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UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D. C. 20523

HAITI

PROJECT PAPER

INTERIM SWINE REPOPULATION

Amendment No. 3

AID/LAC/P-379

CR P-161 P-161/1 P-333

Project Number: 521-0170

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT DATA SHEET</b>	1. TRANSACTION CODE <input type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete	Amendment Number <u>3</u>	DOCUMENT CODE <u>3</u>
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2. COUNTRY/ENTITY Haiti	3. PROJECT NUMBER <u>521-0170</u>
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4. BUREAU/OFFICE USAID/Haiti	5. PROJECT TITLE (maximum 40 characters) <u>Interim Swine Repopulation</u>
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6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY <u>09 30 89</u>	7. ESTIMATED DATE OF OBLIGATION (Under 'B' below, enter 1, 2, 3, or 4) A. Initial FY <u>84</u> B. Quarter <u>4</u> C. Final FY <u>87</u>
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A. FUNDING SOURCE		FIRST FY <u>84</u>			LIFE OF PROJECT		
		B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total		1,500		1,500	7,938		7,938
(Grant)		(1,500)	( )	(1,500)	(7,938)	( )	(7,938)
(Loan)		( )	( )	( )	( )	( )	( )
Other U.S.	1.						
	2.						
Host Country							
Other Donor(s)							
<b>TOTALS</b>		1,500		1,500	7,938		7,938

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ARDN	114	010		6,150		1,786		7,938	
(2)									
(3)									
(4)									
<b>TOTALS</b>				6,150		1,786		7,938	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each) <u>010</u> <u>070</u> <u>260</u>	11. SECONDARY PURPOSE CODE
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12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each) A. Code <u>BR</u> <u>BS</u>	B. Amount
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13. PROJECT PURPOSE (maximum 480 characters).  

To produce and distribute improved breeding stock to Haitian farmers, and to support a nationwide program of animal health.

14. SCHEDULED EVALUATIONS Interim MM YY <u>05 87</u> Final MM YY <u>09 89</u>	15. SOURCE/ORIGIN OF GOODS AND SERVICES <input checked="" type="checkbox"/> 000 <input checked="" type="checkbox"/> 941 <input checked="" type="checkbox"/> Local <input type="checkbox"/> Other (Specify)
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16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment.)  
 There will be three modifications to the ongoing project: a change in the wording of the project purpose, an extension of the PACD to September 30, 1989, and an increase in LOP funding to \$7.938 million.

USAID/Haiti Controller Clearance:  
 I have reviewed and approved the methods of implementation and financing for this PP Amendment.  
 Sylvia Jackson *Sylvia Jackson* A/Controller, USAID/Haiti

17. APPROVED BY <u>Gerald Zarr</u>	Signature <i>Gerald Zarr</i>	Title Mission Director	Date Signed MM DD YY <u>07 31 87</u>
			18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY <u>08 11 87</u>

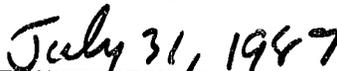
PROJECT AUTHORIZATION

Amendment No. 4

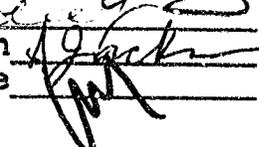
Name of Country : Haiti  
Name of Project : Interim Swine Repopulation  
Number of Project : 521-0170

1. Pursuant to the authority contained in Section 103 of the Foreign Assistance Act of 1961, as amended, the Interim Swine Repopulation Project for Haiti was authorized on September 29, 1983, and amended on August 31, 1984, January 16, 1986, and June 23, 1986. The Authorization is hereby further amended as follows:
  - A. In Paragraph 1, the phrase "\$6,152,000 (Six Million One Hundred Fifty-Two Thousand United States Dollars)" is replaced by the phrase "7,938,000 (Seven Million Nine Hundred Thirty Eight Thousand United States Dollars)".
  - B. In Paragraph 1, the phrase "Period of Forty-six Months" is replaced by the phrase "through September 30, 1989".
2. Except as specifically amended hereby, the terms and conditions of the original Authorization of September 29, 1983, and the amendments thereto, dated August 31, 1984, January 16, 1986, and June 23, 1986, remain in full force and effect.

  
\_\_\_\_\_  
Gerald Zarr  
Director  
USAID/Haiti

  
\_\_\_\_\_  
July 31, 1987  
Date

  
DRE: RByess/rjb:7/15/87:pigs1

  
\_\_\_\_\_  
ADO, RRuybal  
ADO, LJepson  
DRE, AFord  
CONT, SJackson  
D/DIR, LEMorse  


INTERIM SWINE REPOPULATION  
PROJECT PAPER AMENDMENT NO. 3  
TABLE OF CONTENTS

I.	SUMMARY AND RECOMMENDATION	
A.	Recommendation.....	1
B.	Summary	
1.	Background.....	1
2.	Rationale.....	2
3.	Project Amendment Description.....	2
4.	Summary Financial Plan.....	3
5.	Design History and AID/W Concerns.....	4
II.	PROJECT BACKGROUND	
A.	History of the project.....	7
B.	Other donor support	
1.	FAO.....	8
2.	IDB.....	8
3.	CIDA.....	9
4.	USDA.....	9
5.	FAC.....	10
6.	Peace Corps.....	10
7.	GOH.....	10
III.	AMENDED PROJECT DESCRIPTION	
A.	Goal and Purpose.....	11
B.	Project Components	
1.	Swine Health Surveillance Program	11
2.	Extension Training Activities.....	13
3.	Development of Swine Feed Resources.....	15
4.	Veterinary Services and Herd Health.....	17
5.	Marketing Studies for Pork and Pork Meat	19
6.	Data Base Management.....	19
C.	Other Project Issues.....	
1.	White versus Black Pigs.....	20
2.	Upgraded Swine Facilities.....	20
3.	Complete Feed Rations.....	20
4.	Distribution of Pigs.....	21
5.	Creole versus American Pigs.....	21
6.	Potential Health Problems.....	22
7.	Role of UNAPEL.....	22
D.	Project Inputs.....	24

E.	Project Outputs.....	25
IV.	FINANCIAL PLAN.....	27
V.	PROJECT IMPLEMENTATION	
A.	Project Management.....	29
B.	Methods of Implementation and Financing.....	30
C.	Implementation Plan.....	31
VI.	CONDITIONS AND NEGOTIATING STATUS.....	37
VII.	AMENDED PROJECT ANALYSES	
A.	Technical Analysis.....	38
B.	Institutional Analysis.....	42
C.	Economic Analysis.....	44
VIIII.	ANNEXES	
A.	STATE 214359.....	A-1
B.	PaP 3535.....	B-1
C.	STATE 243832.....	C-1
D.	Initial Environmental Examination.....	D-1
E.	Budget Worksheets.....	E-1
F.	Organizational Chart for Laboratory.....	F-1
G.	Scope of Work for Swine Health Coordinator...	G-1
H.	Letter from USDA Deputy Secretary Myers.....	H-1
I.	Letter from USDA Representative Buisch.....	I-1
J.	Summary of Review Team's Report.....	J-1
K.	Letter from Minister of Agriculture on IDB...	K-1
L.	Estimated Annual Operating Expenses.....	L-1
M.	Letter from Minister of Agriculture Re- questing Title III Funds.....	M-1
N.	PIO/T for USDA/APHIS/VS PASA.....	N-1
O.	Letters Regarding Peace Corps Volunteers.....	O-1
P.	Project Checklist.....	P-1

## Glossary of Terms Used in the Project Paper

APHIS	Animal and Plant Health Inspection Service (USDA)
ASF	African Swine Fever
CA	Cooperative Agreement
CIDA	Canadian International Development Agency
Cochon Planche	Rustic (Creole) pig
EOPS	End of Project Status
FAC	Fonds d'Aide et de Cooperation
FAO	Food and Agriculture Organization (of the United Nations)
GA	Grant Agreement
GOH	Government of Haiti
IDB	Interamerican Development Bank
IEE	Initial Environmental Examination
IICA	Interamerican Institute for Cooperation on Agriculture
LOP	Life of Project
MARNDR	Ministry of Agriculture, Natural Resources and Rural Development
NGO	Non-Governmental Organization
PACD	Project Assistance Completion Date
PASA	Participating Agency Service Agreement
PCV	Peace Corps Volunteer
PEPPADEP	Projet d'Eradication de la Peste Porcine Africaine et du Developpement de l'Elevage Porcin
PIO	Project Implementation Order
SMC	Secondary Multiplication Center
UNAPEL	Union Nationale des Associations pour la Promotion de l'Elevage
USDA	US Department of Agriculture

## I. PROJECT SUMMARY AND RECOMMENDATION

### A. Recommendation

The Project Committee has reviewed the implementation status of the Interim Swine Repopulation Project (hereinafter referred to as "Project") and recommends that this Amendment No. 3 to the Project Paper be approved, providing an additional \$1.786 million in grant funding in order to (a) strengthen the National Swine Health Surveillance Program and (b) continue the alternate feed development and extension components of the current activity.

The funds provided under this Amendment will be obligated through two instruments: First, the Mission will negotiate a new, bilateral Grant Agreement through which support costs for two USDA/APHIS PASA veterinarians will be provided. The terms and conditions of the PASA are described below. Second, the ongoing Cooperative Agreement, administered by the Interamerican Institute for Cooperation on Agriculture (IICA), will be extended and increased in three areas: (1) to provide program funds for the National Swine Health surveillance program in support of two USDA veterinarians; (2) to continue the current local feed development program, veterinary services, and extension programs; and (3) to undertake applied studies in marketing and swine production economics. To reflect this expanded scope of activity, in accordance with the AID/W guidance cable, the project purpose will be modified to read "to produce and distribute improved breeding stock to Haitian farmers, and to support a nationwide program of animal health".

Three modifications to the ongoing project are therefore provided for by this Amendment: a change in the wording of the project purpose; an extension of the PACD from September 30, 1987 through September 30, 1989; and an increase in LOP funding from \$6.152 million to \$7.938 million.

### B. Summary

#### 1. Background

The present project was designed by the Mission in 1983 to serve as a bridge between the eradication of the island's swine and the start of a national swine industry development project which was to be funded by the Interamerican Development Bank (IDB). Because the IDB project has not yet begun, the present project has been already amended twice to continue the repopulation program. Now in its fourth year, this project has witnessed dramatic progress towards the goal of total repopulation of Haiti's swine herd.

The repopulation phase is now nearing its end, but US pork producers and the US Department of Agriculture continue to be concerned about possibility of the recurrence of the disease on the island and about the GOH's capacity to deal with outbreaks of this kind. Development of the GOH's capacity to deal with future disease outbreaks has not

kept pace with the repopulation program. The IDB project was intended to address the swine health issue, but the continued lack of progress in its design has prevented the program from beginning. However, the situation appears to be improving by the reformulation of the IDB loan with the participation of officials from MARNDR, AID, USDA, and the FAC to assure that the long awaited program complements other donor swine activities. Although a laboratory was built to house a national veterinary diagnostic laboratory, it was never been equipped or staffed.

## 2. Rationale

This Amendment represents a marked change in USAID/Haiti's approach to the swine repopulation activity and the livestock sector in general. Until 1987, the Mission never contemplated an animal health effort outside of the project.

USDA has repeatedly approached AID to solicit assistance in starting a national disease monitoring program. The Mission has been reluctant to become involved in a disease monitoring program, both because of fears about becoming enmeshed in an unending institutional support effort and because such activities lie far outside the scope of the NGO-based repopulation effort per se. Furthermore, this kind of program is essentially based on recurrent costs, the type of expenditure better made by the host country rather than by a donor organization.

Due to the continued delay of that project, the Mission now proposes to provide bridge financing for two years to start the development of a health surveillance program which includes initiating the development of the Haitian National Veterinary Diagnostic Laboratory and strengthening the National Veterinary Services until the IDB project can be reformulated to make resources available to continue these activities.

In a meeting in AID/W in August 1986, based on the GOH's request to reformulate the IDB project, USDA officials met with Administrator McPherson and presented a program under which AID would underwrite the cost of starting the program and USDA would provide the veterinary personnel. AID agreed to finance two years' operations, and pledged to contribute \$500 thousand to the effort. Subsequent study by the project design committee showed that this sum was inadequate for the purpose, however. The Mission has therefore increased the proposed amount by \$200 thousand, to \$700 thousand, and separately budgeted \$269,000 in Title III local currency funds to assist the National Swine Health Surveillance Program. The ongoing Cooperative Agreement with IICA will be amended to add \$1.086 million towards the local feed development, veterinary services and extension components. The amendment total will therefore be \$1.786 million in ARDN funds.

## 3. Project Amendment Description

The amendment will provide for three types of activities: swine

disease diagnosis and surveillance (through a central laboratory and a national field veterinary service), extension of the local feed development, veterinary services and extension components, and a limited number of applied studies in the areas of swine production and marketing. The combined disease diagnosis and surveillance activities are collectively referred to as the National Swine Health Surveillance Program.

The Program will provide disease prevention through proper port inspection and quarantines, a swine health monitoring system to detect major diseases, should they appear, and a emergency team force that will respond immediately in case a major disease is found. The amendment will provide funds to make the laboratory facility operational. USDA will provide the services of two full-time veterinarians under a PASA arrangement. one to direct the laboratory and one to oversee field operations. Funds furnished under this amendment will supplement the PASA and provide support costs for their activities. Although the veterinarians will report to the Director of Animal Production at the Ministry of Agriculture, their logistic support will be assured by IICA and funded out of this amendment.

The extension component will be also extended by this amendment to phase out AID support to veterinary services and extension activities in a coordinated manner. A veterinarian will monitor the health of the project herd and provide consultation and medicines to the SMCs. The extension team will focus on feed development, management, and extension activities. Peace Corps Volunteers will be assigned to the project to aid in carrying out extension activities.

Feed has become an increasingly important component of the project. In 1986, following the change of government, there began a national feed shortage, which eventually reached the level of a crisis, with prices throughout the nation fluctuating violently. IICA had already initiated a feed subsidy to farmers to help in increasing the rate of repopulation, but it was clear that the feed subsidy could not continue indefinitely. The 1986 project amendment added a local feed development component, which emphasized the use of locally available agricultural by-products and the introduction of new forage plant species. Under this amendment, as of September 1987, the feed subsidy component which was initiated under the project's first phase will stop and the SMCs will begin to finance their own commercial feed with help from UNAPEL.

As it has been to date, project implementation will be guided by the Project Coordinating Committee. IICA will continue to carry out the feed development and extension activities for the swine repopulation component until September 1989. The two USDA veterinarians will be based at the Ministry of Agriculture and work within their respective areas of assignment as shown below until September 1989.

#### 4. Summary Financial Plan

As described above, this Amendment will provide an additional \$1.786

million to IICA and MARNDR and will extend the LOP from September 1987 through September 1989. The table below shows how the funds will be divided between the swine repopulation and swine health surveillance activities. In addition to the funds shown below, the GOH will contribute 1,345,000 gourdes (\$269,000) over the LOP from Title III sources.

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TABLE I

SUMMARY FINANCIAL PLAN

(in \$000)

	<u>Budget to Date</u>	<u>This Amendment</u>	<u>New Total</u>
Repopulation Activities	\$6,152	\$1,066	\$7,218
National Swine Health Surveillance Program	-0-	720	720
TOTAL	\$6,152	\$1,786	\$7,938

5. Design History and AID/W Concerns

This is the third and final amendment to the Project Paper. In tabular form, a summary of the history of amendments to the project paper is as follows, with the third amendment referred to being the present one:

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TABLE II

PP AMENDMENT HISTORY

<u>Amendment</u>	<u>Activity</u>	<u>FY</u>	<u>Amount</u>
Original	Repopulation	1984	3,000
No. 1	Health, Disease Monitoring	1984	803
No. 2	Repopulation, Feed, Health	1986	2,349
No. 3	Feed Development, Extension	1987	1,786
	TOTAL		----- 7,938

The current amendment has developed gradually from a long series of discussions between AID, USDA, the GOH and other donors. In January 31 of this year, the Mission received a budget allowance for \$500 thousand, which had resulted from an AID/W effort to work with USDA to address the swine health issue (see Annex B, STATE 248232). The Mission thus set out to design a third project amendment, designed to incorporate a Swine Health Surveillance Program in conjunction with two USDA veterinarians, IICA, and the Ministry of Agriculture.

The difficulty in designing the amendment was that AID was not the only actor on the scene, and the health initiative was difficult to introduce into the programs of so many different donors, each with its own agenda. At issue was the long-term support of the program, as explained above. The key turning-point in the discussions, which came in the early summer, was the announcement by the IDB that they intended to undertake a reformulation of their project and to assure eventual financing for the national health program. From that point, it was possible to envision a medium-term solution to the problem, to which the donors agreed at the meeting with the IDB. A working group, composed of IDB and other donor representatives, was subsequently formed. When these discussions finally produced a workable consensus, then, the Mission cabled a summary of the different participants' positions to AID/W (in PAP 2864).

Simultaneously, during intensive review, the committee designing the amendment proposed extending the local feed development, veterinary services and extension components to provide for an orderly withdrawal of AID financial support to the project across the board. It further suggested adding a new marketing studies component. Other sources of (ARDN) funds have been identified, mostly from reprogramming of the OYB, and the new amendment total is now \$1.786 million. The results of the intensive review were cabled to AID/W in PAP 3535. STATE 214359 of July 13 responded to the proposed amendment, and it has been duly modified in conformance with those recommendations. The cable raises three issues of substance, however, which have been dealt with as follows:

a. Recurrent costs and GOH budget

The cable argues that recurrent costs should eventually be absorbed by the GOH. In fact, the principal guiding strategy behind this amendment is to provide one-time financing to help the GOH through the next two-year period as the IDB project is reformulated and the national health program begins. The bilateral grant agreement will require that the GOH continue the financing for the Swine Health Program after the cessation of AID funding. This has been done to avoid the Mission's being trapped into paying the recurrent costs of the health program indefinitely. Mission funds will be used to launch the MARNDR swine health surveillance program by procuring equipment and funding the services of USDA personnel for two years. At EOP, the GOH will assume responsibility for funding and continuing the program, as AID assistance is withdrawn.

b. Counterpart financing

The requirements of Section 110(a) of the FAA will be met by Title III funds for the life of the project. This is explained further in the Financial Analysis below.

c. Purpose

The project purpose has been modified, as suggested in Paragraph 4 of the cable.

## II. PROJECT BACKGROUND

### A. History of the Project

In 1979, the swine of the island of Hispaniola were attacked by a deadly virus which causes a disease known as African Swine Fever (ASF). Within a few months, it is estimated that as many as half of the pigs on the island died. Concerned about the effect the disease would have if it crossed into the US, American pork producers placed pressure upon the US Department of Agriculture to take measures to prevent this from happening. USDA, the OAS and the Government of Canada negotiated an agreement with the GOH under which an organization would be created to oversee the eradication of all the swine in the country. That organization, PEPPADEP, undertook a comprehensive eradication program, an effort which continued until 1984.

Simultaneously, the GOH entered into negotiations with the Interamerican Development Bank (IDB) to begin a program to develop the national swine industry once the eradication program had finished. The IDB reserved funds for the program and began a review of the project in earnest. Unfortunately, although the project proceeded through the design and approval phases, it never reached the implementation stage.

The AID Mission personnel who were monitoring the situation became concerned at the lack of progress in repopulation, and sought funds to begin an interim project so that swine repopulation could begin while the IDB project was being designed. A project was quickly put in place in the summer of 1983, and was obligated in August. IICA was chosen to implement the project. It is coordinated by a Committee, which until 1987 was called the Project Steering Committee and has since been renamed the Project Coordinating Committee.

