

PO-RTI-418
 (SN) = 45173

CLASSIFICATION
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Control
 Symbol U-447

1. PROJECT TITLE BELIZE LIVESTOCK DEVELOPMENT PROJECT		2. PROJECT NUMBER 505-0006	3. MISSION/AID/W OFFICE MISSION
5. KEY PROJECT IMPLEMENTATION DATES A. First PRO-AG or Equivalent FY <u>83</u> B. Final Obligation Expected FY <u>84</u> C. Final Input Delivery FY <u>88</u>		4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>505-0006-85-00</u> <input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	
6. ESTIMATED PROJECT FUNDING A. Total \$ <u>4,230,000</u> B. U.S. \$ <u>3,050,000</u>		7. PERIOD COVERED BY EVALUATION From (month/yr.) <u>August, 1983</u> To (month/yr.) <u>October, 1985</u> Date of Evaluation Review <u>October 21 - November 1, 1985</u>	

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

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., program, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Revise and implement work plans in the swine component to focus more directly on establishing the necessary linkages between all interacting parties, i.e. producers, processors, etc., to produce the rudiments of a viable industry by PACD.	ADO	Revise Dec 1985 Implement Jan 1986
2. Activate the revolving fund in order to increase participation by farmers and further objective in (1) above.	ADO	January 1986
3. Redistribute savings resulting from the termination of Toledo Swine Component among other project components as agreed by AID and proposed by SECID.	ADO	January 1986
4. Replace the Pasture Advisor, who is leaving due to ill health, as expeditiously as possible.	ADO	December 1985
5. Direct efforts of Pasture Advisor through revised work plans into farmers' fields, especially dairy farmers.	ADO	January 1986
6. Pasture program should develop the necessary information to demonstrate the benefits of improved pastures, if any.	ADO	July 1987
7. Extend Dairy Advisor's contract to July 1986 to ensure proper coordination.	ADO	December 1985
See attached sheet.		

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS <input type="checkbox"/> Project Paper <input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network <input type="checkbox"/> Other (Specify) _____ <input checked="" type="checkbox"/> Financial Plan <input type="checkbox"/> PIO/T _____ <input type="checkbox"/> Logical Framework <input type="checkbox"/> PIO/C <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Project Agreement <input type="checkbox"/> PIO/P _____	10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT A. <input type="checkbox"/> Continue Project Without Change B. <input type="checkbox"/> Change Project Design and/or <input checked="" type="checkbox"/> Change Implementation Plan C. <input type="checkbox"/> Discontinue Project
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11. PROJECT OFFICER AND HOST COUNTRY OR OTHER BANKING PARTICIPANTS AS APPROPRIATE (Names and Titles) <i>Alyn B. Willmore</i> Alyn Willmore, AADO, USAID Belize Rodney Neal, Permanent Secretary, MNR	12. Mission/AID/W Office Director Approval Signature: <i>Neboysa R. Brashich</i> Typed Name: Neboysa R. Brashich Date: April 30, 1986
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BELIZE LIVESTOCK DEVELOPMENT PROJECT EVALUATION

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|---|-----|--------------|
| 8. Finish construction of building for reagent housing for residue testing. | ADO | June 1, 1986 |
| 9. Focus on getting Policy Office properly incorporated and functioning in Ministry of Natural Resources organizational structure. | ADO | June 1986 |
| 10. Start identifying problems and develop solutions within production, management, and other related aspects before start of milk study to ensure smooth implementation. | ADO | May 1986 |
| 11. Assess financial implications of the evaluation recommendations to determine financial sufficiency. | ADO | May 1986 |

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13. SUMMARY

The first evaluation focused primarily on progress made by the contractor in getting personnel, equipment, and procedures in place. The timing also allowed for a gestation period which provided sufficient information for the evaluators to effectively guide future project implementation. This was a tremendous opportunity.

The Belize Livestock Development Project is the first United States/Belize bilateral agricultural program and was designed with very little resident experience of the Mission to Belize. Furthermore, this project was the first major non-research agricultural project in Belize. As a result of the evaluation the project is now on track and better tailored to conditions in Belize. The following is a summary of findings, conclusions, and recommendations by component. In general, the PES tends to focus on deviations from project benchmarks and implementation schedule. These deviations, however, are not perceived as "problems" but as opportunities for shaping the project to maximize impact.

A. Swine Improvement Component

The major occurrence in this area has been the termination of the Toledo component. Two main reasons have been cited for this action: (a) negative results in the economic analysis of swine production in the region as proposed by the Project; and (b) inefficient synchronization of implementation of the component, i.e., project component activities began before the sociologist finished her report and recommendations. The Evaluation Committee proposed that savings to the Project resulting from the termination be redistributed among other components to achieve those programs. Also as a result of the evaluation, the major focus of the Swine Advisor has been switched to working more directly with producers, feed suppliers and processors to establish the necessary linkages and thus produce the rudiments of a viable industry in a shorter time period. This will be accomplished partially through implementation of the revolving fund.

