,103,581	2,405,742	1,877,370	1,250,419	853,689	768,370	883,626
AID-FUNDED	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	1,861,727	1,514,671	0	0	0	0
COUNTERPART-FUNDED	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	362,699	1,250,419	853,689	768,370	883,626
NET CASH FLOWS												
ABOVE AID-FUNDED EXPENSES	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(748,736)	84,692	1,387,923	2,422,139	0	0	0	0
ABOVE ALL EXPENSES	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,591,697)	(927,185)	843,908	2,059,440	2,149,270	1,496,086	405,233	(9,320)

TABLE 3: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- Current Funding Level -- Assuming no more land purchased -- Higher Interest Rates

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
NET FOUNDATION CASH POSITIONS												
CASH POSITION (BEG. OF YEAR)	0	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,443,726)	(1,599,819)	459,621	(790,797)	(1,644,486)	(2,412,856)
NET CASH FLOW- AID FUNDED	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(748,736)	84,692	1,387,923	2,422,139	0	0	0	0
AID GRANT	338,260	1,148,945	1,200,353	1,521,912	748,736	0	0	0	0	0	0	0
CASH POSITION AFTER GRANT	0	0	133,910	(158,823)	(673,579)	(1,431,849)	(1,055,803)	822,321	459,621	(790,797)	(1,644,486)	(2,412,856)
COUNTER-PART FUNDED EXPENSE	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	362,699	1,250,419	853,689	768,370	883,626
CASH POS. AFTER C/P EXPENSE	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,443,726)	(1,599,819)	459,621	(790,797)	(1,644,486)	(2,412,856)	(3,296,482)
OTHER GRANT SOURCES												
YRLY SHORTFALL A/ALL SOURCES	0	133,910	(292,733)	(514,756)	(842,962)	(927,185)	843,908	2,059,440	(1,250,419)	(853,689)	(768,370)	(883,626)
CASH POSITION AFT ALL SOURCES	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,443,726)	(1,599,819)	459,621	(790,797)	(1,644,486)	(2,412,856)	(3,296,482)
AID FUNDS AVAILABLE												
AVAILABLE (BEGINNING OF YEAR)	0	8,726,740	7,577,796	6,377,443	4,855,530	4,106,795	4,106,795	0	0	0	0	0
NEW AID FUNDS	9,065,000											
TOTAL AID FUNDS AVAILABLE	9,065,000	8,726,740	7,577,796	6,377,443	4,855,530	4,106,795	4,106,795	0	0	0	0	0
AID FUNDS USED	338,260	1,148,945	1,200,353	1,521,912	748,736	0	0	0	0	0	0	0
AVAILABLE (END OF YEAR)	8,726,740	7,577,796	6,377,443	4,855,530	4,106,795	4,106,795	4,106,795	0	0	0	0	0
CUMULATIVE AID GRANTS USED	338,260	1,487,204	2,687,557	4,209,470	4,958,205	4,958,205	4,958,205	4,958,205	4,958,205	4,958,205	4,958,205	4,958,205
YEAR NET CASH FLOW AFTER ALL EXPENSES												
BEFORE AID GRANT	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,591,697)	(927,185)	843,908	2,059,440	2,149,270	1,496,086	405,233	(9,320)
AFTER AID GRANT	0	133,910	(292,733)	(514,756)	(842,962)	(927,185)	843,908	2,059,440	2,149,270	1,496,086	405,233	(9,320)
CUMULATIVE NET CASH FLOW AFTER ALL OUTFLOWS												
BEFORE AID GRANT	(338,260)	(1,353,294)	(2,846,380)	(4,883,049)	(6,474,746)	(7,401,931)	(6,558,024)	(4,498,584)	(2,349,314)	(853,227)	(447,994)	(457,314)
AFTER AID GRANT	0	133,910	(158,823)	(673,579)	(1,516,541)	(2,443,726)	(1,599,819)	459,621	2,608,091	4,104,978	4,510,211	4,500,891
			0									

INPUT SECTION

AID funds for all outflows (Y/N) or just Land & Production Credit	N	Percent of inflatable costs	
Years to fully integrate Production	3	VEGETABLES	50.00%
Total Funds Available	9,065,000	CORN	50.00%
Exchange rate	2.70	SESAME	50.00%
Inflation rate	15.00%	WHEAT	50.00%
Production credit interest rate (1988 - 19xx	16.00%	PINEAPPLE	50.00%
Land credit interest rate (1988 - 19XX)	16.00%	COFFEE	86.00%
certificate interest rate	9.00%	COCOA	50.00%
		MANGOS	50.00%

ALTERNATIVE 3

AID FUNDS ALL COSTS AT INCREASED INTEREST RATES

(Table 4 - Figures 7 & 8)

- This is basically the same alternative as #1 but at an increased interest rate.
- Primary effect would be that they would be able to purchase up to 1,100 hectares a year starting in 1991
- The project would still have a positive cash flow over the project horizon.

PENNEY FOUNDATION LAND PURCHASE PROJECT
ASSUMING AID FUNDS ALL COSTS
1,100 HECTARES PURCHASED BEGINNING IN 1991
(16% PRODUCTION INTEREST)