With the assistance of 130 Non-Governmental Organizations (NGOs), IICA established a network of 440 Secondary Multiplication Centers (SMCs) throughout the countryside. As described above, the original project was based solely on repopulation. It provided for rental of a breeding center in Port-au-Prince and for technical assistance in swine husbandry. The swine produced at the center were distributed to SMCs, where they were multiplied under SMC supervision. The SMCs, in turn, distributed the offspring of those swine directly to farmers. Through a contract arrangement, the SMCs were able to distribute the swine for free from the first litter. In return, the farmers agreed to return to the SMCs a number of pigs equal to the number they received. These SMCs have, as of January 1987, received a total of almost 10,600 pigs from the Project and have distributed over 40,000 to small farmers.

Although the project has been involved in training since its inception, both the size of the targeted audience and the intensity of the training have progressively increased. As originally designed under Phase I, the training of project staff and participating SMC

personnel were part of IICA's responsibilities. However, during this phase, the staff positions funded for IICA included only a swine production specialist and a veterinarian, and extension component was to have been conducted by the GOH. One year later, on August 31, 1984, Cooperative Agreement Amendment No. 3 authorized a fourfold increase in the training and extension budget for IICA. The principal audience was SMC personnel. Phase II began 22 months later, with the signing of Cooperative Amendment No. 7 on July 1, 1986. This phase, which is currently scheduled to terminate on September 30, 1987, was primarily designed to expand extension and veterinary service activities to both the SMCs and their participating farmers.

Over course of the project to date, IICA has conducted several in-country training programs for SMC personnel. Project personnel estimate that they train 300 peasants a month on various topics such as management, local feeds, health, and meat processing. The success of the extension and training component is largely due to three Haitian extension agents who have willingly put in the time to accomplish this objective.

Since October 1986, an Animal Nutritionist has been assigned to the project to develop non-traditional alternatives for swine feed. He has identified locally available feed resources and sites suitable for growing these plants. An important objective not yet attained is to motivate swine producers on the importance of local feeds in swine nutrition. The future of swine production at the peasant level will not come from a bag of commercial feed. Work needs to be continued in applied research, new germplasm materials, and training of peasants on local feeds. Project personnel are confident that local feed packages can be developed and extended to the pig farmer in the near future.

## B. Other Donor Support

The role of other sources of funding to carry on the project is critical to its future success. Several other donors have been involved in the swine repopulation and disease monitoring activities over the course of the past several years, and their activities are briefly summarized here:

### 1. FAO

The FAO was involved in the negotiations over the eradication program. They had originally intended to provide funds to equip the national laboratory, but this intention never came to fruition. They will be involved with the reformulated IDB project by implementing specific activities in the Cap Haitian area.

### 2. IDB

As mentioned earlier, the IDB worked for several years to develop a national swine industry project. Negotiations are continuing over the form and extent of their future involvement in the project. It is anticipated that IDB project will start implementation before the end

of the calendar year. The interventions by IDB loan monies will be in the following areas:

An animal health program which includes quarantine, laboratory diagnosis, surveillance and training. The justification is for Haiti to put emphasis on preventive measures to discourage disease from entering and spreading thereby threatening the national swine herd. These activities are designed to complement the USAID financed health program activities described in this amendment.

A feed component that will develop balanced diets that can be replicated by the peasant pig farmers. Research will develop technological packages to be available during critical periods during the year. The project will also study how Government institutions can become more involved with farmers or possible subsidies on commercial feed.

Four breeding centers will be established at Port-au-Prince, Fond des Negres, ODVA, and Cap Haitien. Activities will concentrate on producing black "Creole" type pigs that will survive in peasant conditions; producing pigs for sale to the private sector for pig raising; and using different blood lines to avoid inbreeding at the peasant level.

Meat processing facilities to provide services to the public will be constructed nationwide.

Develop, reproduce and distribute technology packets to the peasants. Funds will go for procuring equipment, materials, and operating expenses.

Reinforce the Ministry of Agriculture's extension service by providing services and goods for swine producers.

Technical assistance will be provided.

### 3. CIDA

Discussions have been held with representatives from CIDA on the swine repopulation effort on several occasions. AID has encouraged CIDA to become involved in some fashion, but unfortunately, they continue to stay away from the repopulation effort. Recently, they have expressed interest to help UNAPEL by providing seed money.

### 4. USDA

USDA has been involved in the development of this amendment. They will contribute the salaries of two veterinarians, estimated at

\$239,708 over a two year period, to the National Swine Health Surveillance Program. They will also provide short-term technical assistance, free of charge, upon request.

#### 5. FAC

The French project started in January 1986, and is providing \$1,450,000 towards its pig repopulation activity. They are cross-breeding Guadeloupe Creole pigs received from the Institute of Agricultural Research, based in France and Guadeloupe, with three Chinese breeds. The purpose of the French project is to produce Creole type pigs that possess characteristics suitable for peasant conditions. The main activities are construction of primary breeding center facilities, importation of breeding stock, swine multiplication, animal health, and distribution. There are several French research organizations providing technical backstopping, and French and Haitian ONGs are also participating. The project is scheduled to terminate in 1988. It is interesting to note that the FAC project is based on the ISRP model.

#### 6. Peace Corps

The project has received excellent work from PCVs, and it is envisioned that PCVs will play an important role during the transition phase as IICA passes on more responsibilities to UNAPEL. The role of UNAPEL is discussed below in the detailed project description, and a brief institutional analysis is given in the annexes at the end of the paper.

#### 7. GOH

The GOH will provide funds for this amendment as well, from the Title III account, of which 310,000 gourdes will be used to support laboratory personnel and 635,000 gourdes will be used for National Veterinary Services personnel. The GOH will also agree to program Title III or Public Treasury funds to support the disease monitoring program after the PACD. As project implementation progresses, the Mission will press to phase out US support for the swine health program gradually.

### III. AMENDED PROJECT DESCRIPTION

#### A. Goal and Purpose

The goal of the project remains to restore the standard of living of the Haitian farmer to the level existing prior to the outbreak of ASF. The project purpose is changed by this amendment, and is now "to produce and distribute improved breeding stock to Haitian farmers, and to support a nationwide program of animal health".

The amendment provides for a new project component, designed to strengthen the National Veterinary Services and Veterinary Diagnostic Laboratory within the Division of Animal Production by funding a two year effort that will start a disease-reporting system so that reliable information can be made available to the Ministry so it can take action on its priority problems in swine health.

#### B. Project Components

The new health activity will be divided into two subcomponents which are described below--the laboratory and the field veterinary service. The current alternate feed development and extension components will be extended until September 1989. All other project components will continue unchanged. The new National Swine Health Surveillance Program will be coordinated by the Project Coordinating Committee, comprised of IICA, USDA, AID, and MARNDR, which currently oversees the implementation of the Project. USDA will be a new representative to the committee represented by the USDA/APHIS veterinarians assigned to the project. The two USDA/APHIS/VS veterinarians will report to the Director of Division of Animal Production and will be granted the authority by the Director to strengthen the two subcomponents described below.

##### 1. Swine Health Surveillance Program

During August 1986, an internal project evaluation team and an outside review team comprised of USDA officials and U.S. pork industry representatives recommended that a Swine Health Surveillance Program be established as soon as possible because a major disease outbreak could wipe out the present gains. Pigs are entering Haiti illegally from countries with major swine diseases with no health examination. This is continuing, which is a to start a monitoring program immediately. A recently completed evaluation conducted in June 1987 also recommended that this program be started, and urged AID to secure the commitment of MARNDR as the program develops.

The National Swine Health Surveillance Program will permit Haiti to have the technical expertise in-country via the USDA veterinarians in case a major disease outbreak occurs. A spinoff of having a qualified field veterinarian examining the national herd is that if he comes across animal health or husbandry problems, he can provide advice to the swine producer to correct the problem. It would be a tragedy if a swine disease occurred and the GOH could not respond quickly to

identify and control its spread, thereby reducing the current swine population that everyone has worked so hard to establish. USAID's two-year effort will also serve as an incentive to stimulate the GOH's interest on the development of the swine industry and also provide the time for the IDB project to start to allow the GOH to assume responsibility after completion of the USAID financed Swine Health Surveillance project in September 1989.

USAID/Haiti has long maintained that the effectiveness of any long-term USDA/APHIS veterinarians will depend on how they fit into the administrative structure of the project. Previous experience has demonstrated that if they operate too independently of IICA and the Project Coordinating Committee their effectiveness vis a vis Ministry of Agriculture activities will be compromised. After several discussions with USDA/APHIS personnel, USAID, IICA, and USDA have agreed to the implementation arrangements spelled out in section V. These arrangements should avoid any problems during project implementation.

a. National Veterinary Diagnostic Laboratory

USDA/APHIS/VS has assigned a senior level veterinarian trained in laboratory diagnostics to this sub-component. During his first year, the majority of his time will concentrate on making the laboratory operational. This will include improving the basic infrastructure such as installation of electricity and water, repairs to the laboratory windows, and install a security fence. This individual will also be responsible for the identification and procurement of laboratory equipment, furniture, and supplies. While working in close collaboration with the Division of Animal Production, he will assist in the recruitment of the staff in order to develop the organizational chart as shown in annex F. During his second year, he will continue to provide guidance and on-the-job training to the Director of the laboratory and other personnel in all aspects of laboratory diagnostics. The Bilateral Grant Agreement will stipulate that the USDA veterinarian be granted executory powers on the development of the laboratory to assure that the implementation plan is executed on a timely basis. This person will serve as Co-Director with his Haitian counterpart.

b. National Veterinary Service

The second USDA veterinarian will be assigned to this sub-component, to work closely with the Director of National Veterinary Services. The USDA veterinarian will be responsible for:

supervising the development of the reporting system from the field to the central office at the Ministry of Agriculture;

carrying out swine serum surveys; and

analyzing the volume of contraband swine and pork products entering from the ports and other points of entry.

Additionally, he will provide on-the-job and classroom training in emergency response procedures to the veterinary nurses assigned to implement the disease monitoring, surveillance and quarantine program. The Grant Agreement will stipulate that the USDA veterinarian be granted executory powers to assure that the implementation plan is executed as planned.

## 2. Extension Training Activities

The combined efforts of IICA, the GOH and the Haitian private sector have succeeded in introducing a new breed of swine to the country. The repopulation of Haiti with pigs, to whatever total number of animals that the carrying capacity will sustain, will eventually be attained. In order to ensure the continued success of the repopulation program, an extension education program must be directed towards the principal livestock producer in Haiti: the peasant farmer. This extension program can instruct the peasant farmer how to improve his swine husbandry practices, and how to maximize his economic returns for profit.

This amendment will provide funds to continue extension activities so they can be completed in a coordinated manner to minimize any adverse effect on the SMCs and peasant farmers.

Specific objectives to be achieved are:

Revise current extension training materials in swine husbandry technology for distribution to the SMCs and peasant farmers. The format of these extension bulletins will continue to be simple graphic Creole.

Provide support for the institutional development of UNAPEL by: (a) training personnel; (b) providing technical advice for the formulation of balanced feed rations; (c) providing technical advice on the acquisition and use of pharmaceuticals; and (d) assisting UNAPEL in the relocation and installation of the feed mills.

Provide a minimum level of veterinary support to the SMCs and associated farmers to monitor the health status of the swine herd, especially for the internal areas of Haiti which are beyond the initial services to be conducted by the USDA/GOH National Veterinary Service program.

The data management system will be continued to provide information on swine production parameters, numbers of people trained, extension bulletins distributed and associated costs, performance results from forage species plantings and germplasm distribution, and feed ration calculations.

Undertake applied studies in marketing and swine production economics.

Field seminars have been demonstrated to be an acceptable approach to use for information transfer to the target group. To date, over 5,000 individuals have participated in seminars explaining selection of stock, breeding and farrowing techniques, feed production, ration formulation, preservation of meat and other agricultural topics. These seminars will be continued and organized through the SMC network, and UNAPEL will undertake an ever increasing role in coordinating this activity as IICA slowly withdraws services. IICA will provide in-country training to UNAPEL employees who will eventually teach the seminars to assist in an orderly transition. Additionally, the project will also develop "model pig farms" to demonstrate improved husbandry methods appropriate for the peasant farming system. These "model pig farms" will be initially supervised by IICA personnel and eventually managed by the farmer himself.

It is envisioned that a radio extension program be started to reinforce the field seminars and extension bulletins. The radio is the main communication network in Haiti and is capable of reaching the entire population. Radio spots will be simple, short, informative, and repetitive. They will also be in Creole and targeted to school age children. If the attention of the youth can be captured, they can be expected to not only assist in the transfer of technology to their parents, but certainly to adopt and utilize the technology as they come of age. Initially the radio program will present spots for both the adult pig owners and school age children. Impacts will be assessed and evaluated by field extension personnel and the program will be adjusted accordingly.

The involvement of Peace Corps Volunteers (PCVs) during the current phase of the project was so successful that it will be expanded to assist the extension component. IICA and USAID have requested that 10 PCVs be assigned to the project, and received a favorable response (see Annex O). PCV involvement will make a substantial contribution, primarily toward Extension Education, at a negligible expense to the project. Unlike the current phase, when the PCVs serviced as regional project extension agents, they will be assigned to a much more restricted locality. This was requested by Peace Corps/Haiti due to the danger involved with frequent travel in this country. This resident status in localities where IICA has made major distributions of swine will be a strong reinforcement for the entire program. Not only can they function as trainers and assist with other project activities such as forage development and herd health monitoring, but they will become the local contact to deal with all swine husbandry concerns raised by the populace at a more personal (i.e., one to one) basis.

It is difficult to quantify the number of training courses to be given to farmers during the life of this amendment. It is hoped that upon completion of the project in September 1989, experienced swine husbandry trainers and specialists will remain in place and continue the extension/training program. Also, model swine farms will be developed

and remain to serve as samples of the various swine husbandry technologies appropriate for the peasant farming system. Peace Corps Volunteers will promote swine husbandry information at the schools in their areas to assure that a wide audience receives this subject matter.

### 3. Development of Swine Feed Resources

The issue of feed is the number one constraint affecting the development of the national swine herd. It is a constraint for many reasons: (a) shortage of necessary feed ingredients; (b) high costs of balanced rations; and (c) the widespread belief that the "new swine" must have prepared and packaged feed rations. This belief was propagated by the project in an attempt to maximize piglet production. Presently, some peasant swine producers believe that the "new swine" require wheat shorts for survival. The "new swine" serve as a political football for strongly nationalistic parties promoting the more traditional systems over those introduced by commercial swine producers. The Creole pig has literally become the mascot of these factions.

An in-house project review team in November 1985 stated that "feed deficiency is the one foreseeable major technical obstacle to rapid swine repopulation". The feed situation has been exacerbated by the closing of ENAOL (where the imported soybeans were pressed to oil and meal) and the entire wheat shorts fiasco caused by contraband. Nonetheless, the swine feed situation in Haiti is clearly in a crisis state at this time. The August 1986 Swine Industry Review Team recommended the only possible solution, and also a caution: The "long term needs must be directed toward developing a native feed supply. The team places a high priority on this phase of the project, and urged that everything be done to expedite work in this area. This is the real solution, but it's going to take as much effort to get results as has been spent in producing the swine and feed presently available in Haiti".

The Feed Subsidy Program to the SMCs will be terminated by September 1987. As a result of the 250% increase in swine feed costs which started in December 1986, coupled with the limited availability of wheat shorts and the uncertainty as to the duration of the subsidy program, it was necessary for the project to shift the emphasis from maximizing the numbers of pigs produced to the adaptation of the new swine stock to the local peasant farm conditions and indigenous feed sources. At the time of this decision, last April 1986, IICA believed this changeover should be accomplished with the technical support of the project, rather than by a precipitous change at project completion.

The dilemma the project is now facing over the feed issue is not that the American pig can't survive under the more primitive traditional practices, but that the goal of the project continues to address an important need of the populace: to maintain or increase the actual level of swine production. The first response by the project to reconcile this problem began July 1986 and receives increased emphasis.

This project component includes five activities: 1) Complete the inventory and assesment of locally available swine feed resources; 2) Import and disseminate exotic plant germ plasm (i.e., Ramie); 3) Complete applied research and development studies pertaining to the newly introduced forage plants; 4) Formulate rations based on the inventory of swine feed resources and develop appropriate management and utilization systems for these resources; and 5) Prepare extension training materials. All of these activities have been operational since September 1986, and that this continuation is designed to provide the time required to establish and propagate the new plant resources, develop forage management systems based on the available feed resources in different parts of the country, and disseminate this new knowledge.

a. Inventory and Assessment of Locally Available Feedstuffs

The highly diversified, multi-cropping and foraging systems employed by the peasant farmer offer a wide variety of suitable swine feeds. Furthermore, the use of such indigenous resources such as mango and avocado fruit and the leaves of sweet potato, "bwa don" and benzolive is already known to the farmer. This sub-component will expand the catalogue of these feedstuffs to determine their seasonal availability and approximate quantities produced in the various bio-physical habitats of Haiti and to determine their nutritional value as well as any toxic properties. The identification of plant resources and their availability and production levels will be accomplished by literature and field surveys which will include nutritional values and toxic levels. A considerable portion of this work has already been accomplished. The objective of this sub-component is to improve the traditional swine feeding practices by the simple expedient of combining the various available plant resources in such a manner as to provide rations which best meet the nutritional requirements of the various classes of swine (e.g., lactating, growing, maintenance, etc.)

b. Import and Distribute Exotic Plant Germplasm

The native plant resources of Haiti are inadequate to support any efficient level of swine production. If, for example, the soil and climate of Haiti were amenable to the production of soybeans or alfalfa, and there was sufficient land to be devoted to animal feed production, this entire project component might be superfluous. This is certainly not the case, and the project must locate and import new plant types which both complement the indigenous feed resources, and can be grown within the typical peasant farming system.

To date, based on literature reviews and performance in other countries such as the Dominican Republic, eleven plant species have been imported to Haiti. Foremost amongst these is Ramie, a high quality (18% protein) plant which is propagated by root cuttings. Three 10-ton truck loads have been imported since September 1986 and a total of 10 hectares have been established over 143 locations. As these plants mature to the stage where their roots can be dug and separated for seeding material for additional fields, they are producing forage material cropped on a

monthly basis. At this writing, there is a demand for twofold more root stock.

For the other species, Operation Double Harvest has planted sufficient quantities of Amaranth and Sesbania to be distributed to peasant farms. Similarly, a private farmer near Cap Haitian is under contract with IICA to produce seeds of three imported varieties of beans: Velvet, Lablab, and the Winged bean. Other plants which have been imported from countries such as Bolivia, Honduras and New Guinea include Kochia, Glycine, Desmodium and Chaya.

One species that the project is trying to secure is Calliandra. This leguminous plant provides excellent forage, fixes nitrogen for soil improvement, and is suitable for hedgerows. Moreover, unlike Leucaena, it does not contain the toxic compound mimosine, nor is it susceptible to damage from the psyllid fly.

It can be expected that during the course of this project extension additional plant species will be identified and imported.

To summarize the importance of this project component, if one accepts that problems associated with the availability and cost of swine feed is a major problem for swine producers, it should be apparent that this activity offers a viable solution. The additional time that this project extension will provide is crucial for attainment of this objective because time is an important factor in this process. Not only can it take months to receive the requested seeds, but large scale establishment can only be accomplished in concert with the rainy seasons. Often only small quantities of seeds are commercially available, and it requires additional time to plant these seeds to harvest additional seeds once the plant matures. In the case of herbaceous plants this might require only a single growing season whereas for tree species, the process takes longer.