B. Pasture Improvement Component

As in the swine improvement component, the evaluation committee felt that the End of Project Status (EOPS) would probably not be met through the present focus and project work plan. A recommendation was made to redirect efforts into farmers' fields, particularly dairy farmers, and begin

to develop the information necessary to demonstrate the benefits of improved pasture if any. It was also recommended that the replacement for the Pasture Advisor be brought on-stream expeditiously, as the program is already behind schedule.

C. Dairy Industry Development Component

The major effort in this component is directed towards a fresh milk demand study. To effect this it was necessary to construct a dairy plant with sufficient capacity to supply the needs of the study. The construction of the plant is behind schedule and subsequently the study is delayed. However, the causes of the delays have been resolved and the necessary recommendation for future actions made by the evaluation committee to ensure smooth implementation. The Advisor's contract will be extended to provide continuity. Also, several areas of concern were raised and the Advisor tasked to resolve these issues.

D. Pork and Beef Processing Component

This component has run smoothly. The Advisor's report has identified several restraints to be addressed and will be provided a plan for future technical assistance. It was also recommended that greater effort be expended in providing housing for the residue lab reagents.

E. Government Policy Analysis and Formulation

The office has been set up within the Ministry and is operational. However, some difficulties in the proper incorporation into the organizational structure of the Ministry were addressed during the evaluation and some procedures recommended, such as the formation of a Policy Advisory Committee. Also, the Chief-of-Party (COP) will be doing more policy and economic work as the large start-up work load as COP lessens.

F. Participant Training

Participant training is on schedule. A dairy student will be sent to the U.S. if results of the demand study warrants it.

With the new focus of the Advisors in swine and pasture, it is believed that project implementation will be more successful. However, serious constraints, such as cost of inputs in the production system and small and insecure markets, seriously hinder the overall success.

The Project's development impact will not be immediately visible as indicated in the sections on outputs and EOPS. The Project has a large focus and subsequently overall efforts are diluted. Also, the casual linkages between inputs and outputs, etc. provides for elusive physical results.

14. EVALUATION METHODOLOGY

The first of three scheduled evaluations for the Livestock Development Project was conducted during the period October 21 to November 1, 1985. Originally scheduled for March 1985, the evaluation was timed to access project impact beyond normal start-up period and to effect logistical coordination to ensure full participation by all related parties. Participation in the evaluation included representatives from AID/W, USAID/Belize, South East Consortium for International Development (SECID), Land O'Lakes and the host country's Ministry of Natural Resources (MNR).

As stated in the Project Paper, the evaluation was to focus primarily on progress made by the contractor, SECID in getting personnel, equipment, and procedures in place. However, emphasis quickly shifted to issues on project design, assessment of project objectives, implementation constraints, and changes that should be effected to enhance project impact and facilitate project implementation.

The first week and a half of the evaluation involved field trips to project areas, i.e., government research farms, participating farms, farms whose owners were interested in future participation, the dairy plant site, meat processing facilities, etc. Interviews were held with Ministry personnel, USAID personnel, farmers, and project technical advisors. Pertinent documentation was reviewed. A three day advisory council meeting was conducted in the latter part of the second week from which evolved recommendations as to how issues were to be addressed and future direction of the Project. A detailed itinerary and list of participants is included in the Project Evaluation Summary (PES) as Attachment A.

15. EXTERNAL FACTORS

Although a change of Government occurred in 1984, there has been no significant change in policy regarding livestock development. Livestock is still a very high priority in the country's agricultural development plan. Removal of several operational constraints, such as lifting the restriction of the movement of carcasses within districts, has added incentive to livestock producers and processors.

An external factor that has severely hindered development in swine production has been the high cost of feed. When the Project was designed, the price of corn was artificially low. This fact led to an erroneous assumption on the availability and cost of feed. This assumption contributed to the decision to increase swine production in Belize.

Prior to the evaluation, a decision was reached to terminate the Toledo swine activity. This decision resulted from an assessment on the feasibility of producing pigs in Toledo under the system purported in the Project. Reasons cited include: (1) the high cost of transportation from Toledo to Belize City (major buying center); (2) socio-economic difficulties experienced; and (3) poor timing in Toledo swine project component implementation.

Another external constraint possibly contributing to slow development in the swine activity is the price structure for pigs. It is felt that government piggeries, effectively, albeit unintentionally, sets the price country-wide for feeder pigs due to pressures of limited space and over supply. Their prices may not truly reflect farmers' production costs.

Implementation of the pasture improvement component has been adversely affected by two factors. First, the Pasture Advisor's time was reduced by two months due to sickness. He was subsequently advised not to remain in Belize for health reasons. A replacement has not yet been identified and the post may remain vacant for some time - a serious setback. Secondly, seeds needed to establish nurseries could not be obtained in time to meet planting schedules. Seeds were ordered from abroad.