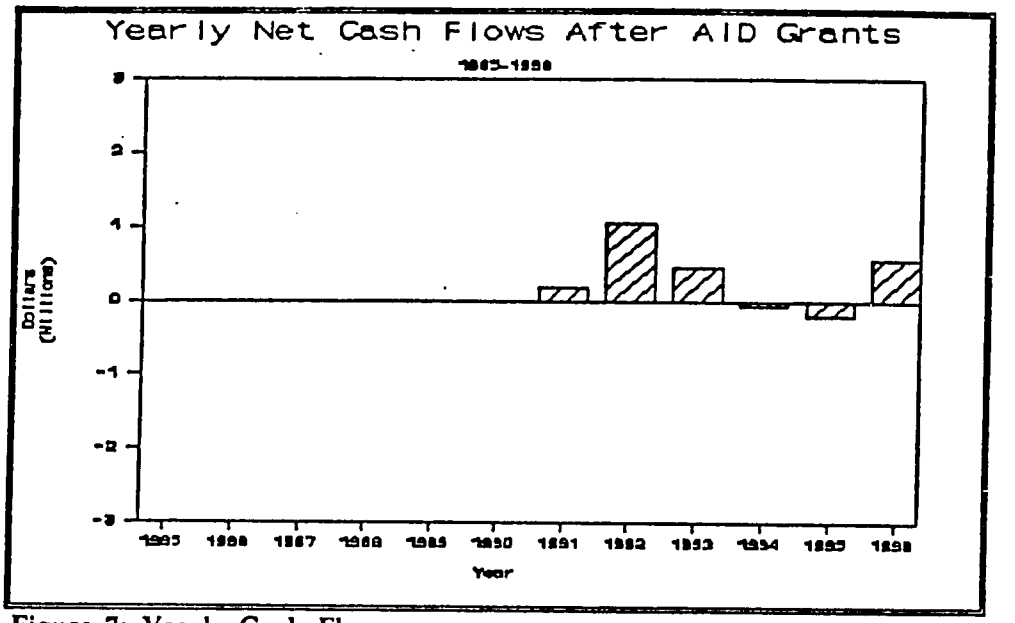

Figure 7: Yearly Cash Flows

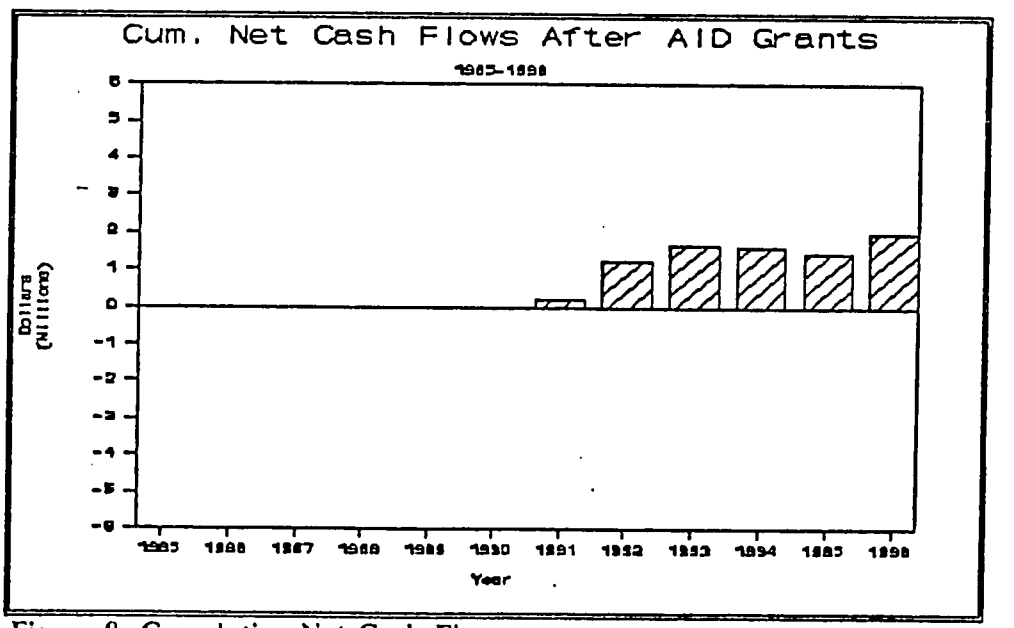

Figure 8: Cumulative Net Cash Flows

ASSUMPTIONS:

Inflation rate:	15%
Exchange Rate (1988):	2.70
Production Credit Interest:	16%
Land Credit Interest:	16%
Certificate Interest:	9%
Years to Crop Integration:	3

Pct of Variable costs Inflatable: 50%

Percent of Production costs financed

Year 1:	100%	Year 6 on: 0%
Year 2:	75%	
Year 3:	60%	
Year 4:	50%	
Year 5:	40%	

TABLE 4: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- AID funds All Costs -- 1,100 HA/year purchased beginning in 1991 -- Higher Interest Rates

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PRICE/HECTARE	377	1,028	662	706	900	900	900	900	900	900	900	900
HECTARES BOUGHT PER YEAR	1,209	1,548	1,827	1,573	0	0	1,100	1,100	1,100	1,100	1,100	1,100
CUMULATIVE HECTARES BOUGHT	1,209	2,757	4,584	6,157	6,157	6,157	7,257	8,357	9,457	10,557	11,657	12,757
CASH INFLOWS												
PRODUCTION CREDIT INTEREST	0	2,339	10,529	10,159	58,706	137,085	240,713	378,726	321,507	196,203	149,396	256,531
PRODUCTION CREDIT PRINCIPAL	13,938	17,861	31,904	84,656	445,468	1,066,825	1,891,837	2,367,037	2,009,421	1,226,269	933,724	1,603,321
LAND SALES DOWN PAYMENT	9,116	31,827	120,947	111,054	0	0	19,800	19,800	19,800	19,800	19,800	19,800
LAND SALES PRINCIPAL	0	7,966	45,560	71,866	142,660	293,371	410,726	546,966	568,499	590,031	611,564	611,564
LAND SALES INTEREST	0	54,695	244,700	384,370	606,651	679,114	706,374	843,550	914,436	981,876	1,065,702	987,684
TOTAL CASH INFLOWS	23,054	114,688	453,641	662,104	1,253,486	2,176,395	3,269,450	4,156,080	3,833,663	3,014,179	2,780,186	3,478,900
CASH EXPENSES												
AID-FUNDED												
CASH PURCHASE OF LAND	227,897	795,672	604,737	555,269	0	0	495,000	495,000				
PRODUCTION CREDIT LOANS	95,593	411,223	818,480	1,333,389	1,670,034	1,709,687	1,609,017	1,598,726				
ADMINISTRATIVE COSTS	13,239	19,859	67,816	107,019	120,772	138,887	159,721	183,679				
EQUIP. (MOTORCYCLES)				4,500	0	0	0	0				
TECHNICAL ASSISTANCE	24,585	36,879	162,960	183,840	211,416	243,128	279,598	321,537				
TOTAL AID-FUNDED EXPENSES	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	2,543,336	2,598,942	0	0	0	0
COUNTERPART FUNDED EXPENSES												
CERTIFICATE PRINCIPAL PMT	0	45,579	204,714	325,661	436,715	436,715	391,136	331,001	408,054	396,000	495,000	0
CERTIFICATE INTEREST PMT	0	20,511	88,019	124,021	144,686	105,381	66,077	75,425	134,735	142,560	151,470	495,000
EQUIP. (JEEPS)				8,000	0	0	0	0	0	0	0	106,920
INFRASTRUCTURE	0	0	0	57,074	261,561	469,781	86,803	99.823	0	0	0	0
SPECIAL CERT. AID GRANT		(200,000)							0	0	0	0
CASH PURCHASE OF LAND									495,000	495,000	495,000	495,000
PRODUCTION CREDIT LOANS									1,774,087	1,364,564	1,063,993	942,446
ADMINISTRATIVE COSTS									211,230	242,915	279,352	321,255
EQUIP. (MOTORCYCLES)									0	0	0	0
TECHNICAL ASSISTANCE									369,768	425,233	489,018	562,371
TOTAL COUNTERPART OUTFLOW	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	506,249	3,392,874	3,066,272	2,973,833	2,922,992
CASH FLOWS												
CASH INFLOWS	23,054	114,688	453,641	662,104	1,253,486	2,176,395	3,269,450	4,156,080	3,833,663	3,014,179	2,780,186	3,478,900
CASH EXPENSES	361,314	1,129,723	1,946,726	2,698,773	2,845,183	3,103,581	3,087,351	3,105,191	3,392,874	3,066,272	2,973,833	2,922,992
AID-FUNDED	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,091,703	2,543,336	2,598,942	0	0	0	0
COUNTERPART-FUNDED	0	(133,910)	292,733	514,756	842,962	1,011,878	544,015	506,249	3,392,874	3,066,272	2,973,833	2,922,992
NET CASH FLOWS												
ABOVE AID-FUNDED EXPENSES	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(748,736)	84,692	726,114	1,557,138	0	0	0	0
ABOVE ALL EXPENSES	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,591,697)	(927,185)	182,099	1,050,889	440,789	(52,093)	(193,647)	555,908