The result of this effort will be the introduction and distribution of high quality forage plants amenable to peasant agricultural practices whereby they can choose most cost effective and balanced rations possible according to their income. This feed development program has the potential to assist virtually every farmer who engages in swine production.

#### 4. Veterinary Services and Herd Health Monitoring

During project implementation, most of the routine animal health procedures including vaccinations, vitamin-mineral supplements, and de-worming were handled by the extensionist/animal health nurses. These individuals each had a minimum of two years experience working with and trained by project veterinarians. This system allowed the veterinarians to concentrate on clinical evaluations and diagnostic work. As clinical cases were reported to the regional veterinarian, he could accurately diagnose the problem, recommend or perform treatments and monitor the overall health of the herd. Thus the project was able to continually monitor both diseases of production and maintain a vigil for

the possible appearance of an exotic disease. The regional veterinarian also made periodic visits to SMCs to evaluate herd management, subclinical diseases and nutritional deficiencies. Due to the fact that the swine eradication program also resulted in the eradication of all the diseases specific to swine in Haiti, this regular attention to herd management problems, subclinical diseases and nutritional deficiencies by the veterinarians contributed significantly to the high production rate experienced by the IICA herd to date.

Now at a critical crossroads, the project is initiating the transfer of veterinary services to the GOH. This task will be accomplished under the direction of two USDA veterinarians as described earlier. Unfortunately, as a result of shifting responsibilities and financial constraints, the IICA veterinary services must be gradually phased out.

If veterinarians are dropped too quickly from the IICA team, the vast majority of the SMCs and their associated farmers will be without veterinarian assistance. Reasonable caution dictates that some form of veterinary services and monitoring capability be maintained for the pigs during the development of the National Swine Health Surveillance Program. In view of funding limitations, it is proposed to include only two field veterinarian positions for the project extension.

Activities planned are as follows:

Prepare extension bulletins on swine health topics.

Provide specialty instruction including hands-on experience for the Peace Corps Volunteers assigned to the project.

Establish a reporting/monitoring network through the extant SMCs, UNAPEL, and PCVs to regularly record selected information on swine health. This activity will be coordinated with the USDA veterinarians responsible for establishing the National Swine Health Surveillance Program, and compiled in a computer data base.

Coordinate visits and field work assignments of (CVMs) Christian Veterinary Mission personnel from World Concern. These CVMs are volunteers and have been active in Haiti for years. A number of veterinarians associated with the USAID/IICA project first came to Haiti in a CVM role. The expanded involvement of the CVMs in this project extension of the USAID/IICA Swine Project is one way to mitigate the impact caused by reduced funding for veterinary services. Maximum advantage can be gained from the CVMs if they can be counseled prior to their arrival by an experienced in-country veterinarian as to disease profiles, activities scheduled, appropriate diagnostic procedures, and what types of equipment and supplies to bring.

Conduct field diagnostics and treatments.

## 5. Marketing studies for pork and pork meat

As the volume of pork produced in the country increases, the importance of a proper understanding of the marketing situation will increase as well. Unfortunately, there is a severe lack of information about marketing pork and pork products on which to base a plan of action. This amendment will therefore begin a program to gather some baseline information on which a comprehensive marketing program can eventually be built. This will be done in three phases over the life of the amendment:

### a. Collecting marketing information

Marketing information will be collected in 40 selected localities throughout the country. Research will center on price variations and volumes marketed. This phase will last for approximately one year and will be performed by IICA field staff.

### b. Data processing

At the same time, IICA will develop a framework for analysis. The information thus generated will then be arranged in a database, stratified by various indicators. This will allow patterns such as those of seasonality and price trends to be recognized.

### c. Analysis

Once the marketing information has been collected for a full year, a marketing specialist with Caribbean and Haitian experience will be brought in to analyse the data and visit the production areas. He will then make a study to derive the elasticities of demand and supply. Based on this information, he will make recommendations to facilitate the efficient marketing of pork and pork products nationwide.

## 6. Data Base Management

Many aspects of the USAID/IICA Swine Project entail computer assisted data management. Examples of the current IICA data base and program capabilities include: a) distributions from HAMPCO including the number of pigs, and SMC name; b) veterinary treatment schedules; c) feed subsidy distributions, amounts and costs; d) feed ration analyses; e) statistical analyses of 2,200 farrowings and over 1060 weanings; f) schedules to ensure that IICA staff are present at each SMC during the first farrowing; and g) a system to monitor the number, distribution and costs of extension bulletins and training courses. All of these programs have been designed for use by non-computer specialists.

This proposed extension will continue these activities and start new programs such as developing marketing strategies to assist the peasant.

## C. Other Project Issues

During the course of this effort which established over 400 NGO production centers throughout the country, produced 50,000 pigs, and trained 3073 support staff and 5000 peasant farmers, a number of problems were encountered and lessons were learned. Some of the problems had a factual basis and the project adjusted resolve them; others derived from a socio-political origin, and proved more difficult to address. Some of the problems faced by the project during project implementation are summarized below:

### 1. White versus Black Pigs

The Yorkshire breed was selected for its large litter size and mothering ability because the primary goal was to produce as many pigs as fast as possible. Perhaps 15 percent of the total production to date, or 7,500 pigs, can be attributed to the reproduction rate of this white breed. Although there was initial reluctance expressed toward black pigs, as more and more peasants receive pigs, their interest in this color issue will probably dissipate.

### 2. Upgraded Swine Facilities

With the primary goal of producing the maximum number of offspring, the project insisted the SMCs construct suitable housing to provide sanitary conditions and to minimize the incidence of disease transmission. Not only were there concerns for problems such as kidney worms which could be transmitted from the soil, but dry, clean conditions were significantly responsible for reducing diarrhea in the baby pigs, and contributed to the large litters routinely weaned. Due to the success of the project in producing one quarter of the national swine herd or 50,000 pigs, there is no longer the need to emphasis maximum weaned litter sizes. If a peasant farmer can afford such facilities, he can expect a higher production and increased revenue; conversely, he can choose to raise his swine under more traditional conditions with less initial investment, but probably too less production. The fact that kidney worms or other major diseases have not been observed by the health monitoring component indicates that a return to the traditional husbandry practices can be technically justified. Thus at this time, there is a clear choice for the farmer: a higher input system used by those who can afford the investment with the goal of increased returns; or a low input system which approximates the previous traditional practices.

### 3. Complete Feed Rations

In order to maximize production and thereby attain the project goal of rapidly repopulating swine at the peasant level, basic animal science dictated that nutritionally balanced rations be used. The results of the production component of the project affirmed this approach, which is the same approach currently being used by the French to produce their "rustic" pigs. Since September 1986, before the wheat shorts shortage crisis, the project was developing balanced rations based on alternatives to commercially processed feeds. This program emphasizes the use of appropriate mixtures of locally available crop residues and

certain imported plants which can be introduced into the peasant farming system. The continuation of this effort, necessitated by the time required to import, test and disseminate new plant materials, is a major component of the proposed project amendment. The feed subsidy component will terminate in September 1987, and UNAPEL will assume this activity (see below).

#### 4. Distribution of Pigs

The project was originally designed to distribute pigs through a countrywide network of NGOs, and over 132 different organizations have eventually become involved. This approach was selected in order to ensure a satisfactory level of management for the over 400 separate breeding centers to achieve the production goals, and because these organizations are well known in Haiti to work most directly with the peasants. Unfortunately, in any project of such national magnitude, there are bound to be some inequities. Undoubtedly, some of the SMCs abused their position and their pigs were distributed to preferred individuals. Also, many peasants who lost their pigs during the eradication were not in areas associated with NGOs and were therefore bypassed during the early stages of the repopulation effort. Even if peasants were selected at random to receive the F1 distributions, those without the proverbial luck of the draw would still be in a position to complain, especially when prompted to do so by politically motivated organizations. Such discontent is expected in a controversial project of this magnitude. Although unfortunate, both for those peasants affected and for the image of USAID, the project designers can rest assured that the decision to operate the distribution through the SMCs rather than direct distribution to individual peasants ensured that the target group received pigs. The infrastructure of the SMC network allowed the logistical and technical support for training, feed delivery, and veterinary services to function efficiently and on a timely manner.

#### 5. Creole versus American Pigs

Considerable attention has been focused on the purported advantages and preferences of the Haitian Creole pig as compared with American pigs imported after the eradication. Comments have been made regarding vulnerability to sunburn, size and feed consumption, ability to be walked to market, flavor, and the minimal lard on the American pigs. Few cases of sunburn have been observed in the field, even with the white Yorkshires distributed from Hampco 2 years later. Although the American pigs are larger and consume more feed, they have a feed conversion ratio of 3.5:1 versus a 7:1 ratio for the Creole pigs. This ratio indicates that for every 3.5 pounds of feed consumed, the animal can gain one pound in body weight. In other words, per pound of weight gained, the American pig consumes one half the feed as does the Creole pig. This advantage, if disseminated by an extension program supported by feeding trial demonstrations, would be instrumental in mitigating this controversy. There have also been statements that the Creole pig has a longer digestive tract, thus enabling it to utilize more roughage type feeds.

Field observations in Haiti reveal that the American pig will consume virtually anything given to it. Whether or not the Creole pig can walk to market easier than the American would be an interesting study. However, the American pig has been observed being walked along provincial roads to market areas. Reports of Haitians preferring the flavor of the Creole pig to the American pig are difficult to assess but probably true. Nonetheless, at present, the "griot" sold on the streets derives from pig scraps imported from the U.S., and human taste preference is known to be acquired and subject to change. It is interesting to note that rice is the preferred cereal in Haiti, but was also introduced. The fact that the American pigs do not carry as much lard, which used to be an important source of cooking oil provided by the former Creole stock has been pressed as another reason for preference for Creole pigs. To a certain degree, this lean to lard ratio can be influenced by the feed ration. The project will attempt to address this in this amendment. Different feed rations and an increased percentage of body fat will also affect the taste, perhaps towards the Haitian preference for greasy pork.

#### 6. Potential Health Problems from Illegal Importations

During the time of the initial distributions of the introduced swine throughout the country, there were concerns of latent zoonoses such as African Swine Fever, hog cholera, and endemic diseases such as kidney worms, all capable of debilitating the repopulation effort. As a result of careful and systematic monitoring, this "worst case" scenario did not materialize. Furthermore, as a result of veterinary services provided by the project, the swine herd has remained healthy and productive. Throughout the repopulation program, but notably during the last year, there has been a steady increase in the number of swine imported. The reasons for these importations are largely economic. Although some importations have been sanctioned by the Government and underwent proper quarantine procedures, others have been illegal. Although Haiti has apparently been lucky thus far, illegally imported swine place the entire program in jeopardy. Haiti is no more prepared for the introduction of another exotic disease than it was eight years ago. Until there is an operational animal health program, history has the opportunity for an encore.

#### 7. Role of UNAPEL

As described above, UNAPEL will become involved as the over the course of the implementation of the Amendment in areas such as local feed development. UNAPEL is a new actor in the project, and as such is described further in the institutional analysis below. It will be engaged in four primary areas:

##### a. Instruction in Feed Mill Operations

In order to minimize a disadvantageous monopoly of the processed swine feed supplies by either the GOH or the large scale private sector, while at the same time serving the majority of the individual consumers, it is

suggested that the operations of the feedmill be transferred to UNAPEL, along with adequate instruction and technical assistance during the period of this proposed extension. Other commodities such as generator trucks, and jeeps will also assist the feedmill operations. In return, UNAPEL will facilitate the development of an information clearinghouse by both disseminating extension and news bulletins, and collecting selected data in conjunction with its feed sales.

**b. Technical Assistance in the Establishment of  
Pharmacy**

Since the administrative infrastructure is already established for this unique service, the assistance required will be limited to professional advice on appropriate pharmaceuticals, and the establishment of contacts with veterinary supply houses.

**c. Distribution of Extension Materials and Training  
Personnel**

During this proposed project extension, IICA will provide UNAPEL with copies of extension training bulletins for direct distribution to member farmers, and will train persons selected by UNAPEL member organizations to develop a cadre of personnel capable to carry on quality extension training in the post USAID/IICA period.

**d. Assistance in Procurement of Imported Plant  
Materials**

This assistance will involve using the UNAPEL network for the distribution of new plant materials to their members and the introduction of UNAPEL representatives to the suppliers identified by IICA.

**D. Project Inputs**

USDA will provide the services of two full-time veterinarians to the project, one to manage the laboratory, and one to supervise the field operations.

MARNDR will provide \$134,500 in Title III L/C funds annually throughout the life of the project, and will assume the responsibility and funding of the National Swine Health Surveillance Program when AID funding ceases. The GOH will also make available the facilities of the National Veterinary Diagnostic Laboratory at Tamarinier for project purposes, and will provide the staff necessary for both the laboratory and the field operations.

IICA will provide logistical support to the USDA implemented program and continue to implement its extension, feed development, and veterinary services components.

AID will provide \$1,786 million in additional funds, which will procure the following goods and services:

TABLE III

## AID-FINANCED INPUTS

1. Swine Health Surveillance	
A. Support for two USDA/APHIS/VS Veterinarians 24 months	
(1) Post differential w/OICL overhead (PASA)	\$ 56,600
(2) Allowances	239,650
(3) Per Diem for in-country travel	12,000
(4) Contingencies	13,750
(5) Operating expenses	24,000
	-----
Subtotal:	\$346,000
B. Swine Health Coordinator	60,000
C. Commodities	
(1) Vehicles (2)	30,000
(2) Vehicle maintenance	18,750
(3) Contingencies	32,625
(4) IICA overhead (@5% and 10%)	12,625
	-----
Subtotal:	94,000
D. Laboratory/Field Surveillance	200,000
IICA direct overhead (@10%)	20,000
	-----
Subtotal:	220,000
	-----
E. Total:	\$720,000
2. Swine Repopulation	
A. Feed Development	154,000
B. Extension	469,000
C. Operating Expenses	306,000
D. IICA Direct Overhead (@10%)	107,000
	-----
Subtotal:	1,036,000
3. Project Evaluation	30,000
4. Grand Total:	\$1,86,000

E. Project Outputs

At EOP, the GOH will have the basic infrastructure necessary to continue the National Swine Health Surveillance Program. This will include a laboratory equipped to do basic clinical analyses, and a trained national staff of veterinary nurses.

IICA's goals have already been spelled out in the Cooperative Agreement and will not be greatly modified by this amendment. In addition to the IICA program, however, the USDA team members will have independent targets to meet. The PASA will be designed to incorporate the following objectives for the USDA personnel to accomplish by the end of the project:

The laboratory will be adequately equipped and personnel adequately trained (including a Haitian laboratory director) to diagnose both exotic and endemic viral, bacterial and parasitic diseases of swine, cattle and other species with a reasonable degree of accuracy;

The transfer of veterinary services to the GOH will be complete;

Procedures will have been established for the importation of animals, animal products, byproducts and associated materials at all major ports of entry;

A workable waste disposal system will be in place to dispose of confiscated contraband and will be functioning at airports, seaports and borders;

A minimum of three veterinary nurses will be in place and trained to assume full-time responsibility in each of the areas of Quarantine Inspection Services, animal surveillance and monitoring, and emergency disease alertness;

Foreign animal disease training will have been provided to one of the Haitian veterinarians at USDA expense; and

A statistically valid national swine serum survey for the detection of ASF, hog cholera and pseudorabies will have been developed.

At the termination of this project extension, then, the program to repopulate Haiti with swine will be completed. This program, which began in September 1983, will have produced and distributed an improved breed of swine; developed alternative feeds which can be produced at the peasant farm level; trained both farmers and extension agents in appropriate swine husbandry techniques; assisted with the starting of the National Veterinary Diagnostic Laboratory and the National Veterinary Health Services; and facilitated the transition from a USAID-financed repopulation project to the IDB-financed GOH program to continue the development of a swine production industry.

IV. SUMMARY COST ESTIMATES AND FINANCIAL PLAN

This amendment will provide \$1.786 million in additional funds to the Project. The majority of these funds (\$1.440) will be obligated by the on-going Cooperative Agreement with IICA and will be used for feed development, international training, extension activities, veterinary services, in-depth project evaluation, and the launching of the National Swine Health Surveillance Program. The remaining funds (\$346,000) will be obligated by a bilateral agreement with the GOH. From the bilateral agreement, a PASA will be negotiated with USDA for the services of the two APHIS veterinarians.

IICA will administer the other budgets, except for the PASA budget, which will be administered by AID.

The tables below give budget details by component and by individual line item:

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TABLE IV  
SUMMARY FINANCIAL PLAN  
(IN \$000)

<u>Component</u>	<u>Budget to Date</u>	<u>This Amendment</u>	<u>New Total</u>
Swine Repopulation	\$6,152	\$1,066	\$7,218
Health Surveillance	-0-	720	720
	-----	-----	-----
TOTAL:	\$6,152	\$1,786	\$7,938

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 TABLE V

BUDGET BY GRANT INSTRUMENT

<u>Component</u>	<u>Budget to Date</u>	<u>This Amendment</u>	<u>New Total</u>
Bilateral Agreement	-0-	346.0	346.0
IICA Coop. Agreement	6,152.0	1,440.0	7,592.0
	-----	-----	-----
TOTAL:	\$6,152.0	\$1,786.0	\$7,938.0

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It should be noted that it is unlikely that all \$1.440 million will be available for obligation in a single action, as \$386,000 thousand have been programmed from a deobligation (deob-reob) which occurred in the last fiscal year. As of this date, those funds have not been reallocated to the Mission, so the first obligation to IICA will be for \$1.054 million rather than \$1.440 million. The remainder will be obligated as funds become available.

Financial and Compliance Audits of Cooperative Agreements with International Organizations are governed under OMB Circular 110, and funds have been budgeted accordingly.

## V. PROJECT IMPLEMENTATION

### A. Project Management

The Swine Health Surveillance Program will be guided by the Project Coordinating Committee, composed of AID, IICA, USDA and Ministry personnel. The two USDA/APHIS/VS veterinarians will be based at the Ministry of Agriculture and work closely with Division of Animal Production personnel at the national and field levels. AID will provide administrative support through a PASA with USDA to finance personnel costs. IICA will provide local program support by hiring a swine health coordinator to assist the two veterinarians and procuring and maintaining two project vehicles. IICA will also assist USDA/APHIS/VS veterinarians and the Ministry of Agriculture in the procurement and installation of basic laboratory furniture and equipment. IICA will carry out its activities in accordance with the Cooperative Agreement. The Ministry of Agriculture will provide personnel to operate the laboratory and veterinary nurses to implement the field operations.

The AID Project Officer and regional APHIS representative will coordinate the National Swine Health Surveillance activity, supervise operations, and will directly supervise the two veterinarians. The APHIS veterinarians will be headquartered in the Ministry of Agriculture. Program support costs for carrying out their technical responsibilities will be provided by IICA through an amendment to the existing Cooperative Agreement. All activities outside of the National Swine Health Surveillance Component will remain under the direction of IICA.

A portion of the funds will be obligated by means of a bilateral grant agreement with the GOH for program and personnel support for the two APHIS veterinarians. On this basis, AID will enter into a PASA with USDA for the services of the two APHIS/VS veterinarians and other short-term technical assistance as required. The existing Cooperative Agreement with IICA will be amended to provide program support costs to assist and coordinate the veterinarians' activities, add funds to extend certain activities, revise budget line items to reflect future activities, and extend the Cooperative Agreement termination date.