16. INPUTS

Project inputs consist of technical assistance, training and equipment/vehicles provided by A.I.D., and operating costs provided by the Government of Belize (GOB). Inputs will be discussed by project component.

a. Swine Improvement Component

The major input in this component, as in other components, is in the form of technical assistance and training. In order to achieve project objectives within the Advisor's time in country (two years, may be too short), a three pronged approach was taken. First, work would be conducted with Central Farm and district stations to fully develop and maximize the efficiency of their programs to provide breeding stock and finishing stock

to farmers. Second, training would be provided through teaching at the Belize School of Agriculture (BSA) and through short courses and seminars for extension officers. Third, the Advisor would be a resource person to extension officers. Proper documentation has been provided to support efforts in the above activities. However, the problem perceived is the existing gap between inputs in the above form and required outputs such as increased numbers of pigs and farmers. The Swine Advisor is just that, an advisor. Whether his recommendations are implemented depends on numerous factors, some out of his/her control.

In attempting to more directly address the problems and develop a viable industry, this input has been redesigned as a result of the evaluation. The focus of the Advisor, in the brief time remaining (nine months), will be to develop linkages at all levels in production through marketing. The revolving fund, which has been dormant to date, will be initiated to provide qualifying small farmers with pigs and feed, and possibly cement floors, in an in-kind basis. The equivalent in cash will be repaid to the fund when the farmer sells his pigs (revolving fund concept). Technical assistance will be provided to small farmers in operating economical sow/farrowing units. These farmers will then sell their pigs to larger operators who will finish these pigs. Linkages will also be established between finishing operations and processors. This concept will be refined and implemented. It is believed that with this direction of effort, the Advisor's remaining time will be most effectively utilized and the rudiments of a viable system established.

b. Pasture Improvement Component

As in the swine improvement component, the major input in the pasture component is technical assistance. Again, documentation of training efforts is established. However, program implementation has been slow (partially through the Advisor's illness). A new Advisor will have to be selected as soon as possible. This has been stressed by USAID/Belize in the evaluation. Further deterrents to progress have been the unavailability of seeds for nurseries, equipment scheduling problems, and delay in implementation of the pasture fund. Since pasture establishment is very dependent on seasonal patterns, the program is greatly hindered. Evaluation discussions culminated in the need to work more directly with farmers. Work would still continue on government farms, but the focus would be on pasture improvement on private farms. Also, work with dairy farmers would be promoted, as this would support the dairy component of the project and the economical

return on improved pasture would probably be greater than for beef. Accurate costs for establishment and maintenance of improved pasture will be developed to incorporate in an economic benefit analysis to demonstrate benefits, if any, of improved pasture. Farmers will not improve pasture unless a demonstrated benefit is evident.

c. Dairy Industry Development Component

The major input in this component is the building of a dairy plant to provide fresh milk for the demand study, which is the major focus of the program. Technical assistance in the form of an advisor from Land O'Lakes was provided to coordinate efforts. There has been some delay in plant construction due to contractual difficulties. These issues have been clarified and building has started. Therefore, the study should begin in May, 1986. Assistance by both the Dairy Advisor and a Peace Corps Volunteer has been provided to strengthen the Macal Dairy Cooperative to fulfill project plans. In order to ensure proper coordination through all phases, the Dairy Advisor's contract will be extended. As the project progresses a number of management and other issues will arise that need to be resolved for smooth operation of the plant and proper functioning of the study. The Dairy Advisor and Project COP will coordinate efforts to resolve these issues.

d. Pork and Beef Processing Component

Input into this component has been in the form of nine person months of technical assistance to teach modern meat processing techniques to interested parties. New products were introduced, cost-efficient cutting of carcasses was demonstrated, and improved methods of sanitation and care of equipment was promoted. Participants showed much enthusiasm and the program is touted as an overall success. Several constraints to increasing further productivity have been identified by the Advisor in conjunction with the processors: (1) market dictates small volume operations with high unit costs; (2) limited capital available for improvements and expansion; and (3) no assured supply of quality slaughter animals. It is believed that item (3) can be addressed through other components of the Project and the necessary linkages made. Further technical assistance will continue activities of the first year. Also, it was recommended that greater effort be expended in providing housing for the reagents for the residue testing laboratory.

e. Government Policy Analysis and Formulation

The Office of Policy and Economics has been established in the MNR, and two individuals have been selected and are receiving training in the U.S. to fill key positions. An expatriate Policy Analyst was provided by the Project in the interim to set up functions of the office and respond to policy analysis requests of the Ministry. However, the Policy Analyst also serves as the COP for the project team, and the major portion of his efforts has been in response to the demands as COP. Another perceived setback was the inadequate incorporation of the policy office into the organizational structure of the Ministry to provide effective input. As a result of the evaluation, the role of the office and the level of action within the Ministry was to be worked out between A.I.D., GOB, and the Policy Analyst and implemented. It was also recommended that a Policy Advisory Committee be established. In the area of economic analysis several papers have been compared. More effort will be placed in this direction as soon as the taxing duties as COP decrease.

f. Financial

Given the changing nature of the Project, it is difficult to determine if adequate funding is provided. The financial implications of the evaluation recommendations would have to be assessed to determine financial sufficiency.