TABLE 4: PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- AID funds All Costs -- 1,100 HA/year purchased beginning in 1991 -- Higher Interest Rates

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
NET FOUNDATION CASH POSITIONS												
CASH POSITION (BEG. OF YEAR)	0	0	0	0	0	0	0	182,099	1,232,988	1,673,776	1,621,683	1,428,037
NET CASH FLOW- ALL FLOWS	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,591,697)	(927,185)	182,099	1,050,889	440,789	(52,093)	(193,647)	555,908
AID GRANT	338,260	1,015,034	1,493,085	2,036,669	1,591,697	927,185	0	0	0	0	0	0
CASH POSITION AFTER GRANT	0	0	0	0	0	0	182,099	1,232,988	1,673,776	1,621,683	1,428,037	1,983,945
COUNTER-PART FUNDED EXPENSE	0	0	0	0	0	0	0	0	0	0	0	0
CASH POS. AFTER C/P EXPENSE	0	0	0	0	0	0	182,099	1,232,988	1,673,776	1,621,683	1,428,037	1,983,945
OTHER GRANT SOURCES												
YRLY SHORTFALL A/ALL SOURCES	0	0	0	0	0	0	182,099	1,050,889	440,789	(52,093)	(193,647)	555,908
CASH POSITION AFT ALL SOURCES	0	0	0	0	0	0	182,099	1,232,988	1,673,776	1,621,683	1,428,037	1,983,945
AID FUNDS AVAILABLE												
AVAILABLE (BEGINNING OF YEAR)	0	8,726,740	7,711,706	6,218,620	4,181,951	2,590,254	1,663,069	0	0	0	0	0
NEW AID FUNDS	9,065,000											
TOTAL AID FUNDS AVAILABLE	9,065,000	8,726,740	7,711,706	6,218,620	4,181,951	2,590,254	1,663,069	0	0	0	0	0
AID FUNDS USED	338,260	1,015,034	1,493,085	2,036,669	1,591,697	927,185	0	0	0	0	0	0
AVAILABLE (END OF YEAR)	8,726,740	7,711,706	6,218,620	4,181,951	2,590,254	1,663,069	1,663,069	0	0	0	0	0
CUMULATIVE AID GRANTS USED	338,260	1,353,294	2,846,380	4,883,049	6,474,746	7,401,931	7,401,931	7,401,931	7,401,931	7,401,931	7,401,931	7,401,931
YEAR NET CASH FLOW AFTER ALL EXPENSES												
BEFORE AID GRANT	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,591,697)	(927,185)	182,099	1,050,889	440,789	(52,093)	(193,647)	555,908
AFTER AID GRANT	0	0	0	0	0	0	182,099	1,050,889	440,789	(52,093)	(193,647)	555,908
CUMULATIVE NET CASH FLOW AFTER ALL OUTFLOWS												
BEFORE AID GRANT	(338,260)	(1,353,294)	(2,846,380)	(4,883,049)	(6,474,746)	(7,401,931)	(7,219,833)	(6,168,944)	(5,728,155)	(5,780,248)	(5,973,895)	(5,417,987)
AFTER AID GRANT	0	0	0	0	0	0	182,099	1,232,988	1,673,776	1,621,683	1,428,037	1,983,945
			1									

INPUT SECTION

AID funds for all outflows (Y/N)		Percent of Inflatable costs	
or just Land & Production Credit	Y	VEGETABLES	50.00%
Years to fully integrate Production	3	CORN	50.00%
Total Funds Available	9,065,000	SESAME	50.00%
Exchange rate	2.70	WHEAT	50.00%
Inflation rate	15.00%	PINEAPPLE	50.00%
Production credit interest rate (1988 - 19xx	16.00%	COFFEE	86.00%
Land credit interest rate (1988 --19XX)	16.00%	COCOA	50.00%
certificate interest rate	9.00%	MANGOS	50.00%

ALTERNATIVE 4

CURRENT FUNDING CRITERIA - DEFERRING FURTHER LAND PURCHASES UNTIL 1990.