All procurement will be handled directly by IICA. Only laboratory equipment and field supplies for the National Swine Surveillance Health Program will have the Ministry of Agriculture's concurrence before procurement.

### B. Methods of Implementation and Financing

The following chart gives the methods of implementation and financing, broken out by activity:

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 TABLE VI

METHODS OF IMPLEMENTATION AND FINANCING

<u>Item</u>	<u>Method of Implementation</u>	<u>Method of Financing</u>	<u>Approximate Cost</u>
A. Veterinarians' Services	PASA	Direct	\$346,000
B. Extension, Health Program and Feed Development	CA	Letter of Credit	\$1,440,000

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 Item B above will be financed through the ongoing Cooperative Agreement with IICA. Item A is to be obligated through the grant agreement which will be signed with the Ministry.

C. Implementation Plan

Draft implementation plans have only been prepared for the laboratory, and field veterinary service. A table with each plan is given on the following pages. The activities regarding extension, feed development, veterinary services and international training will be implemented according to IICA work plans.

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TABLE VII

## IMPLEMENTATION PLAN

## NATIONAL VETERINARY DIAGNOSTIC LABORATORY

<u>Date</u>	<u>Activity</u>	<u>Responsibility</u>
PREPARATION:		
Step A		
July 1987	Procurement of Electricity	USDA/MARNDR
Step B		
July 1987	Identification of Furniture	USDA/MARNDR
July 1987	Procurement of Furniture Vendor	USDA/MARNDR
Step C		
Aug. 1987	Identification and Prioritization of Equipment	USDA/MARNDR
Sept. 1987	Submission of Equipment Lists to Vendors	USDA/MARNDR
Sept. 1987	Installation and Maintenance Contracts for Specific Equipment	USDA/MARNDR
ESTABLISHMENT OF LABORATORY		
Step A		
Sept. 1987	Repairs to Buildings (broken window, seal south windows of lab, install cattle guard)	USDA/MARNDR
As soon as electricity is available	Water Supply	USDA/MARNDR
Nov. 1987	Installation of Emergency Generator	USDA/MARNDR

Interim Swine Repopulation (521-0170.3)  
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	Nov. 1987	Installation of Incinerator	USDA/MARNDR
	Nov. 1987	Perimeter Fence Installation	USDA/MARNDR
Step B	Aug. 1987	Installation of Furniture	USDA/MARNDR
Step C	Aug. 1987	Order Equipment	USDA/MARNDR
	Dec. 1987	Receive Equipment	USDA/MARNDR
	Feb. 1988	Equipment Operational	USDA/MARNDR
Step D	Dec. 1987	Identification of Supplies Needs	USDA/MARNDR
	Sept. 1987	Order Supplies	USDA/MARNDR
	Dec. 1987	Receive Supplies	USDA/MARNDR
Step E	Aug. 1987	Identification of Lab Staff Needs	USDA/MARNDR
	As Needed	Identification and Hiring of Personnel	USDA/MARNDR

FUNCTIONAL DEVELOPMENT

	Oct. 1987	Move Old Lab Equipment and Supplies to New Lab	USDA/MARNDR
	Dec. 1987	Organization of Virology Section	USDA/MARNDR
	On-going	General Training of Personnel	USDA/MARNDR
	Feb. 1988	Screening of Samples for ASF and Hog Cholera	USDA/MARNDR

EVOLUTION AND EXPANSION

Step A	Dec. 1/87 - Sept. 30/89	Expansion of Virology Testing Function (Other Viral Swine Disease)	USDA/MARNDR
	March 1/88 - Sept. 30/89	Viral Cattle Diseases	USDA/MARNDR
	March 1/88 - Sept. 30/89	Viral Diseases of Other Species	USDA/MARNDR

Step B	Dec. 1/87 - Sept. 30/89	Brucellosis and Leptospirosis Serology	USDA/MARNDR
	March 1/88 - Sept. 30/89	Other Bacterial Swine Diseases	USDA/MARNDR
	March 1/88 - Sept. 30/89	Bacterial Diseases in Other Species	USDA/MARNDR
Step C	June 88	Swine Parasite Survey and Identification	USDA/MARNDR
	December 88	Other Parasites	USDA/MARNDR
Step D	Contingent on Adequate Lab Per- sonnel	Gross Pathology Examinations	USDA/MARNDR
	Same	Histopathology	USDA/MARNDR
Step E	As Need Arises	Other Laboratory Procedures	USDA/MARNDR

COMPLETION OF PROJECT

Sept. 30/89	Laboratory is adequately equipped and personnel are adequately trained (including a Haitian Lab Director) to diagnose both exotic and endemic viral, bacterial, and parasitic diseases of swine, cattle, and other species with a reasonable degree of accuracy.	USDA/MARNDR
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TABLE VIII

## IMPLEMENTATION PLAN

## NATIONAL VETERINARY SERVICES

<u>Date</u>	<u>Activity</u>	<u>Area</u>	<u>Responsibility</u>
Aug. 87	Purchase of suitable field vehicle	Quarantine Inspection Service	AID/IICA
Sept. 87	Evaluation of Agricultural Inspection Service at the (7) established border ports	" "	USDA/MARNDR
Oct. 87	Implementation of Reporting System to Central Office (Damien) Quarantine Service	" "	USDA/MARNDR
Nov. 87	Development of statistically valid national swine serum survey for the detection of ASF, hog cholera, and pseudorabies	Animal Surveillance & Monitoring	USDA/MARNDR
Dec. 87	Studies implemented at the seaports of Gonaives, St. Marc, Montrouis, Jeremie, Cayes, Petit Goave, and Jacmel to assess the volume of contraband swine and pork products entering from these ports	Quarantine inspection Service	USDA/MARNDR
Dec. 87	Emergency Animal Disease Response Training - classroom	Emergency Disease Alertness	USDA/MARNDR
Nov. 87	Serum Survey to begin with the collection	Animal Surveillance	USDA/MARNDR

	of 200 sera per week for 10 weeks	& Monitoring	
Dec. 87	Expansion of Quarantine Inspec- tion Service to (7) additional seaports with training for all inspectors this month	Quarantine Inspection Service	USDA/MARNDR
Jan.-Feb. 88	Analysis of Initial Serum Survey of 2,000 samples and planning done for the collection of 3,000 additional samples by 12/31/87	Animal Sur- veillance & Monitoring	USDA/MARNDR

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For 1987, swine and swine product import regulation can be continued on a case-by-case basis until the volume increases significantly and it is possible to establish national quarantine laws and regulations.

JANUARY 1988 THROUGH SEPTEMBER 30, 1989

1. Expand central office (Damien) staff to include three Veterinary Nurses to assume full-time responsibility in each of the areas of Quarantine Inspection Service, Animal Surveillance and Monitoring, and Emergency Disease Alertness.
2. Continue on-the-job training with MARNDR counterpart to develop all the components of the Haitian National Veterinary Services.
3. Plan observation tour in Emergency Disease Test Exercises held by the Dominican Republic, Puerto Rico, or in the U.S.
4. Identify and assist in the procurement of cleaning and disinfection equipment that can be on "stand-by" for the Emergency Disease Response Team.
5. Continue serum survey to reach 10,000 sera which will be the basis for a National Swine Health Herd Profile - i.e. disease status of the national swine herd.
6. Add routine sanitary inspection for acute health problems in swine at concentration points such as livestock markets and slaughter sites; plus trace-backs to the farm or village of origin.

7. Evaluate the incidence of feral and striped pig (usually indicative of domestic and feral swine cross-breeds) sightings and possible trapping instigated for the detection of any latent reservoir of ASF virus.
8. Assist MARNDR to establish regular collaboration with the Dominican Republic for the exchange of disease incidence information, common problems in animal health, and possible joint border control programs.

#### 1989 GOALS

1. Expand Quarantine Inspection Service to the seaports of St. Louis du Nord, Mole St. Nicolas, and Jean Rabel.
2. Equip inspection posts with motorcycle transportation and expand service to include "spot-checks" for weekend and holiday coverage.
3. Provide USDA Foreign Animal Disease training to one of the Haitian Veterinarians at USDA expense.
4. Hold a field test exercise to evaluate the Emergency Animal Disease Response Team.
5. Begin collection of blood for analysis from major swine slaughter sites.
6. Respond to emerging Caribbean animal disease problems like Amblyoma spp. tick infestations, screwworm, hog cholera, and Newcastle disease.

VI. CONDITIONS AND NEGOTIATING STATUS

No additional conditionality will be added to the IICA Cooperative Agreement. There will be a new bilateral Grant Agreement with the GOH's Ministry of Agriculture, which will include the following covenants:

The Grantee will

Grant executory powers to the USDA veterinarians on the development of the Haitian National Veterinary Diagnostic Laboratory and the National Veterinary Services;

Provide and fund qualified personnel to meet the manpower requirements for the Veterinary Diagnostic Laboratory and National Veterinary Services;

Provide office space within the Ministry of Agriculture for the two USDA/APHIS veterinarians;

Provide funds to maintain operations during the life of project and also after USAID funding terminates in September 1989;

Oversee on all project procurement related to the development of the diagnostic laboratory and national veterinary services; and

Negotiate with the IDB to assure that the swine health program is included in the reformulated Swine Production Project.

## VII. AMENDED PROJECT ANALYSES

### A. Technical Analysis

Swine health is becoming more important as the post-eradication swine population grows in Haiti. The Division of Animal Production in the Ministry of Agriculture must be able to do the following upon completion of this activity:

Render swine health assistance to the Haitian farmer, and conduct surveillance and monitoring of swine diseases;

Establish quarantine stations and border controls and the adoption of animal import regulations;

Institute a system of emergency disease alertness; and

Accurately diagnose swine diseases at the Haitian National Veterinary Diagnostic Laboratory.

#### 1. Haitian National Veterinary Diagnostic Laboratory

In order to monitor the health status of the national swine herd, a functioning diagnostic laboratory is essential. The capability of the present diagnostic laboratory has been extremely limited due to insufficient space, no materials and equipment, an absence of trained personnel, and inadequate technical direction. Under this amendment, the laboratory constructed under the USDA-financed swine eradication project will be brought into operation whereby the GOH can assume full responsibility by September 1989.

USDA/APHIS will provide a senior level veterinarian trained in laboratory diagnostic procedures which can work closely with the Haitian National Veterinary Diagnostic Laboratory staff to provide in-service training and leadership. This individual will also be responsible to identify, purchase, and install laboratory furniture and equipment so the laboratory can become operational. Once the equipment is in place and personnel are adequately trained, the laboratory will be capable to perform scientifically reliable tests in virology, bacteriology, serology, parasitology, and pathology. This will probably not be fully achieved by September 1989, and USDA and the GOH will have to develop a plan of action to continue the development of the laboratory after USAID financing ends.

As the laboratory develops, emphasis will be on swine diseases in order to get the laboratory procedures functioning. After these procedures are well established, disease problems in cattle, equines, goats, and poultry will be identified enabling the GOH to respond accordingly to eradicate or control a livestock disease outbreak.

#### 2. Disease Monitoring, Surveillance and Quarantine

One USDA veterinarian will be responsible to strengthen the capability

of the GOH to perform effectively and respond quickly in these areas. He will coordinate all activities, provide leadership to the veterinarians at the national level and also give in-service training to the veterinary nurses implementing the animal health field units.

This component will have animal health field units to serve three purposes: (1) prevent the introduction of foreign diseases; (2) establish a foreign animal disease detection system and, if foreign diseases are introduced, detect them promptly and provide an emergency task force to eradicate the disease as soon as possible; and (3) monitor the health of the national swine herd.

Those in charge of port inspection throughout the country will have responsibility to keep foreign diseases out of the country. They will establish procedures for the importation of animals, animal products, byproducts and associated materials at ports of entry. Protocols will be written and transmitted to the Ministry of Agriculture to be included in the current laws and regulations to allow for seizure and destruction of contraband animals and animal products. Additionally, periodic monitoring by Ministry of Agriculture personnel of all port operations will be done to determine compliance with the agriculture inspection program. Posters and pamphlets will be displayed at all ports of entry to communicate the risks of circumventing the agriculture requirements. Contacts with officials of other countries or international organizations will be established to exchange information concerning prevention programs. At the end of September 1989, a workable waste disposal system to dispose of confiscated contraband will be functioning at airports, seaports, and borders.

Those involved in private swine production must be made aware of foreign animal disease risks and the need to report promptly. The same is true for those using sentinel pigs and their offspring and those in the IICA program. Regular contacts by veterinary nurses made with agriculture district supervisors, chiefs of sections and all private voluntary organizations will assist in the development of a nationwide alert system.

Once there is an unusually large number of deaths occurring on a farm, a report is made promptly to the Ministry of Agriculture. Also when suspicious cases are reported, a Ministry of Agriculture veterinary nurse would be dispatched to investigate the condition. The veterinary nurses would be responsible, with the guidance from the National Veterinary Services Division, to form an emergency task force to eradicate the disease. This emergency team will carry out, in year one, classroom exercises in emergency eradication procedures; in year two, it will participate in emergency disease test exercises held in the Dominican Republic or U.S. This will assure that the emergency team will be adequately prepared to respond and to insure that Haiti does not have to suffer another swine eradication program. By the end of September 1989, it is envisioned that Haiti will have adopted and maintained a practical and workable system.

This network of veterinary nurses will also be able to monitor the

health status of the national swine herd. Reports will be exchanged between them so that the national findings are available to them as well as the Ministry veterinarians at the national level. The USDA veterinarian assigned to this component will work with his counterpart to set up a system where reports could be compiled into a computer and the results disseminated to veterinarians assigned to the IICA project, the GOH, and the private sector. All veterinarians outside the Ministry of Agriculture should be designated as accredited veterinarians to the GOH to participate in the reporting system. Assistance will be provided from the Haitian National Veterinary Diagnostic Laboratory to provide prompt diagnosis and external assistance when necessary.

### 3. Alternate Feed Development

There is an important responsibility attendant to the introduction of any new biological materials. From the technical viewpoint, the adaptability of the new plant to the physical environment must be defined and verified. In the absence of reliable data for the country, this information can be ascertained by multiple trial plots. From the viewpoint of cultural acceptance, the project should be able to provide accurate information to the peasant concerning the biomass production of the new plants in order that the farmer can make an informed decision about changing his planting patterns. Additionally, the project should be able to indicate the labor requirements necessary to cultivate and utilize these plants, and any needs for additional inputs required for the alternate feed package.

Research will attempt to identify appropriate techniques for propagation, harvesting, processing and storage of these new plant species. Virtually all of this work will be accomplished "on-farm" in coordination with SMCs, OCPs and other NGOs who request assistance. The fundamental approach will emphasize small trial/establishment plots. This work will be directed by the Nutritionist and his assistant, implemented as in the past by personnel associated with the participating NGOs, and data collection will be facilitated by the staff extensionists.

Once the inventory of locally available feedstuffs is completed as earlier, and the adaptability and productivity of the newly introduced plant species are ascertained, formulation of swine feed rations is a straightforward process. The nutrient values of most plant materials have already been determined by chemical analyses and published. Values of commonly used indigenous plants in Haiti are also being determined under an AID/W grant to Florida A&M University. It is possible that analyses for a few additional plants may have to be carried out under this project extension in order to complete the data base.

Formulation of rations entails determining what quantities of various feedstuffs are available during different seasons and in different regions of Haiti, and how these can best be combined to provide for the nutritional requirements for the different classes of swine. The same process will also reveal which nutritional elements are

insufficient in these diets, thus allowing recommendations for any necessary supplements to be made. Another important attribute of feed rations is their palatability, i.e., the animal must be able to eat enough of the ration to obtain the quantities of the nutrient required. Palatability and feed consumption are best determined by feeding trials. In lieu of sufficient funding to undertake this additional task, best estimates from observations made at the better managed SMCs will have to suffice. Ration formulations will be under the direction of the Nutritionist, and will be computer assisted by a program which IICA has already developed. Thus far in the project, IICA has prepared a total of 25 different ration formulations. The majority of these have centered around commercially available feed ingredients. The need to develop rations from locally available feedstuffs in order to provide adequate swine nutrition at both reduced costs and transportation requirements, will be addressed in this amendment. It is anticipated that approximately 20 new rations will be formulated.

The final task within this component will be to make specific recommendations concerning the management and proper utilization of the swine feed resources. Data acquired on the availability of locally available feedstuffs, the seasonal productivity on the introduced plants, the cultural practices and labor restraints of the farmer, and the various options for balanced rations will be analysed to provide the farmer recommended alternatives for the most efficient swine production possible under his particular circumstance. Such aspects of feed resource management as how much hectareage for swine feed production is required, optimal harvest times, procedures for mixing his own rations, techniques for storing surplus production will be addressed.

#### 4. Veterinary Services

The reduction in project veterinarians will probably allow subclinical diseases and nutritional deficiencies to go undetected for longer periods than previously. The incidence of agalactia and nutritional anestrus will probably increase if analyses of feed rations cannot be completed and corrected on a routine basis. These problems could impair an otherwise well supported alternative feed program.

## B. INSTITUTIONAL ANALYSIS

Because UNAPEL was not included in previous versions of the project, a brief institutional analysis is in order.

UNAPEL (the Union Nationale des Associations pour la Promotion d'Élevage) is a cooperative association which developed from the network of NGO Secondary Multiplication Centers established by IICA. Of the 440 SMCs under the sponsorship of 130 NGOs, 275 or 62.5% are currently members of UNAPEL. IICA was instrumental in the formation of UNAPEL, and this was done in response to a recommendation made by the USDA and Pork Industry Review Team in August 1986. Simply stated, UNAPEL has the potential to continue many of the activities currently operated by IICA at the conclusion of this proposed project extension.

The decision to promote this infrastructure through the NGO network rather than the Ministry of Agriculture was logical because it was the NGO network which directly participated, without MINAG support, in the Interim Repopulation program. To incorporate the MINAG at this stage would only confound a currently functioning infrastructure. Moreover, one can take the position that the role of a Government should not involve those activities which the private sector is willing and capable of undertaking. In the case of a National Animal Health Program, the role of the Government is apparent and therefore included in the overall USAID Interim Swine Repopulation Project amendment plan. But for rural extension and other aspects of support to peasant swine producers, Government involvement does not appear to be essential.

It is important to realize that the member NGOs are the same organizations which are currently providing the most assistance directly to the Haitian peasants. These NGOs are not only involved in swine repopulation, but are integrally involved in many aspects of rural community development including the construction of roads, schools and health clinics, to name a few.

The resolution to form UNAPEL was made during a national assembly convened on December 30, 1986. There were 62 charter member organizations representing 80,000 peasant farm families. While only five months old, UNAPEL has either accomplished or is currently active in the following activities:

- Developed a Constitution and By-Laws to govern the institution and formed the Regional Assemblies encompassing the 275 SMCs.

- Initiated the process to receive official recognition by the GOH.

- Have begun selling swine feed under the UNAPEL label. Moreover, true to its intended role as successor to IICA, UNAPEL members have secured four of seven seats on the Committee for the Administration and Distribution of Animal Feed. This controlling interest should ensure an equitable distribution of processed animal feeds throughout the countryside.

Established seven Regional Veterinary Pharmaceutical Supply Centers and the administrative capacity to operate them. (Note: the August 1986 Swine Industry Review Task Force stated that "Like feed, there needs to be a better supply of animal medications made available to the peasants at lower costs").

Selected by Heifer Project International to implement a two year project intended to import and distribute 100 boars to augment the swine gene pool in Haiti.