Recommendation: Analysis should be done on present project financial position, as well as financial implications of the evaluation recommendations to determine future financial requirements, if any, in order to complete the Project.

It was decided that since the Toledo portion of the Project was terminated, funds allocated to this can be redistributed. SECID and USAID would work on this.

17. OUTPUTS

1. Extension officers trained in pasture improvement and intensive swine production (34 zonal officers and 16 district officers, 4 ST observational trips taken by groups of nine during life of project). This training is being accomplished by seminars, workshops, discussions in the field and observation tours to the U.S. Training is on track, but constrained by limited MNR resources.

2. Dairy processing plant constructed and operating (one small plant in Cayo District, Belize's major dairy area). The

construction of the dairy plant is somewhat behind schedule as discussed in Section 16.(c). However, construction has begun and a new estimated completion date of May 1986 has been targeted. Problems tending to delay completion date should be immediately addressed. Equipment procurement, delayed once already, should be focused upon and issues clarified to ensure expeditious installation and operation after construction is completed.

3. Market demand analysis for fresh milk completed and findings compiled (study conducted in Belize City, Belmopan, and four secondary towns). Market demand analysis cannot be started until dairy plant is completed and operating with sufficient production to supply needs of the study. Because of the delay in plant construction, the study is also delayed. However, there should be enough time remaining in the Project to conduct the study if there are no other lengthy delays. Preliminary activities, if any, should be initiated to ensure smooth functioning of the study, e.g., contact with schools, stores, etc.

4. Physical plant and instruction support expanded at BSA (one new conference/classroom, library holdings increased by 25%, supply of teaching materials/equipment increased for use on campus, Central Farm, and in the field). The conference/classroom has been constructed and is in operation and books and equipment have been provided.

5. Private livestock producers/butchers trained in meat processing techniques (about 30 butchers and meat vendors to receive training). It is estimated that some eight processors received training. These are the ones who came forward. Probably, in the second round of training, an attempt to reach more butchers and processors throughout the country should be made. However, dilution of effort should remain a consideration.

6. Establishment of special fund at Central Farm (one operating expense fund). This fund has been established through the local currency generation under the Economic Stabilization Fund (ESF) in the Capital II budget. It should be kept in mind that by the beginning of the fourth year of the Project, the GOB should create a specific line item in its MNR budget to maintain the full value of this fund through normal budget allocations.

7. Policy analysis unit established in office of Minister/Permanent Secretary MNR (one new policy analyst position created in MNR). The policy office has been

established and the new policy analyst position created. There have been some hitches in the office functioning as effectively as it was addressed in Section 16.(e). However, with the recommendations in 16.(e) this should be rectified.

8. Trained MNR staff in specialized livestock subsectors and agricultural economics:

- a. MNR receiving U.S. BSc degrees - one in animal science/swine production, one in agronomy, one in forage production, one in dairy production, assuming market study results so warrant.
- b. One MNR staff trained to MS level in agricultural economics.
- c. One MNR staff trained to Ph.D. level in agricultural economics.
- d. Two MNR staff trained in S.T. program at CATIE and CIAT.

All training is on schedule except for item (d). The trainee in dairy production will be selected and placed in a University once the study warrants it. The study will not be completed until mid-1987. The training at CATIE and CIAT was cancelled when the component under which it fell was terminated, i.e., the Toledo swine component.

18. PURPOSE

Approved Project Purpose: To improve small and medium farmers' production efficiencies in the rearing of livestock and to expand market outlets for these products, primarily through import substitution activities.

End of Project Status (EOPS): Progress towards achievement.

1. Increased efficiencies in beef production and slaughtering sufficient to make Belize competitive in U.S. deboned beef. Some progress has been made in increasing production efficiencies. This has been accomplished primarily by promotion of improved pastures. However, farmers are very skeptical about the economics of improved pasture, and demonstrated benefit is needed. The new advisor of the pasture program should work towards this. The low throughput and high overhead of the Ladyville abattoir still remains a serious constraint and the present low price of U.S. beef is a great disincentive and blackens the outlook on beef production.

2. Domestic processing capability expanded, resulting in a 33% reduction in imported pork and beef products. The domestic processing capability has been increased through introduction of new products and increased efficiencies in utilization of carcasses. Whether a 33% reduction in imports can be effected depends on the make-up of these imports, i.e., percentage of pig tails, lard, etc., and what can be replaced through consumer acceptance of the substituted product. However, it is believed that this is an achievable target.
3. Extension service upgraded and better trained to assist farmers with improved livestock production techniques. Through training provided by the advisors the EOPS should be attained. However, logistical and infrastructure support to extension officers need some improvement.
4. Greater technical backstopping provided by Central Farm to extension service and higher quality research conducted and demonstrated on-farm. Technical backstopping by Central Farm to extension service has increased by presence of technical advisors and their activities. However, Project is deficient in promoting on-farm activities and this is being emphasized in the new direction resulting from the evaluation. The non-availability of operational funds has affected accomplishments and this also has been targeted for urgent action as a result of the evaluation.
5. Quality education and academic resources offered at BSA in livestock fields improved and number of students enrolled in livestock courses increased. Through teaching support by the technical advisors and introduction of new courses, this objective has been accomplished. Also, books, equipment, and other resources have been allocated to BSA through the Project.
6. Number of farmers engaged in intensive swine production increased to about 850. The number of farmers involved in swine production may increase, but 850 may be unrealistic due to market absorption and economical size of swine units. This target will be re-evaluated after economical unit size is developed and market absorption is increased. Also, the Toledo component was discontinued.
7. Number of farmers engaged in pasture improvement increased by 250 over Life of the Project. There is still a serious question on the economics of improved pasture, given the constraints found in Belize. The direction of the program, evolving from the evaluation, will address this issue.