(Table 5 - Figures 7 & 8)

- This alternative defers land purchases only for two years rather than the three year stipulated in alternative 2.
- Surprisingly enough, this would allow them to purchase about 1,000 Hectares a year starting in 1990 under current conditions and be in better position than they currently are but they still have a cumulative net shortfall by that time of 2.5 million dollars.
- Again the reason they could still purchase land is that the current agreement allows them to request AID funding for costs rather than Net Costs.

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PENNEY FOUNDATION LAND PURCHASE PROJECT
AID FUNDS ALL COSTS
1,000 HECTARES PURCHASED BEGINNING IN 1990
(12% PRODUCTION CREDIT)

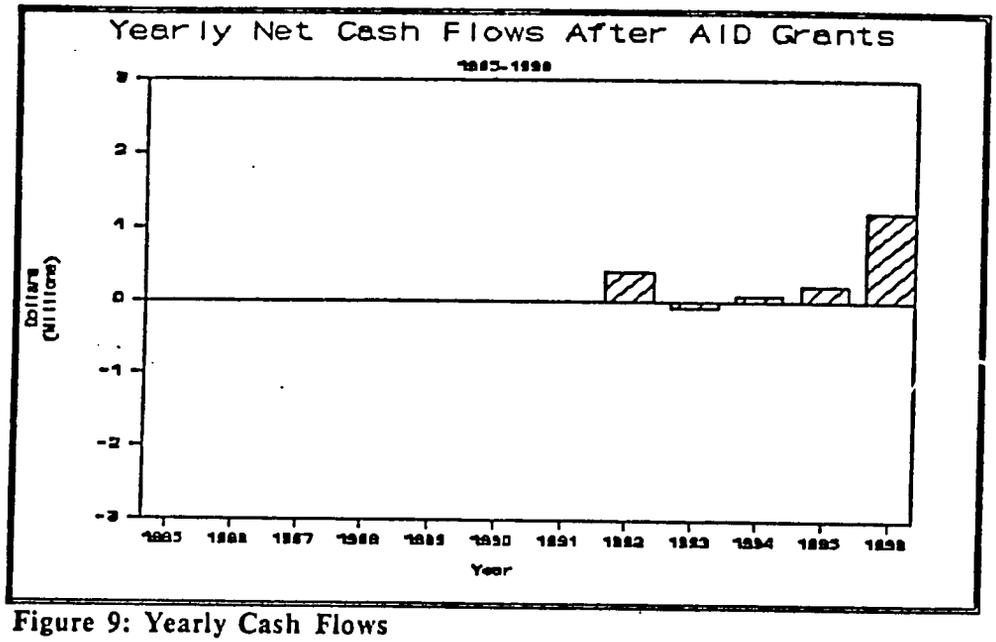

Figure 9: Yearly Cash Flows

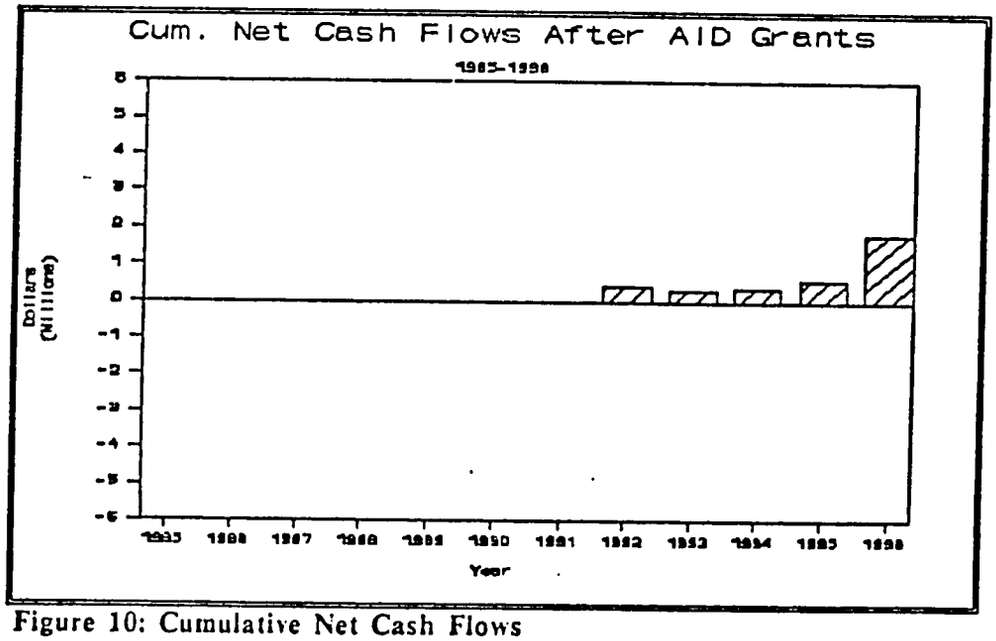

Figure 10: Cumulative Net Cash Flows

ASSUMPTIONS:

Inflation rate:	15%
Exchange Rate (1988):	2.70
Production Credit Interest:	12%
Land Credit Interest:	12%
Certificate Interest:	9%
Years to Crop Integration:	3

Pct of Variable costs Inflatable: 50%

Percent of Production costs financed

Year 1:	100%	Year 6 on: 0%
Year 2:	75%	
Year 3:	60%	
Year 4:	50%	
Year 5:	40%	

TABLE 5:PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- AID funds all costs -- 1,000 HA/year purchased beginning in 1990