Having been in existence for five months, UNAPEL has the potential for rapid growth as its services become recognized. Such services as the Rural Veterinary Centers, the distribution of 100 new boars provided by Heifer Project International to augment the gene pool, and the securing of a 40% quota of the volume of locally produced feedstuffs will assist in recognition by farmers. The unique organizational hierarchy of UNAPEL provides the dual capacity to be responsive at the micro (farm family) level, while at the same time being cognizant and operationally influential at the macro or national level.

In order to promote the rapid development of UNAPEL, which directly parallels many of the efforts currently undertaken by the USAID/IICA swine project, and to provide the best chance that these activities can be continued after the cessation of USAID funding, it is proposed that IICA provide the following institutional support to UNAPEL during this project extension.

## C. ECONOMIC ANALYSIS

### 1. ECONOMIC ANALYSIS OF PIG RAISING IN HAITI

Since the inception of the ISRP project, repopulation of the pig industry has gone more rapidly than expected. In fact, some SMCs which were on the road to economic viability have had to be disbanded because of a shortage of complete bagged feed for their animals. The project personnel subsequently recommended that SMCs "decentralize" their operations and distribute their breeding stock to peasants. In turn the peasant returns to the Center a set number of females and males. The actual contract between the SMC and the peasant can vary.

#### a. Pig Raising at the SMC Level

Sixty-seven SMCs were visited in a period of two weeks in all the major areas where pigs have been distributed by the project. Data were collected in a systematic manner using a questionnaire. Questions on costs of production and marketing were asked of the SMC manager. Data were collected on costs of production at the SMCs. The largest fixed capital cost incurred was the construction of the piggery. The average cost of the sample of SMCs was \$3,000; however, there was wide variability in sizes and construction materials seen.

In some areas, SMCs are vacant because of "decentralization" of the piggery. the shortage of feed has forced SMCs to disperse sows to the peasants to care for. IICA encouraged this strategy because of their projection in shortfalls of feed. In fact, incentives were given to decentralize by increasing quotas of feed to an SMC by 25 percent.

The feed shortage is quickly changing the role of SMCs in the multiplication effort. In some areas facilities are idle, most especially at UNICORS sites in the southwest, where 44 piggeries that cost \$2,500 each are now idle. In a few cases, individual farmers have brought their pigs back into the SMC building and to use the idle facility. The condition of sows that had been given to peasants was better than those that had remained in the same SMC because of available feed and management.

The pigs very destructive to housing facilities. In general, many piggeries are in disrepair. The large size of the pig causes constant damage and these repairs are expensive. In many cases, sows are in pens that have no doors or have broken concrete floors. Several sows and boars are being restrained on a cord in the pen.

The cost and availability of feed are of major concern by almost all SMC personnel interviewed. The data collected indicate that SMCs spend \$199 per month on feed. The average cost was \$19 per sow per month for SMCs able to give figures on feed expenses.

Fifty-three of the sixty-seven SMCs interviewed gave figures on staff employed at the SMCs. Full-time employees at the SMCs averaged 1-8 people per month and 1.4 part-time employees. The labor allocation

appear to be high at the SMCs. The average cost per month is approximately \$83. Only six managers reported their salaries, but they are not included in the figures.

Slightly less than 50 percent of the SMCs responding to the question on debt replied that they owed money on the operation. The amount of the debt varied greatly and the average was \$763.

#### b. Marketing Activities of SMCs

SMC managers were asked about marketing of their pigs. Of 45 respondents, 32 (75%) said they had sold pigs since starting the facility. Castrates and piglets were the predominant type sold. The average price for piglets was \$52 which has decreased by 50% from reported prices before the feed crisis. Farmers complained they could not sell piglets because others could not get feed for them.

Large castrates were reported sold for an average of \$216 per head. Visits to markets and discussions with project staff indicate the range is from \$180 - \$250 for a 250 pound slaughter hog. Small castrates around 70 - 100 pounds were selling for an average of \$59. There were not many large castrates being housed in the SMCs visited. It could be that feed shortage has caused them to sell off these pigs.

SMC managers were asked if they have marketing problems. 77% said they were experiencing difficulty in selling their pigs. The major reason given was shortage of feed (41%) with depressed market conditions representing the rest.

#### c. Distribution of Pigs by the SMCs

Information was collected on distribution of weaned piglets by SMCs to peasants. Thirty-two SMCs out of 69 provided the information. Reports on distributions are not required of SMCs by IICA.

For selected SMCs, the average number of pigs distributed was 76.7 with a wide variability in numbers. If there are 440 SMCs presently, the number of Haitian households receiving pigs is then approximately 34,000. This estimate is much lower than what is projected by the project. It should be added that the survey found that piglets were distributed to a group of individuals in which the spread effect would be much greater. The lowest projected estimate by IICA is 44,101 households were impacted. The implication of this finding is that repopulation has not reached the targeted levels of households set in by the Project Paper.

#### d. Overall Evaluation of the SMC Concept

The SMC produced both positive and negative results. The SMC in general provided good distribution of piglets to the target group of low-income peasant farmers. However, as the prices for feed went up and feed became scarce, SMCs began to have problems. They were locked into giving away piglets to peasants which became an economic hardship

as feed prices went up.

The criteria to become a SMC was fine; however, in reality the requirements were not always appropriate. The piggeries quickly went into disrepair, requiring large expenditures on maintenance. The project did suggest low cost materials, but many SMCs decided to go into more expensive buildings. Smaller SMCs would have been more appropriate, and giving away only the first litter would have been better. Some SMCs indebted themselves by giving too many pigs away to peasants. Some SMCs were not on sound ground financially and when feed problems started, these SMCs were the first to decentralize.

Approximately 10 percent of the SMCs did not live up to their contracts in distribution of pigs which is a low number given the temptation to sell piglets at \$100 per animal. However, the SMCs did put pigs in the hands of poor farmers who had pigs before ASF.

It is true that recipients were asked to perform community projects before receiving pigs. In one area, a recipient had to: (1) build a latrine; (2) build a piggery; (3) give 25 hours of community labor; (4) read and write his name; and (5) give 3 females and 1 male from the first four farrowings.

There was a waiting list of farmers wanting to receive a pig at this particular SMC in the Northeast. If the farmer wanted a second pig, then 85 additional hours of community service was required.

In general, peasants were required to at least build a facility, but there was not a requirement to give bagged feed.

The evident lack of motivation by SMC staff to improve management was also the same regarding extension by the SMC to the peasant. Over time, SMC staff lost interest in maintaining the operation. It was only in the area of veterinary services that extension was done and that is because these people received payment. In some cases, the peasant was exploited by high fees, e.g. a farrowing for \$20.

Several changes in the program design occurred during the project:

(i) Feed Subsidy

At the start of the project, a 50% subsidy was given and feed was available to SMCs in unlimited quantities at the price of \$2.50. The project paid an additional \$2.50 as a subsidy to the SMC. By March 1986 only 5 SMCs were off subsidies. At the end of January 1987, 50 percent of SMCs were off subsidies, equivalent to 2,658 sows. It was found that most SMCs could not succeed without a subsidy. SMCs could not continue to give away pigs.

Wheat shorts disappeared and the ration increased in cost 250 percent. The project had a \$35,000 allowance for the subsidy which supplied 250 MT/month, of feed for only 50% of the base herd.

(ii) Regional Feedmill

During this same period, the plan to establish regional feed mills was dropped from the project because the possible participants CODEVA, IRD and UNICORS were in debt to the bank on their loan for feed. The Convention Baptiste, who had a feedmill in place in Cap Haitien since 1985, has not been able to start operation for over two years.

(iii) Decentralization

Because of the shortage of feed and the financial problems experienced by SMCs, decentralization from the piggery was an effective redesign strategy for the project. Pigs looked as though they were performing better than if they had been in the piggery. The feed shortage problem has placed enormous pressure on the daily operation of SMCs. SMC with large number of sows, over 10, will have difficulty maintaining operation unless they have good financial support and capable management. The condition of SMCs varied on both accounts. The sponsoring non-governmental organizations (NGOs) of the piggery was in charge of providing credit, extension and deciding the distribution of the piglets. It was obvious some SMCs that had sows should decentralized. In general, SMCs served only as a multiplication center without sufficient or substantial transfer of technical information to peasants. Only in the case of a strong central cooperative, e.g. CODEVA, UNICORS or IRD, are effective extension programs going to be carried out.

e. Pig Raising at the Peasant Level

Thirty-seven peasants were interviewed who had received pigs from the SMCs that the team visited. Four hours per day of family labor is devoted to pigs by household members. The estimate is very high for a livestock activity such as pigs; but pigs are new again for the peasant and high expectations are placed on pigs. It is interesting to note that over 50 percent of the peasants said they had not incurred a debt to have their pigs. This was approximately equivalent to the same percent as what was said by SMCs.

If the sow farrows 1.7 times per year and the farmer sells 10 piglets per year (having to give back one male and a female) the net returns to labor and management is estimated to be \$136 per year. Pig raising is profitable at the peasant level even though the live piglet price has dropped 50 percent since the feed crisis. It is projected that the price for weaned piglets will drop to \$25 in 1989.

Average prices were asked for types of pigs sold. Price reported had declined since before the feed problem. It is interesting to note that peasants had not sold any of their pigs in the market. Demand seems sufficient for buyers to come to the piggery although prices have declined.

However, peasants said they were experiencing problems in selling their pigs. The majority said that market demand was the greatest

problem.

Peasants on the average had one sow or a gilt they were raising to breed. Assuming that the peasant had a sow, the average net return per sow is estimated at \$136 per year. That is assuming a farrowing of 1.7 times per year and a weaned litter size of 7. The greatest expense mentioned by peasants was feed, \$267 per year. It seems as though local feed is substituting for bagged feed by peasants. It is uncertain if producers are really spending that much money on feed or just saying what they wanted us to believe. An estimate of the trade-sensitivity analysis of the economics of SMC and peasant operations can be conducted.

The implication is that pig raising is still profitable for the peasant although it is a matter of time before the net returns will decline further as more pigs are produced. It was observed that management of pigs was generally better by peasants than at the SMCs that we visited. A representative farm budget for a peasant operation based on information from Drew Kutschenreuter, IICA Extension Coordinator, is presented in Table 11.11. The internal rate of return on the operation is over 50% to make the stream of present value of benefits equal to zero.

It should be noted that the majority of peasants interviewed said they could take care of fewer numbers of pigs than before ASF. This points to the peasant's ability to calculate how much this pig will require in terms of management and inputs and that fewer pigs will be required.

## 2. FEED SITUATION AND OUTLOOK

### a. The Project's Feed Program

The feed supply problem has grown in magnitude in the past several months due to the lack of wheat shorts. The majority of respondents in the field survey complained that feed was difficult to obtain at an affordable price.

The project was developed to design a feed supply program that met the need of the peasant pig raiser. A fifty percent feed subsidy on a bag of complete feed was provided. As the cost of raw materials, particularly wheat shorts, has gone up, fewer bags of feed from the program were available to SMCs. The project staff realizing this shortage recommended to SMCs to decentralize their operations and give sows to peasants.

The feedmill operation is in the process of being transferred to UNAPEL which is an organization representing NGOs in Haiti that have been involved in establishment of SMCs. UNAPEL receives its allocation of wheat shorts and rice bran from the Minoterie. The raw materials are delivered to the project's feedmill where raw materials are mixed with premix concentrate in the proportion of 60% wheat shorts, 20% rice bran and 10% premix. The project charges \$2 per bag

for mixing. UNAPEL then sells a bag of feed to member SMCs at \$5.75 F.O.B. the plant site. UNAPEL makes \$33.33 per short ton.

b. Other Sources of Animal Feed

Other sources of animal feed for pigs are available in Haiti; however, the cost is higher than feed from the project. In visits to Purina and SONUAN, it was learned that both facilities are operating at far less than full-capacity. Prices quoted by both facilities were in a range of \$10 - \$15 per bag of mixed feed. Both company managers expressed concern about availability of wheat shorts.

In recent months, large amounts of flour have entered the country which has been one factor affecting the amount of wheat shorts available from the Minoterie. At the same time demand for wheat shorts has increased dramatically by owners of pigs.

c. Opportunities for Local Feed Production

The project has taken great efforts to examine alternative feed sources for SMCs. Cuttings of Ramie obtained from the Dominican Republic have been given to SMCs to establish near their piggeries. The crop is performing well and SMC laborers are cutting and feeding the Ramie to their pigs. If widespread impact is going to be felt, then further economic analysis is needed on cropping systems and how this variety and others can be adopted by peasants.

3. MACROECONOMIC FACTORS AFFECTING THE SWINE INDUSTRY

After the ASF outbreak, pork was not available in Haiti in large quantities. During the period since the eradication, pork imports have increased tremendously. These imports have not decreased sufficiently since herd numbers have begun to increase. Data indicate that for the first quarter of this year, official imports were approximately 2.7 million pounds, which is equivalent to 13,500 pigs. The major importer of pork parts has been FAMEPAK. Compared to monthly imports of around 11 containers in December 1986, the tonnage imported is increasing even though more pigs are available in Haiti.

Pork is one of seven commodities that requires an import license. The tax on pork is reported to be 40 percent of the CIF value. There is concern that licenses are being given easily and are being revised by a group of importers. The impact is that probably much more pork is entering Haiti than what is reported.

a. Estimates of Pork Demand in Haiti

Precise figures on the disappearance and consumption of pork in Haiti are not available. However, the estimate that has been quoted is 25,000 MT.

Breed	Average Carcass Wt.	Carcasses to Satisfy Demand
Creole	80 lbs.	625,000
Creole	100 lbs	500,000
Imported	140 lbs	357,000

Based on the illustration above then over 500,000 head were slaughtered from the domestic herd. The heavier carcasses of the imported breeds mean that fewer pigs will be required to satisfy local consumption needs than compared to the pre-ASF period. If we assume a national average of six weaned pigs per litter, then approximately 60,000 sows will satisfy this demand for pork in Haiti.

Projections using secondary data from IICA suggest that approximately 20,000 sows will be producing piglets by September 1988. A similar number of sows will be supplied by the private sector as well as from the sentinel herd. This base herd of 60,000 sows will produce an offtake of 360,000 animals, equivalent to the offtake before ASF.

The important conclusion is that the herd is expanding rapidly and that marketing problems are already existing. The live weight price for hogs is below the pre-ASF level. The need is clearly apparent that marketing strategies are needed to cope with increased feed problems and increasing herd numbers.

**b. Marketing Strategies for Pigs Raised by Peasants**

Appropriate marketing strategies for peasants raising pigs needs to focus on opening up marketing alternatives where constraints in the system occur. Problems that will need to be addressed are:

Thin rural markets where demand is not sufficient for local offtake.

Lack of market information on seasonal supply and demand for feeder pigs, slaughter hogs or breeding stock.

Adjusting production systems to meet specific market requirement--liveweight, fat cover, age, etc.

Lack of an adequate number of buyers willing to speculate and move pigs to areas for providing further value to the animals.

To meet marketing constraints, the following set of strategies are suggested:

Develop Feeder Pig Markets. Regions of Haiti have a comparative advantage during certain seasons of the year to feed pigs on local feed better than others. It was observed in the far Southwest around Port-

Salut that not enough feed is available during the dry season. However, not far to the East the watershed of Les Cayes has more rainfall and available feedstuffs. Weaned piglets could be sold from finishing to heavier weights during certain seasons of the year.

The opportunities for implementing such a marketing channel are that (1) two strong organizations UNICORS in the Southwest and IRD in Les Cayes could cooperate on setting up such a system; (2) one of the better abattoirs outside of Port-au-Prince being used by FAMEPAK currently could be integrated into the slaughter and processing activities; and (3) the transportation system is good from Port-au-Prince to Les Cayes.

Small Scale Meat Processing, Technology and Marketing. Because the imported pig produces more weight per dressed carcass, new marketing options have to be implemented along with the improved management which is taking place. With more meat having to be disposed at slaughter, the need for processing for preservation will be required. The creole pig produced a fatter product which was processed into griot or was salted and preserved.

The learner carcasses at optimum slaughter weight 200 lbs, will have less fat and more muscle which opens options for further processing of pork products. There are different consumer markets that could be targeted.

It is proposed to establish small-scale processing centers in selected areas. The objective would be to create a more competitive environment in regions identified as having potential for marketing opportunities for marketing access for the products. This scheme is similar to one being developed under the Interamerican Development Bank. Credit would be extended to purchase the animals and process them for sale.

The advantage of this proposal compared to number 3 listed below is that rural employment would be generated and pork would be a valued-added product for the community. The risks are that more expertise in food technology, food safety, and management would have to be required.

Contract Marketing for Slaughter Hogs. The two major meat processing facilities are located in Port-au-Prince. Both companies are processors of

domestic pigs as well as importers of pork from the U.S. A marketing strategy that could be developed is to initiate a marketing program whereby each firm would be encouraged to set-up buying stations for slaughter hogs. These installations would have set criteria for types of pigs desired. Premiums and discounts would be received for animals not meeting the specifications.

As an incentive to these companies for participating, a license could be issued for importation of pork with a favorable tax reduction provided. The objective would be to encourage domestic slaughter and at the same time relieve any bottlenecks of pigs stacked-up in the marketing system. This strategy could encourage development of grades and standards by peasants and hopefully begin to educate producers when the proper time is to sell slaughter hogs. The issuance of the import license to these companies could allow for smoothing out the variation in pork supply because of seasonal effects.

#### 4. MARKETING RECOMMENDATIONS

It is apparent that marketing of pigs and pork is becoming a concern of both peasant and commercial pig operators. Efforts are needed to begin to formulate appropriate and rational marketing programs that will insure an orderly market for pigs and pork products. The following recommendations are presented, and are directed at two levels: (1) micro-level and (2) macro-level programs.

##### a. Micro-level Programs

It is important to look at cost/benefit of various production and marketing alternatives for pigs raised by peasants. If marketing options are going to be designed then key parameters on what breeding, growing and finishing operations are viable at the peasant level. These production/marketing options will vary by agro-economic areas in Haiti. Efforts should be concentrated where numbers are already high in the South and Southwest regions. these regions coincide with the areas targeted by the evaluation team animal nutritionist for studies on local feeding trials.

Basic socio-economic field data need to be collected in conjunction with project nutritionists doing local feeding trials. Data would look at economics of alternative cropping systems. This activity should be tied in with the initiation of the Targeted Watershed Project in Les Cayes. Objective is to design technological package.

Studies need to be conducted on the operation of the livestock marketing system to look at price margins, buying procedures in the country-side, the role of credit by market agents and price

differences by region and season for different type and sex of pigs and other livestock. This information would be useful in implementing the general strategies outlined above.

Design, test and implement an extension pig marketing program based on field data collected. Training of extensionists will be conducted with subsequent programs for peasant. Extension information will be introduced in conjunction with a test marketing project. e.g. feeder pig markets or country-buying stations. Extension program will focus on when and how to best market pigs.

b. Macro-level Market Research

The development of the swine industry in Haiti is also dependent on larger issues of a policy nature. The impact of imports is being felt dramatically on a fledging swine industry. Yet no rational plan for sound economic analysis has been done to guide the policy-makers or inform the industry. In the U.S., trade associations and Government agencies provide this type of research. The following is proposed: A strong need is present to begin a series of "white papers" on the pork industry. These studies could be carried out by the Ministry of Agriculture with support from the Agricultural Producers Association (APA). Assistance could be provided by short-term consultants or agricultural economists at the Agricultural University. The following topic areas are proposed: (1) feed supply and demand; (2) the impact of imports; (3) establishment of the framework for collection of livestock market information; (4) competition in the commercial meat processing industry; and (5) competitive analysis between peasants and commercial swine producers.