8. Improved capability within the MNR to analyze agricultural policy issues and formulate sound policy actions. The office has been established and Belizeans to fill key positions are being trained. The incorporation into the functioning of the Ministry has been a problem, but this problem is being rectified through evaluation recommendations.

9. GOB policies and strategies related to development of a national dairy industry formulated based on a sound analysis of the potential size of the market for fresh milk. GOB policy still calls for the development of a dairy industry. However, the development strategy will incorporate findings of the fresh milk demand study to be conducted in the latter part of CY 1986.

19. GOAL

To increase agricultural productivity and income among small and medium farmers in Belize.

The measures of goal achievement are: (1) increase agricultural national product by 50% in real terms between 1982 and 1990, and (2) increase household income of farmers owning less than 100 head of cattle or less than 30 drove of pigs. Measure (1) is probably impossible to achieve given the present economic situation, primarily the outlook on sugar. Also, large growth in the livestock sector is presently prohibited by poor or elusive export markets and the small domestic market. Measure (2) is achievable once the constraints and issues discussed in Section 18 are addressed and satisfactorily reconciled.

Since USAID/Belize's approach to development in the agricultural sector is comprehensive and complementary, several other agricultural oriented projects are also contributing to this goal by addressing specific constraints, e.g., Rural Access Roads and Bridges, Commercialization of Alternative Crops, and the Toledo Small Farmers' Project presently in the design phase.

20. BENEFICIARIES

The direct beneficiaries of this Project are the small to medium farmers involved in swine, beef, and dairy production who should realize an increase in income through improved production efficiencies and increased demand for their products. In the swine activity the number of participant beneficiaries was reduced when the Toledo component of the Project was discontinued. The meat processing community are beneficiaries of technical assistance to expand into new

products and increase overall efficiencies. This in turn created an increased and more specialized demand for hogs and beef from the farmers. Another beneficiary in this Project is the Macal Dairy Cooperative who will be receiving strengthening assistance and will in time be the owners of a 400 gallon/day dairy plant which will provide a marketing mechanism for the members who are small/medium farmers. The indirect beneficiaries of the Project are the Belizean people, who will be able to take advantage of locally processed meats and dairy products at comparable standards to traditional imports.

21. UNPLANNED EFFECTS

Since the initiation of the construction of the dairy plant, work has also commenced on improvements by Western Dairies (Menonites) of their plant. While not a direct effect of the Project, it may be construed as a reaction to competition.

The market for deboned beef in the U.S. has dropped since project conception and implementation, making the economics of developing a beef industry geared to that market risky. Throughput of the Ladyville abattoir has not increased significantly and the management has directed a large portion of their products to the domestic market to try to survive. This has increased competition among the meat processing constituency for shares in the domestic market. While competition provides a better deal to the consumer, the domestic market is not large enough to sustain both small processors and the Ladyville abattoir. Hence, there is some debate as to who should be allowed to suffice the domestic market. The Belize Livestock Producers' Association supports the small processors.

Upon withdrawal of the Toledo swine activity, a vacuum has been left as far as assistance to swine farmers in the region. The discontinuation of the effort has emphasized the need for a cautious approach to development in Toledo.

22. LESSONS LEARNED

A major problem with the project design is the casual linkage between inputs, outputs, and EOPS. The major input has been in the form of technical assistance and that is in an advisory capacity. Some of the outputs and EOPS demand physical results, i.e., increased number of pigs, increased number of farmers, etc. The technical assistance is provided through an implementing agency, in this case the MNR, i.e., there is no direct interaction between advisor and farmer. Similarly with the other inputs, they are implemented through the intermediary

agency. If there is no clear understanding as to the role and responsibility of each implementor (e.g., the advisor or his counterpart) in effecting project targets, then project impact is severely reduced.

Another problem encountered in the project design is the large area of focus and subsequently diluted effort. Comprehensive projects are very good, provided the gaps in the system that are to be addressed are clearly perceived so that implementation efficiency can be maximized.