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PRICE/HECTARE	377	1,028	662	706	900	900	900	900	900	900	900	900
HECTARES BOUGHT PER YEAR	1,209	1,548	1,827	1,573	0	1,000	1,000	1,000	1,000	1,000	1,000	1,000
CUMULATIVE HECTARES BOUGHT	1,209	2,757	4,584	6,157	6,157	7,157	8,157	9,157	10,157	11,157	12,157	13,157
CASH INFLOWS												
PRODUCTION CREDIT INTEREST	0	2,339	10,529	10,159	53,456	128,019	228,730	287,076	245,229	207,651	185,395	264,970
PRODUCTION CREDIT PRINCIPAL	13,938	17,861	31,904	84,656	445,468	1,066,825	1,906,079	2,392,300	2,043,574	1,730,425	1,544,962	2,208,084
LAND SALES DOWN PAYMENT	9,116	31,827	120,947	111,054	0	18,000	18,000	18,000	18,000	18,000	18,000	18,000
LAND SALES PRINCIPAL	0	7,966	45,560	71,866	142,660	293,371	430,301	557,632	577,207	675,658	774,109	852,985
LAND SALES INTEREST	0	54,695	244,700	384,370	519,843	537,728	637,780	719,171	760,255	809,132	846,194	763,442
TOTAL CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,043,943	3,220,890	3,974,179	3,644,265	3,440,865	3,368,660	4,107,481
CASH EXPENSES												
AID-FUNDED												
CASH PURCHASE OF LAND	227,897	795,672	604,737	555,269	0	450,000	450,000	450,000				
PRODUCTION CREDIT LOANS	95,593	411,223	818,480	1,333,389	1,670,034	1,861,210	1,900,630	2,003,861				
ADMINISTRATIVE COSTS	13,239	19,859	67,816	107,019	120,772	138,887	159,721	183,679				
EQUIP. (MOTORCYCLES)				4,500	0	0	0	0				
TECHNICAL ASSISTANCE	24,585	36,879	162,960	183,840	211,416	243,128	279,598	321,537				
TOTAL AID-FUNDED EXPENSES	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,693,226	2,789,949	2,959,077	0	0	0	0
COUNTERPART FUNDED EXPENSES												
CERTIFICATE PRINCIPAL PMT	0	45,579	204,714	325,661	436,715	436,715	481,136	412,001	471,054	450,000	540,000	450,000
CERTIFICATE INTEREST PMT	0	20,511	88,019	124,021	144,686	105,381	106,577	103,775	147,695	145,800	145,800	97,200
EQUIP. (JEEPS)				8,000	0	0	0	0	0	0	0	0
INFRASTRUCTURE	0	0	0	57,074	261,561	469,781	86,803	99,823	0	0	0	0
SPECIAL CERT. AID GRANT		(200,000)										
CASH PURCHASE OF LAND									450,000	450,000	450,000	450,000
PRODUCTION CREDIT LOANS									2,085,244	1,653,410	1,252,513	1,005,441
ADMINISTRATIVE COSTS									211,230	242,915	279,352	321,255
EQUIP. (MOTORCYCLES)									0	0	0	0
TECHNICAL ASSISTANCE									369,768	425,233	489,018	562,371
TOTAL COUNTERPART OUTFLOW	0	(133,910)	292,733	514,756	842,962	1,011,878	674,515	615,599	3,734,991	3,367,358	3,156,683	2,886,266
CASH FLOWS												
CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,043,943	3,220,890	3,974,179	3,644,265	3,440,865	3,368,660	4,107,481
CASH EXPENSES	361,314	1,129,723	1,946,726	2,698,773	2,845,183	3,705,103	3,464,464	3,574,676	3,734,991	3,367,358	3,156,683	2,886,266
AID-FUNDED	361,314	1,263,633	1,653,994	2,184,017	2,002,221	2,693,226	2,789,949	2,959,077	0	0	0	0
COUNTERPART-FUNDED	0	(133,910)	292,733	514,756	842,962	1,011,878	674,515	615,599	3,734,991	3,367,358	3,156,683	2,886,266
NET CASH FLOWS												
ABOVE AID-FUNDED EXPENSES	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(840,794)	(649,282)	430,942	1,015,102	0	0	0	0
ABOVE ALL EXPENSES	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,661,160)	(243,573)	399,503	(90,726)	73,507	211,977	1,221,214

TABLE 5:PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- AID funds all costs -- 1,000 HA/year purchased beginning in 1990

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
NET FOUNDATION CASH POSITIONS												
CASH POSITION (BEG. OF YEAR)	0	0	0	0	0	0	0	0	399,503	308,777	382,284	594,261
NET CASH FLOW- ALL FLOWS	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,661,160)	(243,573)	399,503	(90,726)	73,507	211,977	1,221,214
AID GRANT	338,260	1,015,034	1,493,085	2,036,669	1,683,755	1,661,160	243,573	0	0	0	0	0
CASH POSITION AFTER GRANT	0	0	0	0	0	0	0	399,503	308,777	382,284	594,261	1,815,475
COUNTER-PART FUNDED EXPENSE	0	0	0	0	0	0	0	0	0	0	0	0
CASH POS. AFTER C/P EXPENSE	0	0	0	0	0	0	0	399,503	308,777	382,284	594,261	1,815,475
OTHER GRANT SOURCES												
YRLY SHORTFALL A/ALL SOURCES	0	0	0	0	0	0	0	399,503	(90,726)	73,507	211,977	1,221,214
CASH POSITION AFT ALL SOURCES	0	0	0	0	0	0	0	399,503	308,777	382,284	594,261	1,815,475
AID FUNDS AVAILABLE												
AVAILABLE (BEGINNING OF YEAR)	0	8,726,740	7,711,706	6,218,620	4,181,951	2,498,196	837,036	0	0	0	0	0
NEW AID FUNDS	9,065,000											
TOTAL AID FUNDS AVAILABLE	9,065,000	8,726,740	7,711,706	6,218,620	4,181,951	2,498,196	837,036	0	0	0	0	0
AID FUNDS USED	338,260	1,015,034	1,493,085	2,036,669	1,683,755	1,661,160	243,573	0	0	0	0	0
AVAILABLE (END OF YEAR)	8,726,740	7,711,706	6,218,620	4,181,951	2,498,196	837,036	593,463	0	0	0	0	0
CUMULATIVE AID GRANTS USED	338,260	1,353,294	2,846,380	4,883,049	6,566,804	8,227,964	8,471,537	8,471,537	8,471,537	8,471,537	8,471,537	8,471,537
YEAR NET CASH FLOW AFTER ALL EXPENSES												
BEFORE AID GRANT	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	(1,661,160)	(243,573)	399,503	(90,726)	73,507	211,977	1,221,214
AFTER AID GRANT	0	0	0	0	0	0	0	399,503	(90,726)	73,507	211,977	1,221,214
CUMULATIVE NET CASH FLOW AFTER ALL OUTFLOWS												
BEFORE AID GRANT	(338,260)	(1,353,294)	(2,846,380)	(4,883,049)	(6,566,804)	(8,227,964)	(8,471,537)	(8,072,034)	(8,162,760)	(8,089,254)	(7,877,277)	(6,656,062)
AFTER AID GRANT	0	0	0	0	0	0	0	399,503	308,777	382,284	594,261	1,815,475
			1									