(4) ACTION AID-2 INFO AMB DCM

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PP RUEKPU  
DE RUEHC #4359 1942007  
ZNR UUUUU ZZH  
P 132007Z JUL 87  
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LOC: 113 098  
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CN: 50025  
CHRG: AID  
DIST: AID

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E.O. 12356: N/A

TAGS:

SUBJECT: INTERIM SWINE REPOPULATION PROJECT AMENDMENT  
NO 521-0170

REF: PAP 3535

1. WE ARE CONCERNED THAT THE GOH COUNTERPART CONTRIBUTION IS TO BE FUNDED FROM TITLE III SOURCES. RECURRENT COSTS OF ANIMAL HEALTH PROGRAM SHOULD BE PROGRESSIVELY INTEGRATED INTO GOH OPERATIONAL BUDGET TO ENSURE CONTINUITY OF PROGRAM AFTER A.I.D. FUNDING ENDS. AID/W CONCURS IN MISSION APPROVAL OF PROPOSED AMENDMENT SUBJECT TO GOH SUBMISSION OF A PLAN TO PROGRESSIVELY INCREASE PERCENTAGE OF RECURRENT COSTS INCLUDED IN GOH OPERATIONAL BUDGET WHICH SHOULD PROVIDE FOR FULL INCLUSION OF THOSE COSTS IN THE GOH OPERATING BUDGET IN THE FINAL YEAR OF THE PROJECT.

2. LAC/CAR IS SENDING IDB A LETTER CONFIRMING OUR BASIC UNDERSTANDING OR REDESIGN OF THE SWINE INDUSTRY DEVELOPMENT PROJECT, AND SEEKING A MEETING TO DISCUSS THE NEW FORMULATION IN DETAIL. WE WILL POUCH A COPY OF THE LETTER TO YOU WHEN SIGNED.

3. COUNTERPART. ORIGINAL PP AND AMENDMENTS DO NOT DEAL WITH HC COUNTERPART. RATIONALE FOR LACK OF COUNTERPART FOR THE PROJECT, WHICH AID/W ASSUMES IS BASED ON OBLIGATION OF FUNDS WITH AN INTERNATIONAL ORGANIZATION, SHOULD BE FULLY SPELLED OUT IN THE PP AMENDMENT. PER EB 3, CHAPTER 2, ANNEX 2G, IF ANY FUNDS HAVE BEEN OR WILL BE OBLIGATED WITH AN INSTITUTION OTHER THAN IICA, THE PP AMENDMENT SHOULD CLEARLY IDENTIFY HOW THE REQUIREMENTS OF SECTION 110(A) OF THE FAA WILL BE MET.

4. PURPOSE. REFTTEL INDICATES THAT PROJECT PURPOSE WILL NOT BE ALTERED BY PRESENT AMENDMENT. HOWEVER ADDITION OF ANIMAL HEALTH ACTIVITIES INDICATES PURPOSE BEYOND PRODUCTION AND DISTRIBUTION OF SWINE. SUGGEST PURPOSE STATEMENT BE REVISED TO APPROPRIATELY REFLECT PRESENT BREADER SCOPE OF ACTIVITIES. SHULTZ

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ANNEX B-1

CLASS: UNCLASSIFIED  
 CHRG: AID 06/03/87  
 APPRV: DIR:GZARR  
 DRFTD: DRE:RBYESS:ND  
 CLEAR: 1.ADO:RRUYBAL  
 2.G/ARDO:VCUSU  
 3.DRE:AFORD  
 DISTR: RDO2 AMB DCM

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E.O. 12356: N/A  
 SUBJECT: INTERIM SWINE REPOPULATION PROJECT  
 NO. 521-0170

REF: A.86 STATE 243832, B.PAP 2216, C.PAP 3248

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1. SUMMARY. THIS CABLE IS THE ACTION PLAN-TYPE DESCRIPTION PROMISED IN REF (C) WHICH DESCRIBES THE PROPOSED AMENDMENT NO. 3 TO SUBJECT PROJECT. MISSION INTENDS TO AMEND PROJECT TH. YEAR IN AMOUNT DOLS 1.786 MILLION TO NEW TOTAL OF DOLS 7.938 MILLION. FUNDS WILL BE USED TO LAUNCH NATIONAL SWINE HEALTH PROGRAM AS DESCRIBED IN REF (C), AND TO CONTINUE THE ONGOING LOCAL FEED DEVELOPMENT PROGRAM AND THE EXTENSION SERVICES PROVIDED THROUGH IICA IN THE AREAS OF HUSBANDRY, MARKETING, PRODUCTION AND SWINE HEALTH. CURRENT LOP AMOUNT IS DOLS 6.152 MILLION AND CURRENT PACD IS SEPTEMBER 30, 1987. PURPOSES OF THIS CABLE ARE THREE: TO (A) SOLICIT BUREAU APPROVAL OF THE AMENDMENT; (B) PROVIDE INFORMATION SO THAT YOU MAY PREPARE CONGRESSIONAL NOTIFICATION; AND (C) OBTAIN AUTHORITY TO EXTEND PACD FOR AN ADDITIONAL TWO YEARS. AMENDMENT WILL BE

FUNDED FROM ADJUSTMENTS TO EXISTING ARDN OYB AND FROM DOLS 500 THOUSAND ALLOTMENT RECEIVED EARLIER THIS FY. THEREFORE, NO INCREASE IN OYB IS CONTEMPLATED. END SUMMARY.

2. THE PROJECT WAS DESIGNED IN 1983 TO SERVE AS A BRIDGE BETWEEN THE ERADICATION OF THE ISLAND'S SWINE AND THE START OF A NATIONAL SWINE INDUSTRY DEVELOPMENT PROJECT WHICH WAS TO BE FUNDED BY IDB. BECAUSE THE IDB PROJECT HAS NOT YET BEGUN, THE PRESENT PROJECT HAS BEEN AMENDED TWICE AND OTHER COMPONENTS HAVE BEEN ADDED. NOW IN ITS FOURTH YEAR. THIS PROJECT HAS WITNESSED DRAMATIC PROGRESS TOWARD THE GOAL OF TOTAL REPOPULATION OF HAITI'S SWINE HERD. DEVELOPMENT OF THE GOH'S CAPACITY TO DEAL WITH FUTURE DISEASE OUTBREAKS HAS NOT KEPT PACE WITH THE REPOPULATION PROGRAM. THE MISSION HAS BEEN RELUCTANT TO BECOME INVOLVED IN A DISEASE MONITORING PROGRAM, AS SUCH ACTIVITIES LIE FAR OUTSIDE THE SCOPE OF THE AID-FUNDED, NGO-BASED REPOPULATION EFFORT PER SE. FURTHERMORE, THIS KIND OF PROGRAM IS

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PRIMARILY BASED ON RECURRENT COSTS, THE TYPE OF EXPENDITURE BETTER MADE BY THE HOST COUNTRY THAN BY A DONOR.

3. RECENT DEVELOPMENTS IN THE IDB PROGRAM HAVE RECENTLY CAUSED MISSION TO RECONSIDER OUR POSITION WITH REGARD TO THE SWINE HEALTH ISSUE. DURING FAC-HOSTED MEETING DESCRIBED REF (C), THE IDB ANNOUNCED ITS INTENTION TO REFORMULATE THE PROJECT DESIGN AND TO INCLUDE A SWINE HEALTH PROGRAM IN COOPERATION WITH MARNDR. MISSION RESPONDED BY OFFERING TO PROVIDE "BRIDGE" FUNDING BETWEEN THE PRESENT SITUATION AND ONSET OF IDB PROJECT, BY PROCURING BASIC EQUIPMENT FOR THE NATIONAL VETERINARY LABORATORY AND FUNDING THE SERVICES OF USDA PERSONNEL FOR A TWO-YEAR PERIOD.

4. IN AUGUST 1986 MEETING IN AID/W, USDA OFFICIALS MET WITH A/AID AND PRESENTED A PROGRAM UNDER WHICH

AID COULD UNDERWRITE THE COST OF STARTING THE PROGRAM AND USDA WOULD PROVIDE THE VETERINARY PERSONNEL. AID AGREED TO FINANCE TWO YEARS' OPERATIONS, AND PLEDGED TO CONTRIBUTE DOLS 500 THOUSAND TOWARD THIS END. REF (A), WHICH PROVIDED CONCURRENCE FOR AMENDMENT NO 2 TO THE PROJECT, FURTHER PROPOSED INCREASING THE LOP AMOUNT TO DOLS. 6.653 MILLION. THE ADDITIONAL DOLS 500 THOUSAND, WHICH WAS NOT BUDGETED FOR IN FY 1986, WAS TO BE USED TO INITIATE A NATIONAL SWINE HEALTH PROGRAM. THIS PROPOSAL NOTWITHSTANDING, THE MISSION CHOSE TO DEFER A DECISION ON THE HEALTH COMPONENT, PENDING RESOLUTION OF THE RECURRENT COST QUESTION. MISSION DESIGN COMMITTEE HAS NOW STUDIED THE ISSUE AND CONCLUDED THAT DOLS 500 THOUSAND IS INADEQUATE FOR CARRYING OUT PROPOSED ACTIVITIES. AND HAVE ADDED DOLS 220 THOUSAND IN F/X AND DOLS 269 THOUSAND IN L/C FOR THIS PURPOSE.

5. GOAL AND PURPOSE. THE GOAL OF THE PROJECT REMAINS TO RESTORE THE STANDARD OF LIVING OF THE HAITIAN FARMER TO THE LEVEL EXISTING PRIOR TO THE OUTBREAK OF ASF. THE PURPOSE IS TO PRODUCE AND

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DISTRIBUTE IMPROVED BREEDING STOCK TO HAITIAN FARMERS DURING THE PERIOD IMMEDIATELY FOLLOWING THE ERADICATION OF ASF. NEITHER THE GOAL NOR THE PURPOSE WILL BE MODIFIED BY THE PRESENT AMENDMENT.

AMENDMENT WILL ASSIST IN THE ESTABLISHMENT OF A NATIONAL SWINE HEALTH PROGRAM TO BE CARRIED OUT BY THE MINISTRY OF AGRICULTURE. AID CONTRIBUTION TO THE HEALTH PROGRAM WILL CONSIST OF PROCUREMENT OF BASIC EQUIPMENT FOR THE LABORATORY, THE COST OF A SWINE HEALTH COORDINATOR TO BE EMPLOYED BY IICA, AND PROGRAM SUPPORT COSTS FOR THE USDA VETERINARIANS FOR TWO YEARS. THE MAJOR ELEMENTS OF THE ONGOING PROJECT, INCLUDING LOCAL FEED DEVELOPMENT AND EXTENSION, WILL BE SUPPORTED AS WELL. THIS AMENDMENT HAS BEEN CAREFULLY DESIGNED TO AVOID MISSION'S BEING TRAPPED INTO PAYING RECURRENT COSTS OF HEALTH PROGRAM INDEFINITELY. AT EOP. WHETHER OR

NOT OTHER SOURCES OF FUNDS HAVE BEEN IDENTIFIED, AID FUNDING WILL CEASE.

7. PROJECT INPUTS. AID WILL PROVIDE DOLS 1.786 MILLION IN ADDITIONAL FUNDS, WHICH WILL PROCURE THE FOLLOWING GOODS AND SERVICES:

A. TECHNICAL ASSISTANCE

- SUPPORT FOR TWO USDA/APHIS/VETS 43 M/M
- SWINE HEALTH COORDINATOR 24 M/M

B. COMMODITIES

- EQUIPMENT FOR NATIONAL VETERINARY LAB X
- VEHICLES 2
- FIELD SUPPLIES X
- EVALUATION X

8. PROJECT OUTPUTS. AT EOP, GOH WILL HAVE THE FOLLOWING:

- FUNCTIONAL VET LAB WITH BASIC EQUIPMENT 1
- EXTENSION MATERIALS IN CREOLE LANGUAGE X
- ALTERNATIVE FEED PACKAGE X
- TRAINED FIELD STAFF X

9. FINANCIAL PLAN.

A. SUMMARY FINANCIAL PLAN (DOLS MILLIONS)

	THIS AMENDMENT	NEW TOTAL
SWINE REPOPULATION	1.066	7.218
- FEED DEVELOPMENT	154	
- EXTENSION	469	
- OPERATING EXPENSES	336	
- IICA OVERHEAD	107	

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HEALTH SURVEILLANCE	720	720
- PASA SUPPORT COSTS	500	
- HEALTH PROGRAM	200	
- IICA OVERHEAD	20	
TOTAL	1.786	7.938

## B. BUDGET BY GRANT INSTRUMENT (DOLS MILLIONS)

## COMPONENT

BILATERAL AGREEMENT	346	346
IICA COOP. AGREEMENT	1.140	7.592
TOTAL	1.786	7.938

IN ADDITION TO ABOVE FUNDS, GOH WILL CONTRIBUTE DOLS 269 THOUSAND IN FY 87 TITLE III GOURDES AND DOLS 174 THOUSAND IN FY 86 FUNDS FOR THE ANIMAL HEALTH PROGRAM. DOLS 23 THOUSAND REMAIN UNEXPENDED FROM THE CURRENT IICA COOPERATIVE AGREEMENT AND WILL BE REPROGRAMMED FOR THE NEW HEALTH ACTIVITY.

10. OTHER DONORS. THIS SUBJECT, INCLUDING PLEDGES BY GCH, WAS COVERED FULLY IN REF (C).

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11. CONTRACTORS OR GRANTEEES. INTERAMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE (IICA).

12. ACTION REQUESTED. PLEASE (A) PROVIDE BUREAU CONCURRENCE WITH THIS AMENDMENT; (B) DELEGATE AUTHORITY TO EXTEND PACD THROUGH SEPTEMBER 30, 1989; AND (C) PREPARE CONGRESSIONAL NOTIFICATION AND INFORM MISSION UPON ITS TRANSMITTAL TO HILL. WE ARE AIMING FOR A JULY OBLIGATION; HOWEVER, IF CN CAN BE DISPATCHED SPEEDILY, A JUNE OBLIGATION IS NOW POSSIBLE. WE WILL STAND READY WITH GRANT AGREEMENTS IN EITHER EVENT. AS ALWAYS, YOUR ASSISTANCE IS APPRECIATED.

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ACTION AID-2 INFO AMB DCM

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LOC: 122  
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E.O. 12356: N/A  
TAGS: N/A  
SUBJECT: INTERIM SWINE REPOPULATION 521-0170

REFS: (A) PAP 03199; (B) PAP 03770; (C) ZALLMAN-MORSE  
TELCON 7/16/86

LAC CONCURS IN MISSION APPROVING PROJECT AMENDMENT  
INCREASING LOP TO DOLS 6.653 MILLION AND EXTENDING PACD  
TO 9/30/87 AS PROPOSED REF. A. THIS LOP AMOUNT IS DOLS  
500,000 MORE THAN REQUESTED REF. A BASED ON  
UNDERSTANDING, REF. C, THAT MISSION INTENDS TO INCREASE  
LOP BY THIS ADDITIONAL AMOUNT TO FINANCE THE SERVICES OF  
TWO VETERINARIANS FOR THE ANIMAL HEALTH COMPONENT.

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112: 8/12/86

INITIAL ENVIRONMENTAL EXAMINATION

Project Location: Haiti  
Project Title: Interim Swine Repopulation  
PP Amendment No. 3 (521-0170)  
Funding: \$1.738 DA  
LOP: 7 Years (FY 83-89)  
IEE Prepared By:

  
\_\_\_\_\_  
Ron F. Ruybal  
Mission Environmental Officer

7-29-87  
Date

Threshold Decision  
Recommended

Negative Determination

Concurrence:

  
\_\_\_\_\_  
Gerald Zarr  
Director, USAID/Haiti

July 31, 1987  
Date

INITIAL ENVIRONMENTAL EXAMINATION FOR  
INTERIM SWINE REPOPULATION PP AMENDMENT NO. 3

## PROGRAM DESCRIPTION

The Mission is proposing to amend the Project Paper to extend the current alternate feed development, extension, and veterinary services activities. A new program in National Swine Health Surveillance will be added and also applied studies in marketing and swine production economics. The present project was designed by the Mission in 1983 to serve as a bridge between eradication of the island's swine and the start of a national swine industry development project which was to be funded by the Interamerican Development Bank (IDB). Because the IDB project has not yet begun, the present project has been already amended twice to continue the repopulation program. Now in its fourth year, this project has witnessed dramatic progress towards the goal of total repopulation of Haiti's swine herd.

## PROJECT ACTIVITIES

Two USDA veterinarians will assist the Ministry of Agriculture to further develop the National Swine Health Surveillance Program. One veterinarian will be responsible to identify, purchase and install laboratory equipment so the Haitian National Veterinary Diagnostic Laboratory will become operational to accurately diagnose swine diseases. This individual will also provide on-the-job training to Ministry of Agriculture personnel so they will be capable to perform scientifically reliable tests in pathology, parasitology, serology, bacteriology, toxicology and virology. The second veterinarian will assist in the development of a disease monitoring, surveillance and quarantine program by working with the field veterinary nurses assigned to the Department of National Veterinary Services. Working closely with his counterparts, he will conduct swine serum surveys and analyze the volume of contraband swine and pork products entering from the ports of entry.

The extension component will also be extended by this amendment to phase out AID support to veterinary services and extension activities in a coordinated manner. Two veterinarians will monitor the health of the project herd and provide consultation and medicines to the SMCs. Now at a critical crossroads, the project is initiating the transfer of veterinary services to the GOH. This task will be accomplished under the direction of two USDA veterinarians as described earlier. Unfortunately, as a result of shifting responsibilities and financial constraints, the IICA veterinary services must be gradually phased out. If veterinarians are dropped too quickly from the IICA team, the vast majority of the SMCs and their associated farmers will be without veterinarian assistance. Reasonable caution dictates that some form of veterinary services and monitoring capability be maintained for the pigs during the development of the National Swine Health Surveillance Program. The extension team will focus on feed development, management, and extension activities. Peace Corps Volunteers will be assigned to the project to aid in carrying out extension and veterinary activities.

Feed has become an increasingly important component of the project. In 1986, following the change of Government, there began a national feed shortage, which eventually reached the level of a crisis, with prices throughout the nation fluctuating violently. IICA had already initiated a feed subsidy to farmers to help in increasing the rate of repopulation, but it was clear that the feed subsidy could not continue indefinitely. The last Project amendment added a local feed development component, which emphasized the use of locally available agricultural by-products and the introduction of a new forage plant species. The feed subsidy program to the SMCs will be terminated by September 1987. The feed development component will continue to; 1) carry out the inventory and assessment of locally available swine feed resources; 2) undertake applied research and development studies pertaining to introduced forage plants; 3) import and disseminate exotic plant germ plasm; 4) formulate rations based on the inventory of swine feed resources and develop appropriate management and utilization systems for these resources; and 5) prepare extension training materials.

Baseline information will be collected in 40 selected localities throughout the country on price variations and volumes marketed. Once this information has been collected, a marketing specialist will be recruited to analyze the data and visit production areas. This individual will develop elasticities of demand and supply. Based on this information, he/she will make recommendations to facilitate the efficient marketing of pork and pork products nationwide.

#### ENVIRONMENTAL REVIEW.

No negative environmental impacts have been identified. Construction activities will consist of minor structural renovation to the the diagnostic laboratory and installing a security perimeter fence to enclose the grounds. The fence will assure that live animals raised by the peasants in the area will be a safe distance away from the laboratory. All waste water from the laboratory will be treated to kill all biological organisms. The laboratory supplies such as biological agents, reagents, chemicals, disinfectants, media, and culture dishes will have Food and Drug (FDA) approval and access to their storage area will be restricted to authorized personnel. The receiving, handling, and processing of samples will be followed utilizing standard USDA laboratory guidelines. The disposal of all viral and bacterial cultures, agents, tissues, reagents, and expenable cultureware will be accomplished according to biological security measures by on site incineration.