DETAILED LIVESTOCK EVALUATION SCHEDULE

Oct 21	Evaluation Team meeting at USAID Conference Room			
Mon				
		AM		PM
	Jenkins	Hinojosa	Jenkins	Hinojosa
	Willmore	Silva	Willmore	Silva
	Ellington	Canton	Ellington	Mangum
			Canton	
Oct 22	7.30 am	Leave Belize City		
Tues	9.00 am	Arrive BSA		
	9.00 am	Teaching Program - Pasture		
	10.00 am	Overview of Pasture Program		
	10.30 am	Tour of Pasture Program at Central Farm		
	11.30 am	Site visit Bedran Farm - Sillage		
	12.00 noon	Lunch San Ignacio Hotel		
	1.00 pm	Overview of Dairy Program - San Ignacio Hotel		
	1.30 pm	Site Visits:		
		Dairy Plant Site		
		Galvez Farm - Dairy and Pasture		
		Juan Farm - Dairy Cooperative President		
		Collins Farm - Dairy		
	6.00 pm	Return to Belmopan for overnight stay.		
Oct 23	8.30 am	BSA, Swine Program Overview		
Wed	9.00 am	Swine Program at Central Farm		
	10.00 am	Swine Farm at San Antonio		
	12.00 noon	Lunch at San Ignacio Hotel		
	2.30 pm	Meeting with Rodney Neal, Permanent Secretary, MNR, Libby Gonzales, CAO, Dr. Balmore Silva, CVO		
	4.00 pm	Meeting in Project Office		
		Return to Belize City		

Oct 24	7.30 am	Leave Belize City
Thur	8.30 am	Arrive Yo Creek
	8.30 am	Yo Creek District Office, Swine and Pasture
		Richmond Hill, Pasture
		Guinea Grass, Swine
		St Annes, Swine
		Corozolito, Swine
		Hunter Farm, Pasture, Meat Processor
		Overnight stay in Belize City
Oct 25	8.00 am	Leave Belize City
Fri	8.30 am	Arrive Belize Meats Limited
	10.00 am	McKeseey Meats
	11.30 am	Southside Meats, Lizarraga

AGENDA

Advisory Council Meeting Belize Livestock Development Project October 30 - November 1, 1985

Date	Time	Event	Location
Wednesday, October 30	8.30 am	Project Overview Chairman: Rodney Neal Views of MONR Views of AID-Mission Views of Livestock Team	Circle A Hotel
	12.00 noon	Lunch	Circle A Hotel
	1.30 pm	Report of Project Evaluators Chairman: Charles Jenkins	Circle A Hotel
	5.00 pm	Adjourn	
	6.00 pm	Cocktails	Mangum's Residence
Thursday, October 31	8.00 am	Work Plans - 2nd year Chairman: John Moland Swine Pasture and Forage Policy Dairy Meat Processing Training Procurement	Circle A Hotel
	12.00 noon	Lunch	Circle A Hotel
	1.30 pm	Continue Work Plans	Circle A Hotel
	5.00 pm	Adjourn	
	Friday, November 1,	8.30 am	Advisory Council Meeting Executive Session Chairman: Charles Schexnayder Cocktails

Attendance

Advisory Committee Meeting
October 30 - November 1

Advisory Committee

1. Vern Freeh, Land O'Lakes
2. Charles Jenkins, AID
3. John Moland, Southern University
4. Rodney Neal, MONR
5. Charles Schexnayder, LSU
6. Ed Vickery, SECID
7. Harry Wheeler, SECID

Livestock Team

1. Marvin Allen, Pasture and Forage Advisor
2. Cliff Benson, Dairy Coordinator
3. Bill Bakka, PCV, Dairy Project
4. Ismael Cal, Dairy Counterpart
5. Walter Cooke, Swine Advisor
6. Ralston Flowers, Swine Counterpart
7. Fred Mangum, Agricultural Policy Advisor
8. Rene Montero, Swine Counterpart
9. Harry Parham, Pasture and Forage Counterpart
10. Marjorie Ramnarace, Administrative Assistant
11. Carrol Wilson, Pasture and Forage Advisor nominee

Others

1. Neboysha Brashich, AID Representative
2. Moises Cal, Principal BSA
3. Gilbert Canton, AID, Agriculture Project Officer
4. Barbara Ellington, AID, ADO/IDI
5. Liborio Gonzalez, Chief Agriculture Officer
6. Raul Hinojosa, AID, Evaluator
7. Marla Holder, Resident Director Central Farm
8. Mike Kenyon, AID, Regional Contracts Officer
9. Balmore Silva, Principal Veterinary Officer
10. Alyn Willmore, AID, Assistant ADO

Scope of Work
for
Belize Livestock Development Project
Evaluation

The project evaluation will focus on implementation of the Project thus far in relation to the Project Paper. The Evaluation Team will assess progress of the Project compared to the Implementation Schedule, as well as the progress of each project component in attaining project goals and objectives.

The Evaluation Team will consist of Belize Livestock Development Project personnel, USAID/Belize staff, AID/Washington support staff, and GOB MNR personnel.

In the course of evaluation the Team will make site visits, interview people involved in the Project, and examine project documents. The team will assess problems and strengths of the Project, and propose ways to adjust activities appropriate to improving the quality and effectiveness of the Project.