INPUT SECTION

AID funds for all outflows (Y/N)		Percent of inflatable costs	
or just Land & Production Credit	Y	VEGETABLES	50.00%
Years to fully integrate Production	3	CORN	50.00%
Total Funds Available	9,065,000	SESAME	50.00%
Exchange rate	2.70	WHEAT	50.00%
Inflation rate	15.00%	PINEAPPLE	50.00%
Production credit Interest rate (1988 - 19xx	12.00%	COFFEE	86.00%
Land credit interest rate (1988 - 19XX)	12.00%	COCOA	50.00%
certificate interest rate	9.00%	MANGOS	50.00%

ALTERNATIVE 5

FINDING ANOTHER PRODUCTION CREDIT SOURCE

(Table 6 - Figures 11 & 12)

* This is not the total answer that it would appear at first. The foundation does profit some from the interest on production credit.

* A significant assumption would be that there would be other sources of production credit available to these beneficiaries without some guarantee for the source. The beneficiaries do not hold title to the land until totally amortized and the lien on the land or an outside guarantee would be the only a current lender would provide production credit.

* Again because the foundation can only request payment for certain scheduled costs and they would not be accruing interest from production credit , there would not be enough of a return from the mortgage interest to pay off the certificates.

* This would have the double effect of restricting the amount of land (750 Hectares/year) that could be bought and decreasing the amount of the AID grant that could be used because only a portion of the costs can be funded under the current agreement

TABLE 6:PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- Current Funding Level -- 750 HA/year purchased beginning in 1990 - Assuming Other Production Credit So

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PRICE/HECTARE	377	1,028	662	706	900	900	900	900	900	900	900	900
HECTARES BOUGHT PER YEAR	1,209	1,548	1,827	1,573	0	750	750	750	750	750	750	750
CUMULATIVE HECTARES BOUGHT	1,209	2,757	4,584	6,157	6,157	6,907	7,657	8,407	9,157	9,907	10,657	11,407
CASH INFLOWS												
PRODUCTION CREDIT INTEREST	0	2,339	10,529	10,159	53,456	128,019	142,449	124,370	49,831	0	0	0
PRODUCTION CREDIT PRINCIPAL	13,938	17,861	31,904	84,656	445,468	1,066,825	1,187,077	1,036,417	415,257	0	0	0
LAND SALES DOWN PAYMENT	9,116	31,827	120,947	111,054	0	13,500	13,500	13,500	13,500	13,500	13,500	13,500
LAND SALES PRINCIPAL	0	7,966	45,560	71,866	142,660	293,371	425,407	547,844	562,525	636,364	710,202	769,359
LAND SALES INTEREST	0	54,695	244,700	384,370	519,843	537,728	610,780	665,758	681,017	702,120	714,362	636,744
TOTAL CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,039,443	2,379,214	2,387,890	1,722,131	1,351,984	1,438,064	1,419,603
CASH EXPENSES												
AID-FUNDED												
CASH PURCHASE OF LAND	227,897	795,672	604,737	555,269	0	337,500	337,500	337,500				
PRODUCTION CREDIT LOANS	95,593	411,223	818,480	1,333,389	1,670,034	0	0	0				
ADMINISTRATIVE COSTS	13,239	19,859	67,816	107,019	120,772	138,887	159,721	183,679				
EQUIP. (MOTORCYCLES)				4,500	0	0	0	0				
TECHNICAL ASSISTANCE	24,585	36,879	162,960	183,840	211,416	243,128	279,598	321,537				
TOTAL AID-FUNDED EXPENSES	361,314	1,263,633	1,653,994	2,184,017	2,002,221	719,516	776,818	842,716	0	0	0	0
COUNTERPART FUNDED EXPENSES												
CERTIFICATE PRINCIPAL PMT	0	45,579	204,714	325,661	436,715	436,715	458,636	367,001	381,054	337,500	405,000	337,500
CERTIFICATE INTEREST PMT	0	20,511	88,019	124,021	144,686	105,381	96,452	85,550	113,270	109,350	109,350	72,900
EQUIP. (JEEPS)				8,000	0	0	0	0	0	0	0	0
INFRASTRUCTURE	0	0	0	57,074	261,561	469,781	86,803	99,823	0	0	0	0
SPECIAL CERT. AID GRANT		(200,000)										
CASH PURCHASE OF LAND									337,500	337,500	337,500	337,500
PRODUCTION CREDIT LOANS									0	0	0	0
ADMINISTRATIVE COSTS									211,230	242,915	279,352	321,255
EQUIP. (MOTORCYCLES)									0	0	0	0
TECHNICAL ASSISTANCE									369,768	425,233	489,018	562,371
TOTAL COUNTERPART OUTFLOW	0	(133,910)	292,733	514,756	842,962	1,011,878	641,890	552,374	1,412,822	1,452,498	1,620,220	1,631,526
CASH FLOWS												
CASH INFLOWS	23,054	114,688	453,641	662,104	1,161,428	2,039,443	2,379,214	2,387,890	1,722,131	1,351,984	1,438,064	1,419,603
CASH EXPENSES	361,314	1,129,723	1,946,726	2,698,773	2,845,183	1,731,394	1,418,708	1,395,090	1,412,822	1,452,498	1,620,220	1,631,526
AID-FUNDED	361,314	1,263,633	1,653,994	2,184,017	2,002,221	719,516	776,818	842,716	0	0	0	0
COUNTERPART-FUNDED	0	(133,910)	292,733	514,756	842,962	1,011,878	641,890	552,374	1,412,822	1,452,498	1,620,220	1,631,526
NET CASH FLOWS												
ABOVE AID-FUNDED EXPENSES	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(840,794)	1,319,928	1,602,396	1,545,174	0	0	0	0
ABOVE ALL EXPENSES	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	308,050	960,505	992,800	309,309	(100,514)	(182,156)	(211,923)