The reduction in project veterinarians will probably allow subclinical diseases and nutritional deficiencies to go undetected for longer periods than previously. The incidence of agalactia and nutritional anestrus will probably increase if analyses of feed rations cannot be completed and corrected on a routine basis. These problems could repair an otherwise well supported alternative feed program. Nonetheless, if a major disease outbreak occurs, the USDA and IICA veterinarians will be able to respond quickly to the crisis and take appropriate measures.

The formulation of rations to be extended to pig farmers will have a positive impact on the beneficiaries. Information will be made available on the availability of local feedstuffs, the seasonal productivity on the introduced plants, the cultural practices and labor restraints of the farmer, and the various options for balance rations to provide the farmer alternatives for the most efficient swine production possible under his/her particular circumstance. This will be supported by training and extension materials.

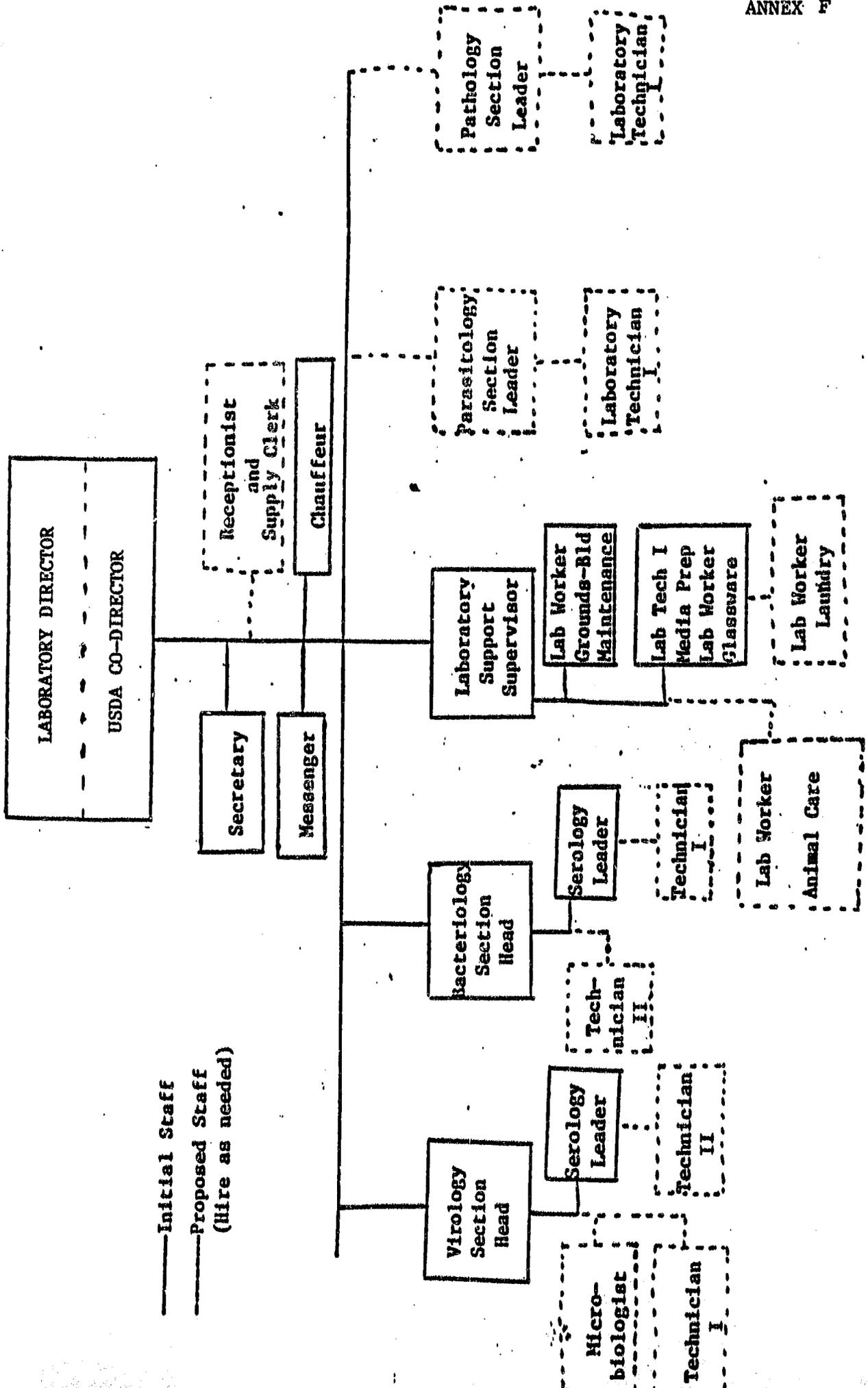
#### ENVIRONMENTAL THRESHOLD DECISION

Given that the project activities will not have an adverse environment impact as described in the Project Paper Amendment No. 3, the Mission recommends that a negative determination be made.

## USDA/AID WORKSHEET FOR AID SUPPORT COSTS

 HAITI  
 SWINE REPOPULATION PROJECT  
 1987, 1988

	<u>Year 1</u>		<u>Year 2</u>		<u>TOTAL</u>
	<u>Vet. 1</u>	<u>Vet. 2</u>	<u>Vet. 1</u>	<u>Vet. 2</u>	
<b>USDA:</b>					
Salary/Benefits	\$ 74,198	\$ 42,560	\$ 77,950	\$ 45,000	\$ 239,708
<b>USAID:</b>					
Post Differential (20%)	12,420	8,200	13,600	10,000	44,220
OIGD/APHIS O/H (28%)	3,480	2,300	3,800	2,800	12,380
Post Assignment	13,400	10,200			23,600
Air Fare	(3,000)	(1,000)			
Travel - P/D	(500)	(200)			
Excess Baggage	(500)	(100)			
Air Freight	(1,200)	(700)			
HHE Shipment	(5,000)	(5,000)			
POV Shipment	(2,000)	(2,000)			
Storage Per Eff	(1,200)	(1,200)			
Repatriation	-0-	-0-	14,700	11,200	25,900
Medical Evac/ Emerg. Travel	2,000	2,000	2,000	2,000	8,000
Allowances:	35,700	23,750	42,500	23,400	125,350
Education	(4,000)	-0-	(12,000)	-0-	
Housing	(13,500)	(11,000)	(14,000)	(12,000)	
Utilities	(7,500)	(800)	(8,200)	(1,000)	
Drapery	(800)	(800)	-0-	-0-	
Transfer	(700)	(350)	-0-	-0-	
Guard Services	(4,500)	(4,500)	(5,000)	(5,000)	
Renovation-house	(1,000)	(1,000)	-0-	-0-	
Maintenance-house	(1,200)	(600)	(1,300)	(700)	
Separate Mtce	-0-	(4,700)	-0-	(4,700)	
Educational travel	(2,000)	-0-	(2,000)	-0-	
Other	24,200	22,750	-0-	-0-	46,950
Furniture	(15,000)	(15,000)	-0-	-0-	
Appliances	(7,000)	(7,000)	-0-	-0-	
Rest/Recuperation	(2,200)	(750)	-0-	-0-	
Medical Exams	-0-	-0-	1,000	600	1,600
Immunizations	-0-	-0-	150	100	250
Language Training	2,000	2,000	2,000	2,000	8,000
In-country Per diem	<u>1,000</u>	<u>5,000</u>	<u>1,000</u>	<u>5,000</u>	<u>12,000</u>
Sub Total	\$ 94,200	\$ 76,200	\$ 80,750	\$ 57,100	\$ 308,250
AID Contingency (10%)	\$ 9,400	7,650	8,100	5,700	30,850
AID Overhead	<u>6,000</u>	<u>6,000</u>	<u>6,000</u>	<u>6,000</u>	<u>24,000</u>
<b>TOTAL</b>	<b>\$ 109,700</b>	<b>\$ 90,000</b>	<b>\$ 94,700</b>	<b>\$ 68,700</b>	<b>\$ 363,100</b>
Subtract: AID contingency	<u>- 9,400</u>	<u>-7,650</u>	<u>- 8,100</u>	<u>-5,700</u>	<u>- 30,850</u>
<b>TOTAL</b>	<b>\$ 100,300</b>	<b>\$ 82,350</b>	<b>\$ 86,600</b>	<b>\$ 63,000</b>	<b>\$ 332,250</b>
Add: AID contingency					<u>13,750</u>
<b>TOTAL</b>					<b>\$ 346,000</b>



— Initial Staff  
 - - - Proposed Staff (Hire as needed)

SWINE HEALTH ADMINISTRATIVE COORDINATOR/IICA  
SCOPE OF WORK

1. To coordinate with the Ministry of Agriculture the activities of USDA Veterinary team in Haiti.
2. To assist in the contracting of suppliers and manufacturers of laboratory equipment, fixtures, furniture, and materials.
3. To supervise installation of laboratory equipment and fixtures with follow-up maintenance, warranty, and service contracts.
4. To assist in the establishment of laboratory and quarantine inspection service administration, including accountability of equipment, establishment of work schedules, servicing of equipment, payment of utilities, and establishment of time tables.
5. To assist in the planning, development, and implementation of training courses for on-the-job, classroom, and field training for the National Veterinary Laboratory and the National Veterinary Services.
6. To assist in interactions with local authorities and government officials.
7. To assist in writing, publishing, and implementing necessary information campaigns for swine health.
8. To assist in the creation of a field reporting system of swine disease and the compiling of disease incidence at local, regional, and national levels.

Reporting Requirements

The incumbent will submit to USDA, IICA, USAID and the Ministry of Agriculture a quarterly status report on the activities accomplished, problems encountered, and recommendations to resolve implementation problems.

*Mr. Blackburn*

August 19, 1986

Honorable M. Peter McPherson  
Administrator, Agency for  
International Development  
320 21st Street, NW  
Washington, DC 20523

Dear Mr. McPherson:

Thanks for taking the time to see me Thursday afternoon about the animal health component of the swine repopulation project in Haiti. I was glad to see that you and your staff share our concern that failure to have an animal health component in place is threatening the success of the repopulation project. Your commitment to see that prompt action is taken is gratifying.

Following our conversation, I asked the Animal and Plant Health Inspection Service (APHIS) to redirect funds to support one veterinary advisor. It is my understanding that you will support a second veterinary advisor through a Participating Agency Service Agreement, or similar mechanism, with APHIS. The early assignment of these veterinary advisors is essential.

USDA has financed construction of the laboratory for the animal health component. It has been idle for nearly a year and is beginning to deteriorate from disuse. It is my understanding that you have provided \$175,000 to the Inter-American Institute for Cooperation on Agriculture to equip the laboratory, which must be equipped and ready to operate when the veterinary advisors arrive. We would appreciate anything you can do to speed up the equipping of the laboratory. USDA would be willing to provide advice and assistance in equipment procurement if that would be helpful.

I also understand from our conversation that you have allocated another \$500,000, in addition to funding one veterinary advisor position, to support the animal health component and, should this not be sufficient, will allocate additional funding. We appreciate your attitude and recognize how difficult it is to provide additional funding in the current climate. Likewise, we will continue to fund one veterinary advisor until International Development Bank financing commences.

As you know USDA has spent almost \$23 million in the depopulation and subsequent phase of this project. We are anxious that this investment be protected. Only a sound animal health program can prevent the repopulated swine from being reinfected with African swine fever, hog cholera, or other swine diseases of economic importance. We believe that a healthy swine population can significantly bolster the agricultural economy of Haiti and help bring stability to the country. The key to maintaining a healthy swine population is a system providing for port of entry inspection, surveillance and quarantine, laboratory testing, and emergency response to disease introduction.

Honorable Mr. Peter McPherson

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One issue still to be resolved is the reporting line for the animal health component. We understand that a member of your staff is to call APHIS to discuss this issue. In our judgment the veterinary advisors can only be effective if they work directly with the Ministry of Agriculture and not through an intermediary. Further, it is our objective that technical competence for these kinds of animal health activities be transferred to Ministry personnel, and it makes no sense to do this through another organization. For our part we will guarantee the competence and effectiveness of our personnel.

Thank you again for your time and for your personal attention to this very important endeavor.

Sincerely,

/s/Peter C. Myers  
Deputy Secretary

cc:

Gryllie Sweet, National Pork  
Producers Council

K. A. Gillies, SEC

B. W. Hawkins, APHIS/OA

J. K. Atwell, APHIS/VS

J. Weisand, APHIS/LPAS

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APHIS-25-289 - FINAL



United States  
Department of  
Agriculture

Plant Health  
Inspection Service

**OFFICIAL FILE**

*Smith*

00490

March 25 1987

Mr. Gerald Zaar  
Director, USAID  
Port-au-Prince, Haiti

Dear Mr. Zaar:

We are very pleased to learn of your commitment to redirect approximately \$886,000 of Development Assistance funds to the Interim Swine Repopulation Project over a 24 month period. This commitment on USAID's part is most encouraging and adds to USDA's resolve to accomplish the mission ahead of us.

It is our intention to continue to support and encourage Inter-American Development Bank (IDB) funding to provide for the long-term Haitian institutional infrastructure that is necessary for this project. At this point in time, we do not foresee the need for USAID funding beyond what is being made available for the next 2 years. However, we feel it is imperative that USAID support the use of PL-480 funds for those areas that the IDB loan will not cover. This of course means that in the future we need to get into the queue of priorities and funded projects, as well as have active Mission support with the Ministry for appropriate allocation of PL-480 funds.

We continue to have our two veterinarians assigned to Haiti on a temporary duty status. We are most anxious to formalize the PASA and complete all the arrangements so that we can get on with the business at hand.

Over the last several months your staff has been most supportive and helpful in getting this project to this point of progress. We are appreciative of the working relationships that have developed.

Sincerely,

*W. W. Buisch*

W. W. Buisch  
Assistant Deputy Administrator  
International Programs  
Veterinary Services

4-7-87  
*Jew*

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**Report By Review Team**

**Of**

**Haiti Swine Repopulation Project**

**Préamble 2**

Presented by: Dr. Frank J. Mulhern,  
on behalf of the Industry  
Review Team.

On August 24, 1986 a Review Team made up of USDA officials and pork industry representatives, traveled to Haiti. The team spent the next five days touring the country and meeting with government officials and those involved in the swine repopulation project. The purpose of the trip was to acquire first-hand information on the project's status.

According to the press, both in the United States and in Haiti, pigs imported from America could not survive under Haiti's rustic production environment where owners are not accustomed to provide adequate feed and care for their pigs. In addition, reports have been received that pigs are being imported, legally and illegally, into Haiti. This creates the threat of reintroducing major swine diseases, which were eliminated by the African Swine Fever Eradication Program.

The Review Team consisted of representatives from various agencies involved in the eradication and repopulation programs. Among those attending were: Don Gingerich, National Pork Producers Council (NPPC); Dr. Frank Mulhern, NPPC; Dr. Bert Hawkins, Animal Plant Health Inspection Service director; Dr. Hector Compos, Inter-American Institute for Cooperation on Agriculture (IICA) animal health director; Dr. Jerry Walker, USDA Office of International Cooperation and Development; Raul Hinojosa, U.S. AID livestock specialist; Dr. Wilson Pond, USDA Agricultural Research Service; Bill Fleming, editor National Hog Farmer magazine; Marlys Miller, editor Pork Report; Dr. Robert Amelingmeier, IICA Swine Repopulation Project director; Marty Gingerich, Mennonite Central Committee Extension worker; Drew Krutchengruter, IICA Extension chief.

The Review Team was briefed by all officials involved in Haiti's Swine Repopulation Project. In addition, the Review Team divided into four groups, each spending two twelve-hour days observing swine facilities and interviewing swine owners and managers. The Review Team spent one day exchanging observations and reaching conclusions. On the final day of the trip, the team presented their findings to Haiti's Minister of Agriculture, USAID officials and the National Director of IICA.

## Background Information and Current Haitian Swine Population

Keep in mind there are three sources of pigs being used to repopulate swine in Haiti. The first source, is the 2,000 sentinel pigs imported to test premises where African Swine Fever existed before the eradication program. After using sentinel pigs to check the premises, the animals were tested for all major swine diseases and were found negative. These were Specific Pathogen Free (SPF) pigs mainly from the United States (500 came from Canada). Some were given to the peasants who worked with the swine while the premises were being monitored for African Swine Fever.

Due to lack of funds, the Ministry of Agriculture used most of these pigs and their offspring to initiate its repopulation program. It sold pigs to peasants and private interests but was limited in the feed and training it could provide. Some of the sentinel pigs are kept at the Ministry of Agriculture's government farms for breeding and distribution purposes. There is now estimated to be over 20,000 pigs originating from the sentinel pigs. The USAID/IICA Repopulation Project also provided some sows and boars to the government farms for reproduction purposes.

The second source is from pigs imported by Haiti's private sector. These persons imported pigs from various locations in the United States and Canada. Some may have been SPF pigs but reports indicate that most were not due to the high costs. This source of swine observed by the team appeared to be from high quality breeding stock.

Some private sector facilities are quite elaborate. It is believed the owners are motivated by the exceptionally high price of pigs on the current market (\$400 for an adult finished hog). A limited number of private sector pigs was also derived from the Ministry of Agriculture source. Some private interests produce for "direct-to-market" sale. Others have developed a system where they supply all essentials to the peasants. These are provided at no cost, however, the peasant must sell the pigs back to the private owner who deducts the cost of essentials. The peasant receives the difference between the costs and the agreed sale price. The team was unable to obtain information as to the number of swine in this category. It was estimated to be between 5,000 and 10,000 swine.

The third source of swine is from those purchased and reproduced by the USAID/IICA Haiti Swine Repopulation Project. This began in 1983 with imports of 500 SPF pigs (450 female and 50 male) from the United States.

Those pigs were placed in a national breeding center which provided pigs and training to Private Voluntary Organizations (PVO). At the present time, two years after this phase of the project began, there are over 390 Swine Multiplication Centers (SMs) at these PVOs. These PVOs should be thought of as cooperatives since many have multiple projects working with peasants to improve overall conditions in Haiti. There are currently 4,600 sows at the SMCs, 1,000 have already farrowed and 7,000 gilts have been distributed to peasants who belong to these cooperatives. Earlier this year the National Breeding Center was closed and sows were distributed to SMCs.

The Extension and veterinary support provided through the USAID/IICA project was a major reason for this success. In order for PVOs to receive pigs they had to send people to the National Breeding Center for training in general production practices breeding and farrowing techniques. When farrowing began at SMCs, trainers from the National Breeding Center were present to see that trainees applied what they had been taught. Also, in order for SMCs to receive pigs, they had to agree to provide similar training to those who would receive pigs.

The project also provided a balanced feed ration to the SMC at 50% of cost, for 18 months from when the first pigs were received. The SMC's are expected to work out a system to provide feed at a reduced cost for the peasants receiving pigs from them. In some cases SMCs received castrates to finish out and sell for feed money. Male offspring not desired for breeding at SMC's are castrated for the same purpose. In most cases, peasants or other groups receiving free pigs from SMC's will return two females for further distribution once their gilts farrowed.

Haiti presently has an estimated 12,000-15,000 pigs in this group, which brings the country's total swine population to 39,000-45,000 pigs. By January 1987, Haiti is projected to have 70,000 dispersed throughout the country.