Specific issues the Team should address during the evaluation include each component of the Project. In preparing for the evaluation, several items were identified which should be addressed during the evaluation process.

These include:

1. The Swine Program - Taking feed, cost constraints, and breeding stock limitations into consideration, how best should this program be further developed?
2. How best may the Belize Livestock Development Project provide service to the Belize School of Agriculture?
3. How can we capitalize on the success of the meat processing program?
4. The Pasture/Forage Program is, by nature, very slow-going. Results need to be more closely monitored and documented. Studies translating improved pasture costs into income and profit for the farmer need to be done and disseminated.

5. The roles of each player in the Project should be reviewed. How has each member performed thus far in the Project? (USAID, SECID, GOB, and Project Team).
6. How have project logistics worked? Is there room for improvement or refinement?

Of course, the evaluation is not limited to these issues, The entire Project will be examined.

2025-10-20 11:00
 2025-10-20 11:00

PROJECT DESIGN SUMMARY
 LOGICAL FRAMEWORK

INSTRUCTION: THIS IS AN OPTIONAL
 FORM WHICH CAN BE USED AS AN AID
 TO ORGANIZING DATA FOR THE PAR
 REPORT. IT NEED NOT BE RETAINED
 OR SUBMITTED.

Life of Project: Annex I
 page 1 of 6
 From FY 83 to FY 89
 Total U.S. Funds: \$1,000,000 (1) \$2,000,000 (2)
 Date Prepared: 11/7/83

Project Title & Number: Livestock Development # 505-0006

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: (A-1)</p> <p>To increase agricultural productivity and income among small and medium farmers in Belize.</p>	<p>Measures of Goal Achievement: (A-2)</p> <ol style="list-style-type: none"> 1) Increase agricultural national product by 50% in real terms between 1982 and 1990. 2) Increase household income of farmers owning less than 100 head of cattle or less than 30 drove of pigs. 	<p>(A-3)</p> <ol style="list-style-type: none"> 1) National Accounts data. 2) Belize household survey data. 	<p>Assumptions for achieving goal targets: (A-4)</p> <p>Agricultural development continues to be sector priority of GOB.</p> <p>Farmers are convinced of economic benefits to increasing productivity through identification of reliable markets and adequate prices for their products.</p>

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Annex I
Life of Project: From FY 83 to FY 89 Page 2 of 6
Total U.S. Funding \$1,000,000 (I) \$2,050,000 (G)
Date Prepared: July 13, 1983

Project Title & Number: Livestock Development #505-0006

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p> <p>To improve small and medium farmers' production efficiencies in the rearing of livestock and to expand market outlets for these products, primarily through import substitution activities.</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <ol style="list-style-type: none"> 1) Increased efficiencies in beef production and slaughtering sufficient to make Belize competitive in US deboned beef market. 2) Domestic processing capability expanded resulting in a 33% reduction in imported pork and beef products. 3) Extension service upgraded and better trained to assist farmers with improved livestock production techniques 4) Greater technical back-stopping provided by Central Farm to extension service and higher quality research conducted and demonstrated on-farm. 5) Quality of education and academic resources offered at the BSA in livestock fields improved and number of students enrolled in livestock courses increased. 	<p>(B-3)</p> <ol style="list-style-type: none"> 1) Prices cited at the Abattoir; Annual Trade Reports citing export statistics 2) Annual Trade Reports (NOF); site visits to butcher shops 3) Site visits to recipient farmers demonstrating higher calving rates; cutting rates; 4) Site visits to Central Farm 5) Academic records of enrolled students and graduates; site visits to BSA library 6) Records of field agents; number of improved pigs being marketed 7) Records of field agents 8) Visits to MONR; new computer system being used; more policy actions being taken by MONR 9) GOB National Development Plan; discussions with MONR. 	<p>Assumptions for achieving purpose: (B-4)</p> <ol style="list-style-type: none"> 1) Ladyville Abattoir, the country's major slaughter and meat packing facility, is technically and operationally efficient. 2) Quality of processed product is competitive with imported substitute; import regulations do not preclude price competition by domestic products; retailers willing to promote "Belizean" products 3) GOB priority to strengthen extension service continues; CAEP project successfully decentralizes field staff and GOB provides adequate logistical and infrastructure support to zonal officers. 4) GOB increases livestock officer staff appropriately and makes operational funds available to carry out research/demonstration activities. 5)

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: Annex I
From FY 03 to FY 09 page 3 of 6
Total U.S. Funding \$1,000,000 (I) \$2,050,000 (G)
Date Prepared: 1/10/1988