TABLE 6:PENNEY FOUNDATION LAND PURCHASE PROJECT -- PROJECTED CASH FLOW -- Current Funding Level -- 750 HA/year purchased beginning in 1990 - Assuming Other Production Credit So

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
NET FOUNDATION CASH POSITIONS												
CASH POSITION (BEG. OF YEAR)	0	0	133,910	(158,823)	(673,579)	(1,516,541)	(1,208,491)	(247,986)	744,814	(668,008)	(2,120,506)	(3,740,726)
NET CASH FLOW- AID FUNDED	(338,260)	(1,148,945)	(1,200,353)	(1,521,912)	(840,794)	1,319,928	1,602,396	1,545,174	0	0	0	0
AID GRANT	338,260	1,148,945	1,200,353	1,521,912	840,794	0	0	0	0	0	0	0
CASH POSITION AFTER GRANT	0	0	133,910	(158,823)	(673,579)	(196,613)	393,904	1,297,188	744,814	(668,008)	(2,120,506)	(3,740,726)
COUNTER-PART FUNDED EXPENSE	0	(133,910)	292,733	514,756	842,962	1,011,878	641,890	552,374	1,412,822	1,452,498	1,620,220	1,631,526
CASH POS. AFTER C/P EXPENSE	0	133,910	(158,823)	(673,579)	(1,516,541)	(1,208,491)	(247,986)	744,814	(668,008)	(2,120,506)	(3,740,726)	(5,372,252)
OTHER GRANT SOURCES												
YRLY SHORTFALL A/ALL SOURCES	0	133,910	(292,733)	(514,756)	(842,962)	308,050	960,505	992,800	(1,412,822)	(1,452,498)	(1,620,220)	(1,631,526)
CASH POSITION AFT ALL SOURCES	0	133,910	(158,823)	(673,579)	(1,516,541)	(1,208,491)	(247,986)	744,814	(668,008)	(2,120,506)	(3,740,726)	(5,372,252)
AID FUNDS AVAILABLE												
AVAILABLE (BEGINNING OF YEAR)	0	8,726,740	7,577,796	6,377,443	4,855,530	4,014,737	4,014,737	0	0	0	0	0
NEW AID FUNDS	9,065,000											
TOTAL AID FUNDS AVAILABLE	9,065,000	8,726,740	7,577,796	6,377,443	4,855,530	4,014,737	4,014,737	0	0	0	0	0
AID FUNDS USED	338,260	1,148,945	1,200,353	1,521,912	840,794	0	0	0	0	0	0	0
AVAILABLE (END OF YEAR)	8,726,740	7,577,796	6,377,443	4,855,530	4,014,737	4,014,737	4,014,737	0	0	0	0	0
CUMULATIVE AID GRANTS USED	338,260	1,487,204	2,687,557	4,209,470	5,050,263	5,050,263	5,050,263	5,050,263	5,050,263	5,050,263	5,050,263	5,050,263
YEAR NET CASH FLOW AFTER ALL EXPENSES												
BEFORE AID GRANT	(338,260)	(1,015,034)	(1,493,085)	(2,036,669)	(1,683,755)	308,050	960,505	992,800	309,309	(100,514)	(182,156)	(211,923)
AFTER AID GRANT	0	133,910	(292,733)	(514,756)	(842,962)	308,050	960,505	992,800	309,309	(100,514)	(182,156)	(211,923)
CUMULATIVE NET CASH FLOW AFTER ALL OUTFLOWS												
BEFORE AID GRANT	(338,260)	(1,353,294)	(2,846,380)	(4,883,049)	(6,566,804)	(6,258,754)	(5,298,249)	(4,305,449)	(3,996,140)	(4,096,654)	(4,278,810)	(4,490,733)
AFTER AID GRANT	0	133,910	(158,823)	(673,579)	(1,516,541)	(1,208,491)	(247,986)	744,814	1,054,123	953,609	771,453	559,530
			0									

INPUT SECTION

AID funds for all outflows (Y/N)		Percent of inflatable costs	
or just Land & Production Credit	N	VEGETABLES	50.00%
Years to fully integrate Production	3	CORN	50.00%
Total Funds Available	9,065,000	SESAME	50.00%
Exchange rate	2.70	WHEAT	50.00%
Inflation rate	15.00%	PINEAPPLE	50.00%
Production credit Interest rate (1988 - 19xx	12.00%	COFFEE	86.00%
Land credit interest rate (1988 - 19XX)	12.00%	COCOA	50.00%
certificate interest rate	9.00%	MANGOS	50.00%

FINDINGS

* The foundation accelerated their purchase of land causing pressure on production credit needs and certificate repayment.

* The project is extremely sensitive to the timing of land purchases, and the resulting rates of crop integration.

* The project has deviated from the original projected cash flow analysis in terms of the ratio of permanent to seasonal crops planted on established land.

* By allowing the foundation to request AID funds on the basis of total costs rather than net costs after reflows, the foundation has no responsibility to reinvest reflows back into the project, thus digging themselves deeper and deeper into trouble as the land purchased needs more production credit and certificate payment. Furthermore this type of funding mechanism allows them to continue to purchase land even when in a precarious cash flow position.

* While it is true that permanent crops may be the most stable and sure investment for the beneficiaries and therefore most profitable, the foundation must realize that it is really cash flow not profitability that is at stake in this project. They have been very closely tied with the beneficiaries due to the nature of the organization and its goals. As a result the foundation has been pushing for more coffee planting because it is so profitable.

* However, what is profitable for the beneficiaries is not what maybe best for the foundation. The foundation does not accrue the profits of the land -- only the interest payments on the land purchase agreement and the production credit interest. This project is vital that planning be done on a longer-term basis, the variability and uncertainty involved in heavy reliance on permanent crops dictates that.

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RECOMMENDATIONS

* AID must change how the foundation requests funds. Making requests on a net cost basis will force the Foundation to be responsible for making the project a self-sufficient entity. Without such responsibility, they can simply continue to purchase more land without planning for the consequences. The inflows MUST be reinvested in the project to meet current obligations and not simply used to purchase more land.

* A careful evaluation of how the Penney foundation formulates it planning for this project must be made. The foundation is now a financial intermediary and must plan in the long-term rather than short-term.