Project Title & Number: Livestock Development #505-0006

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <p>6) Number of farmers engaged in intensive swine production increased to about 850.</p> <p>7) Number of farmers engaged in pasture improvement increased by 250 over life of the project.</p> <p>8) Improved capability within the MONR to analyze agricultural policy issues and formulate sound policy actions.</p> <p>9) GOB policies and strategies related to development of a national dairy industry formulated based on a sound analysis of the potential size of the market for fresh milk.</p>	<p>(B-3)</p>	<p>Assumptions for achieving purpose: (B-4)</p> <p>6) Decentralization of extension agents into zones successfully implemented under CAEP; Toledo farmers are receptive to new swine production techniques.</p> <p>7) Decentralization of extension agents into zones successfully implemented under CAEP; technologies to be extended can be affordably implemented by small/medium ranches.</p> <p>8) GOB creates new policy analyst position within office of the Minister and offers adequate salary incentive to retain qualified personnel</p> <p>9) Project market study successfully completed and findings accepted and used by GOB.</p>

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY _____ to FY _____
Total U.S. Funding: \$1,000,000 (1) \$2,050,000
Date Prepared: July 1, 1983

Project Title & Number: Livestock Development #505-0006

NARRATIVE SUMMARY (C-1)	OBJECTIVELY MEASURABLE INDICATORS (C-2)	IC (C-3)	ASSUMPTIONS FOR ACHIEVING OUTPUTS (C-4)
<ol style="list-style-type: none"> 1) Extension officers trained in pasture improvement and intensive swine production 2) Dairy processing plant constructed and operating 3) Market demand analysis for fresh milk completed and findings compiled 4) Physical plant and institutional support expanded at BSA 5) Private livestock producers/butchers trained in meat processing techniques 6) Establishment of special fund at Central Farm 7) Policy analysis unit established in office of Minister/Permanent Secretary of MONR 8) Trained MONR staff in specialized livestock subsectors and agricultural economic 	<ol style="list-style-type: none"> 1) 34 zonal officers and 16 district officers; 4 ST observational trips taken by groups of 9 during use of project. 2) One small plant in Cayo district, Belize's major dairy area. 3) Study conducted in Belize city, Belmopan and 4 secondary towns 4) 1 new conference/classroom; library holdings increased by 25%; supply of teaching materials/equipment increased for use on-campus, Central Farm and in the field 5) About 30 butchers and meat vendors to receive training 6) 1 operating expense fund 7) 1 new policy analyst position created in MONR. 8a) MONR receiving U.S. BSc degrees: <ul style="list-style-type: none"> 1 in animal science/swine production 1 in agronomy/forage production 	<ol style="list-style-type: none"> 1) Field inspections 2) Site inspection 3) Final study report; data collections 4) Site visits 5) Visits to butcher shops 6) MONR annual report of revenues and expenditures 7) MONR staffing pattern; 8) Personnel files; academic reports from host U.S. universities 	<ol style="list-style-type: none"> 1) T.A. arrives in country and is made accessible to field staff 2) Equipment arrives in-country 3) T.A. arrives in country; Rural Coop cooperatives in study and MONR assigns counterpart to work with T.A. 4) Materials arrive in-country 5) GOB furnishes training site 6) GOB agrees to decentralize funding procedures and approval authority 7) Exception made to current GOB hiring freeze 8a-c) GOB grants approval to allow MONR staff to participate in long-term training overseas

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Livestock Development #505-0006

Life of Project:
From FY 81 to FY 89
Total U.S. Funding \$1,000,000 (L) 22,000,000 (C)
Date of Revision: 12/15/85

NARRATIVE SUMMARY Project Outputs (C-1)	OBJECTIVELY MEASURABLE INDICATORS Magnitudes of Outputs (C-2)	INDICATORS OF EFFECTIVENESS (C-3)	ASSUMPTIONS FOR ACHIEVING OUTPUTS (C-4)
	<p>1 in dairy production, assuming market study results so warrant.</p> <p>b) 1 MONR staff trained to MA level in agricultural economics</p> <p>c) 1 MONR staff trained to MID level in agricultural economics</p> <p>d) 2 MONR staff trained in ST programs at CATIE, CIAT.</p>		

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY: 81 to FY: 83
Total U.S. Funding: \$1,000,000 (I) \$2,050,000 (G)
Date Prepared: July 13, 1978

Project Title & Number: Livestock Development #505-0006

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS			MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	Implementation Target (Type and Quantity) (D-2)				
Project Inputs: (D-1)	A.I.D.		GOB	Private Sector	Assumptions for providing inputs: (D-4)
	Loan	Grant			
Technical Assistance				Review of project financed records, vouchers, etc.	Inputs are provided on a timely basis; no unanticipated delays in meeting CIs set forth in project agreements
Long - term		1,410			
Short - term	20	200			
Training					
Long - term :	200				
Short - term	100				
Equipment/Vehicles	430		10		
Operating Costs					
- Salaries			100		
- Central Farm/Zone Activities			570		
- Vehicle Operation & Maintenance			60		
- Dairy Study and Plant		140		30	
Evaluations	70				
Inflation	100	250	160	-	
Contingencies	80	50	50	-	
Total	\$1,000	\$2,050	\$1,150	\$30	

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ACRONYMS

BSA	Belize School of Agriculture
COP	Chief-of-Party
EOPS	End of Project Status
GOB	Government of Belize
MNR	Ministry of Natural Resources
PES	Project Evaluation Summary
SECID	South East Consortium for International Development