* As far as solving the cash shortfall problem, probably the best route is probably to allow AID funds to repay guarantee certificates. The current situation is really a two edged sword-on one hand the 9.5 million dollars available for this project allows some land to be bought but without some means of repaying the certificates the foundation will never be able to use all of the AID grant without putting themselves into a dangerous cash flow position. Other sources of production credit should be examined but this is not as fruitful a idea as it would first appear. The foundation does profit from the interest payments on production credit.

* Increasing interest rates is not a solution in and of itself, but it could be combined with the above solution to further increase net cash flow.

* The foundation realize that the reflows from the project are already spoken for - i.e. to repay certificates, interest, etc. and are not windfalls with which to simply purchase more land.

* The foundation must realize that to change the crop mix spontaneously is disastrous without careful evaluation. The project is too sensitive to cash flow timing to not have a carefully evaluated crop production schedule.

1. Introduction
2. Current Situation
   a. Current Funding Level 0 hectares
      1. Currently in cash flow bind
3. Reasons
   a. Why?
      1. Accelerated purchase of land due to low prices but the projected cash flow is very sensitive to the timing of land purchases. The present value of this accelerated
      2. More land than projected into permanent crops deferring payback
      3. Foundation must use counterpart funds chiefly derived from the project to pay certificate principal and interest. Due to 1 and 2 above they will fall behind
      4. Foundation comes to AID with request for expenses
      5. It seems more prudent that AID should grant only request for net expenses. In other words AID should meet only the shortfall of Income from the project minus AID funded project expenses. This would ensure that the reflows are being invested in the project and force more proactive
      6. Penney foundation has been a quasi-philanthropic organization relying on donations & grants. this project has put them into the position of a financial intermediary. This means that a new attitude will have to be taken
         a. While it is true that coffee is probably the most stable and sure investment for the beneficiaries and therefore most profitable, the foundation must realize that it is really cashflow not profitability that is at stake in this project. is critical to their own survival.
         b. They have been very closely tied with the beneficiaries due to the nature of the organization and its goals. As a result the foundation has ~~been~~ encouraged increased production of ~~pushing for more~~ coffee ~~planting~~ because it is so profitable. However, what is profitable for the beneficiaries is not what maybe best for the foundation. The foundation does not see the profits of the land -- only share in the interest payments on the land purchase agreement and the production credit interest. As a result they must have an attitude that planning must be long-term. As with many non-profit organizations the planning horizon is usually only a short-term one year affair. ~~This project is~~ In this it is vital that planning be done on a longer-term basis, the variability and uncertainty involved in heavy reliance on permanent crops dictates that.
      7. Original project design didn't include infrastructure costs now the foundation ~~wishes~~ plans to build houses, schools and processing plants with project funds
      8. Lending at 12 percent - inflation is 15% or more
4. Consequences
   a. consequences
      1. If they purchase no more land without further investment they will not be able to meet certificate payments. even if --
      2. Tables include a summary sheet with cash flow information. Key are the last two items on the second pages - yearly cash flow and cumulative cash flow
      3. The rest is a breakdown of the cashflow anlaysis for this project.
      4. Definition - Curr
         a. Current funding level - Status quo - AID only funds specific costs not including infrastructure, certificate principal & interest some equipment such as jeeps
         b. AID funds all costs - AID would amend agreement to pay not only specific costs but to include the aforementioned excluded items currently
      5. Appendix includes the full project worksheet used in deriving the cash flow analysis
         a. Includes phase in of projected land purchase
         b. Includes phasein of land integration into production over a period of time
         c. Includes phase in of credit needs both for land purchase and for production

credit for the project

5. Alternative Solutions
   a. Spreadsheet Summary & definiti
      1. Price/Hectare - derived and projected from actual costs paid 1985-1988 and projected to 1996
      2. Hectares bought per year - derived from actual costs incurred - projected by back-solving i.e. finding out how much land can be purchased and still remain profitable
      3. Cumulative hectares purchased - self-evident
      4. Cash inflows - inflows from the project to the foundation
      5. Production credit interest - interest on all production credit loaned
      6. Production credit principal - self evident
      7. Land sales down payment - the down payment paid by the beneficiaries prior to sale
      8. Land sales principal & interest - self evident
      9. Cash expenses - these are broken down into AID funded - specific costs as detailed in definitions -- and Counterpart funded - those costs paid by the foundation through reflows and other sources
      10. Note that After 1992 ALL expenses will be counterpart funded as AID project will end
      11. AID funded
      12. Cash purchase of land - half of the land purchase price is paid in cash and half is paid in a guarantee certificate that is repaid over a three to five year time period currently a 12 percent interest.
      13. Production credit loans - outflows for production credit on both short-term and permanent crops
      14. Administrative costs - direct administrative costs of the foundation to the project,
      15. Equipment (motorcycles) - ~~self-explanatory~~ purchased in 1988 for
      16. Technical assistance - salaries for technicians and agronomists helping with the farms purchased - presently includes one technician per farm and 1 agronomist per approximately three farms
      17. Counterpart funded - those costs not covered by the AID agreement - after 1993 would include all costs
      18. Certificate principal and interest - see explanation above
      19. equipment(jeeps) - one per agronomist in 1988
      20. Infrastructure - schools, processing plants, and buildings - see full worksheet in appendix a for detail
      21. Cash flows
          Cash inflows - total cash inflow from project
      22. Cash outflow - total and broken down into aid funded and counterpart funded
      23. Net cash flows - total net cash flow from project (total cash inflow - total cash expenses)
      24. Above AID funded expenses net cash flow from project - AID specific expenses
          Above Counterpart funded expenses net cash flow from project - Counterpart funded expenses
      25. PAGE 2
      26. Net foundation cash position
      27. Cash position (Beginning of Year) = cash available at the start of the year
      28. Net cash flow (Net income from the project over the year)
      29. AID grant assuming AID funds net cash expenses then this would be calculated as follows: if the net cash flow is negative the AID grant would match the loss, otherwise the AID grant would be zero for the year)
      30. Cash position after grant = net cash position beginning of year + net cash flow + grant
      31. Counterpart funded expense = total from counterpart funded expenses on page 1