#### **The African Swine Fever Eradication And Swine Industry Development In Haiti**

There are three phases of the African Swine Fever Eradication and Swine Industry Development Project. The eradication phase was implemented and completed by IICA and Haiti. The country was declared free of African Swine Fever in September 1984. This phase was financed by the Agriculture Departments of the United States, Mexico and Canada, along with the United Nation's Food & Agriculture Organization (FAO). The second phase, Interim Swine Repopulation Project began in 1983 and is expected to be completed by September 30, 1987. It is financed by USAID and is being implemented by IICA. The Third Phase, Swine Industry Development, a five year project, began in January 1985. Funding will be provided to the Haitian government through a loan from the Inter-American Development Bank (IDB).

Conclusions reached by the Review Team can be segmented into six categories. There are two very urgent ones: an effective Animal Health Program, and an adequate swine feed supply. Animal health is the more urgent one because a major disease outbreak that could wipe out present gains could occur at any time. The second, an adequate feed supply, is urgent because pigs could begin dying from starvation, as the critics have forecasted, if something isn't done.

## I. Animal Health

Last December a project evaluation team cautioned about Haiti's lack of a sound animal health program. Needed is a program to provide disease prevention through proper port inspection and quarantines, an animal health monitoring system to detect major diseases should they appear, a strike force that will respond immediately in case a major disease should be found, and a functional animal disease diagnostic laboratory. Very little has been done in the animal health area. Incinerators have been ordered for ports of entry to destroy confiscated materials. It must be realized that Haiti's financial status is very low and funds are not currently available to make all the needed changes. However, more action in this area would indicate they recognize its importance.

There is a new laboratory building in Haiti which has never been equipped. The Review Team recommended that necessary measures be taken to make the laboratory functional. Haiti's Minister of Agriculture assured the team that he would look into the situation and projected the laboratory would be up and running by the end of this year. APHIS Administrator Bert Hawkins committed two veterinarians to help Haiti establish an effective animal health program.

A more threatening situation has developed since the evaluation was made last December. At least four groups of pigs have been imported from countries with major swine diseases, which had been eliminated by Haiti's African Swine Fever Eradication Project. Some shipments were legal and some illegal. Reports suggest still others have occurred without the government's knowledge. Since Haiti's hog prices are so high, due to the low swine population, the market will continue to attract smugglers, which could be very dangerous to animal health.

### A Quick Action Response By APHIS

Since the Review Team's visit, APHIS has sent two animal health specialists to Haiti. The specialists will negotiate an agreement whereby APHIS will send two veterinarians to work with the Haitian government to develop a more effective animal health program. The minister of Agriculture advised that ultimately Haiti will be using the services of 12 veterinarians, some of whom will come from Taiwan.

There are several veterinarians working in Haiti for different organizations, many on a part time basis. They need to be involved, to some degree, in any animal health program. The animal health program must apply to all three sources of hogs.

Review Team members feel the majority of herds in the USAID/IICA Project are doing well. However, abscesses, umbilical hernias, broken legs, skin condition, diarrhea, blindness, dry sows, etc., were observed. Little signs of parasitism were seen. One veterinarian who has been checking for worms has found only whipworms and hookworms that could be coming from humans. However, one report showed that in swine derived from the sentinel pigs, many different types of internal parasites were found. One bright spot, the team saw no sign of a contagious disease. That factor alone has undoubtedly helped produce the favorable swine production results uncovered.

Like feed, there needs to be a better supply of animal medications made available to peasants at lower costs. This must be addressed in the future swine production program.

## II. Adequate Feed Supply

Feed and water availability is a critical factor. The cost of feed is equally important. Water supply at SMCs is mainly a training problem. Peasants must be taught that water needs to be made available to pigs on a continuous basis, especially during the period between farrowing and weaning. This is going to become more important as the project distributes pigs from the SMCs to the peasants. Peasants are not accustomed to providing water and feed to pigs. Some did provide feed just before marketing the hog.

Presently, feed availability in the IICA Swine Repopulation Project appears adequate. However, the Review Team is concerned what will happen when the lower cost feed is no longer available. Many peasants have voiced concern. Some team members saw little evidence of supplemental feeding of fruits and other waste products, while others reported different degrees of supplemental feeding.

Estimates suggest there is enough concentrate feed to raise approximately 140,000 swine on full rations. This could be extended if part of the concentrates were replaced with native foods such as fruits and tubers.

The Review Team explored ways to increase the food supply. One potential avenue would be to increase wheat imports under Public Law 480 and 416. This action would not only help provide additional human food, but would also lower the cost of wheat shorts, a by-product commonly used in swine rations. There should also be increased use of rice bran, which was observed being burned simply to eliminate it. Imports of sorghum, soybeans and corn were also discussed. Due to the drastic need for human food, animal feed cannot be imported in lieu of that needed to feed people.

There are presently seven mills in Haiti, some of which are not functioning. Most mills are located near Port-au-Prince. One or two mixing mills are in the process of being installed by SMCs and private interests. The government also plans to build mills in the third phase of the project. The Review Team feels that mills should be located near the feed supply, otherwise one just aggravates the tremendous transportation problem that already exists.

In light of the feed supply and distribution problems, the Review Team concluded a realistic swine production goal must be established before the swine population is expanded much further. In addition, the various organizations represented should explore possibilities with USDA and USAID to reduce the cost of food to the peasants through the use of Public Law 480 and 416 to help Haiti, the poorest country in our hemisphere, in its hour of great need.

Imported feeds, supplemental feeding and lower drug costs, are short term solutions. However, long term (five to 10 years) needs must be directed toward developing a native feed supply. The Review Team learned Haiti recognizes this need and has already begun an investigation into alternative crops. IICA also indicated they will have a specialist in the area of alternative feeds, working out of their Haiti office beginning this fall. The specialist has done similar work in this area in the Dominican Republic. FAO has a project on substitute feeds underway in Haiti's northern region near Cap-Haitien. Review Team members were unable to make contacts with the FAO Representative even though they tried.

The Team places a high priority on this phase of the project, and urged that everything be done to expedite work in this area. Feed such as the use of Amaranth, Rami, beans, peas and other crops should be explored. This is a real solution, but its going to take as much effort to get results as has been spent in producing the swine and feed presently available in Haiti. Hopefully, the Extensionists will accept this challenge with the same vigor and commitment as they have in the past.

### III. Swine Production

Now we would like to address the third issue of importance as expressed by the Review Team. First, the government program needs to improve the quality and number of swine available for distribution. It is believed that much of their better breeding stock has been sold to private interests. Some were observed in the hands of peasants who complained about feed cost, lack of Extension type activities and lack of medical supplies. Some government swine were doing well, but most were not. Management of the swine herds at the two government demonstration centers observed, could be greatly improved. In fact, the private herd

owned by the director of a government center showed better management and hogs in better condition than observed at the demonstration center. Out of the three sources of swine in Haiti's repopulation program, the government sector needs the most improvement.

The government hopes to improve swine produced in its facilities by importing 100 black boars as soon as possible, utilizing funds from the Inter-American Bank (IDB) loan.

Haiti's Minister of Agriculture advised this was necessary for sociological reasons but also to broaden bloodlines for genetic purposes. There have been several articles in the Haitian press about the need to bring "rustic" pigs into the country. "Rustic" pigs look like U.S. wild pigs - black, long snout, a rough hair coat and are smaller than domestic pigs. However, these articles appeared to stop once pigs from France were imported into Haiti.

The Ministry wants to improve present government Demonstration Centers and to build others in the country, with an eventual goal of nine such facilities. They also plan to build nine feed mills in various parts of the country. This would all be done when IDB funds are available.

Government officials agree the feed supply and its cost are critical and they are trying to resolve the problem by reducing cost to producers. Also they agree that growing native feeds to replace imported feed is urgently needed. The government is also establishing Swine Multiplication Centers (OCP) that are similar to IICA's SMCs, but are not given the same support. They hope to support them when money from IDB is available.

Second, private enterprise, or entrepreneurs as they have been called, have a long history in Haiti in all areas of marketing. They vary in size from peasants to large producers. Some have had influence in the past at the President's level. They undoubtedly will play a similar role in the future. Review Team members were told some members of the private sector have imported swine without the participation of the animal health officials or going thru the official quarantine stations. It is expected the more influential types will maintain the quality of pigs they produce as long as the market price remains highly profitable. However, there are also some who will try to raise pigs at the least cost and effort, which may cause some deterioration in the quality of the pigs. This is especially true if hog prices decline due to over production and feed becomes scarce or too expensive.

#### USAID-IICA-Haiti Project Swine

We saw very good, average and poor quality pigs. However, the majority were doing quite well. Litter sizes range from 10-15, with weaning averages of seven to nine piglets. Poor management was the main factor affecting swine that were not doing well. In

It was obvious that contagious diseases were not a serious problem. A veterinarian working on the project stated that so far the only internal parasites found were whip and hookworms and that these could be coming from people. In one area several herds had umbilical hernias and the scrotum of some boars had blisters or vesicles. In another herd, many of the swine had hemorrhagic areas over large parts of the body, especially behind the ears. Diarrhea was observed in some baby pigs and sows. Blindness was observed in a few herds. Metritis-Mastitis Syndrome was observed in several herds. Consequently, pigs were lost due to the sow not producing milk. Some nutritional and genetic conditions were observed.

Lack of ventilation on some premises caused pregnant sows to pant for air. Also, in some areas the availability of a continuous water supply was a problem. On certain premises, dampness was causing problems and baby pigs were killed by sows where farrowing pens were not available. In several herds the latter was the main cause of pig losses.

When the SMCs were cooperative and management responded to their training, the favorable results were obvious. When this is not the case, a better form of leverage is needed. We observed two premises where pens had deteriorated and the pigs were all running together. There were abscesses resulting from boars fighting, no controls over breeding and the water supply had tadpoles in it. The Extensionists had complained frequently to church leaders, and each time they promised to correct the situation but to no avail.

The Review Team felt on the whole, the pigs were doing well. In some cases management can be improved. New genetic lines should be introduced to prevent inbreeding. The National Pork Producers Council's (NPPC) representative offered to help find new bloodlines to improve the genetic base which would provide more black pigs for the national herd. Perhaps an experienced consultant on baby pig diseases, nutrition and genetics should be hired to review the overall health of the swine in the project. Also, a consultant specializing in ventilation or swine facilities should be hired to evaluate present structures to make them more effective in Haiti's tropical environment.

#### IV. Extension

The fourth point is the continued need for Extension. This service is most successful in the USAID/IICA Project. However, as pigs are distributed from SMCs to the peasants, demands on Extensionists will increase dramatically. The importance of production surveillance and training can not be over estimated. Present Extensionists have a great challenge to work with peasants to lower production costs by utilizing local feedstuffs

and adding supplements to provide a complete ration. As new feedstuffs become available, Extensionists will be responsible to introduce them to the peasants and encourage their usage. They will serve like county agents in this regard.

The Review Team recommended informational materials on swine production be developed in very simple graphic form, to be distributed to the peasants. The Purina and Carnation companies have both expressed interest in assisting with such a project. With Haiti's disturbingly high illiteracy rate, graphic materials would help get the message across. From a longer term perspective, the team suggested tying in a swine production education program with one that teaches peasants to read. IICA and the Haitian government were both extremely receptive to this idea.

#### V. Marketing

The fifth point is to become more aware of the effects of a growing swine population on the market price of hogs. Necessary precautions must be taken to keep Haiti from entering an overpopulation scenario as occurred in the Dominican Republic. An effort must be made to monitor market indices to determine the relationship between swine population and price. Such a system needs to be established as soon as possible, to head off a potential market disaster.

#### VI. Organization Of Producers

Finally, the Review Team was concerned about what will happen to continue swine production once USAID funds are no longer available. The IICA Project has worked through 390 private voluntary organizations. These organizations in most cases have been very productive and effective in the swine repopulation project to date. The team believes a producer organization could be useful in many different areas, particularly with feed distribution. For example, the organization may be used to purchase animal drugs in bulk to reduce the cost to the producer and improve availability. The organization could follow the pattern established by the swine repopulation project. It could also help establish new alternative feedstuffs or the use of fertilizers.

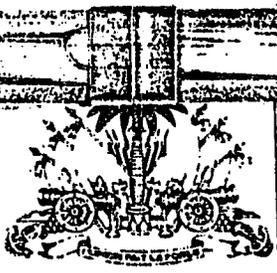
If necessary, the organization could control swine production levels in order to maintain a satisfactory return for producers. Regional groups could be organized and a representative from each district could serve on a board to address problems relative to swine production in Haiti. Perhaps the OPC could be included in the organization as well as those in the private sector. Such an organization could provide the basis for a secure swine industry in Haiti. Naturally such a proposal would take place in the future, but it has a great deal of merit that should be explored. NPPC and other U.S. agricultural commodity groups could lend assistance and insight into establishing such an organization.

**Miscellaneous**

The present swine repopulation project is making progress. However, time is passing quickly and the plans and resources already approved in the loan from the Inter-American Development Bank need to take on more impetus. Since USAID resources will not be available after September 1987, some key components need to be addressed. Hopefully the resources and funds from the Bank will be used to blend into the Animal Health Program being developed by USAID/IICA Project. The Animal Health Program needs to deal with a national swine herd concept so that the three sources of pigs in the repopulation program will mesh into one. The same point needs to be applied to a nationwide feed source. The relationship between SMC's, OPC and Government Demonstration Centers needs to be established. It is necessary that such planning occur as soon as possible so that problems are detected in advance to minimize conflicts that may arise as one activity ends and another begins.

The Review Team wishes to congratulate all who have worked so hard in such an adverse environment to achieve the results that have been made to date. The team realizes today's challenge to the project is just as great as those that have been overcome.

**ACTION COPY**



REPUBLIQUE D'HAÏTI

**MINISTERE DE L'AGRICULTURE, DES RESSOURCES NATURELLES  
ET DU DEVELOPPEMENT RURAL**

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No ..... A-2/1564

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DATE RECEIVED  
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**ACTION TAKEN**  
 Date: *NAN*  
*6-6-87*  
 By: *RB*

28 mai 1987 198.....

Monsieur Gérald ZAAR  
Directeur de l'USAID  
En ses Bureaux.-

**OFFICIAL FILE**

Monsieur le Directeur,

J'ai l'avantage de vous transmettre annexés à la présente les documents ci-dessous mentionnés:

1. Le Rapport de la Mission Spéciale des Opérations de la BID du 11 au 15 mai 1987.
2. La Commission de Reformulation du Projet de Repeuplement Porcin avec financement de la BID.

Il reste clair que l'objectif poursuivi par cette reformulation est bien celui de mieux adapter le financement de la BID aux conditions actuelles du repeuplement porcin tout en le rendant plus apte à répondre aux exigences de son développement.

En la circonstance, en souhaitant la participation d'une Représentation de votre Institution au sein de la Commission en question, je vous saurais gré de considérer l'opportunité de rendre disponible(s) le(s) technicien(s) identifié(s) à l'annexe 2 pour la période de reformulation conjointement établie entre le MARNDR et les membres de la Mission de la BID. Il reste entendu que les responsables des différents comités à l'intérieur de la période de reformulation devront se charger de planifier avec le technicien en question de votre Institution le calendrier des rencontres de travail ou de consultation en vue de pouvoir réaliser un travail efficace.

Dans l'espoir d'une participation fructueuse de la Représentation de l'USAID à cette action de haute priorité pour le MARNDR, je vous renouvelle, Monsieur le Directeur, l'assurance de ma considération distinguée.

*Gustave Menager*  
Gustave MENAGER  
Ministre

/sa

Estimated Annual Operating Expenses  
for the  
Haitian National Veterinary Diagnostic Laboratory

1. Equipment Replacement of damaged, worn-out or obsolete equipment, new equipment for expansion of function.	\$ 50,000
2. Supplies Glassware, filters, media, reagents, clothing, etc.	50,000
3. Utilities Electricity and telephone	100,000*
4. Maintenance and Repairs Grounds, buildings and equipment	50,000
5. Transportation Gas, oil, tires, repairs	25,000
6. Animal Testing Purchase of test animals (mice, rats, rabbits, pigs, goats, etc.) feed for animals and caging.	15,000
7. Travel and Training Specific training of laboratory personnel in U.S., D. R., etc. Training sessions for veterinary nurses and other field personnel	10,000
Total	<u>\$300,000</u>

\* Estimate may be in error due to lack of knowledge on utility costs.

These operating expenses to begin October 1, 1987,

*file Suwane  
encommerij*

D-111: 1245

16 Avril.

7.

Monsieur le Commissaire Général,

J'ai l'avantage d'introduire auprès de votre office la requête afférente au Projet Intérimaire de Repeuplement Porcin 521-0170 financé par l'USAID. Cette requête vise à obtenir une extension de l'assistance de l'USAID qui devra faciliter le recrutement de deux médecins vétérinaires et la mise en opération d'un laboratoire de médecine vétérinaire.

Les dépenses supplémentaires liées à l'exécution du Projet peuvent s'établir suivant le devis ci-après, en gourdes:

• Subvention en aliments aux Centres de multiplication	Gdes 400.000.00
• Frais de Laboratoire (fonctionnement)	" 310.000.00
• Frais d'opérations des Infirmiers vétérinaires incluant entraînement de 2 médecins vétérinaires (University de Tuskegee)	" 635.000.00
totalisant.....	Gdes 1.345.000.00

Il va de soi que ces débours qui englobent le salaire du personnel local, les frais de fonctionnement et d'entretien peuvent être payés en monnaie locale à partir du PL TITRE III.

MONSIEUR GARVEY LAURENT  
COMMISSAIRE GENERAL AU CPNAP  
EN SES BUREAUX.

Je vous serais sincèrement obligé de toute diligence qui sera faite par le Commissariat pour présenter la requête à l'USAID en Haïti.

Veillez agréer, Monsieur le Commissaire Général, avec nos remerciements, l'assurance de ma considération distinguée.



Gustave MENAGER  
Ministre

AID 1350-1 (10-79)  PIO/T	UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY AGENCY FOR INTERNATIONAL DEVELOPMENT  PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES	1. Cooperating Country <u>Haiti</u>	Page 1 of 10 Pages
		2. PIO/T No. 521-0170-2-70090	3. <input checked="" type="checkbox"/> Original or Amendment No. _____
		4. Project/Activity No. and Title 521-0170 Interim Swine Repopulation	

DISTRIBUTION	5. Appropriation Symbol 72-1171021.3		6. Allotment Symbol and Charge LDNA-87-25521-KG13			
	7. Obligation Status <input type="checkbox"/> Administrative Reservation <input checked="" type="checkbox"/> Implementing Document		8. Project Assistance Completion Date (Mo., Day, Yr.) 09/30/89			
	9. Authorized Agent M/SER/PROC		10. This PIO/T is in full conformance with PRO/AG Date _____			
	11a. Type of Action and Governing AID Handbook <input type="checkbox"/> AID Contract (HS 14) <input checked="" type="checkbox"/> PASA/RSSA (HS 12) <input type="checkbox"/> AID Grant (HS 13) <input type="checkbox"/> Other		11b. Contract/Grant/PASA/RSSA Reference Number (if this is an Amendment) N/A			
	12. Estimated Financing (A detailed budget in support of column (2) is attached as attachment no. <u>1</u> )					
	Maximum AID Financing	A. Dollars	(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
		B. U.S.-Owned Local Currency		346,000		346,000
	13. Mission References  Amendment #3 Project Agreement					
	14a. Instructions to Authorized Agent  See Page 4					
	14b. Address of Voucher Paying Office Office of the Controller USAID/Haiti					

15. Clearances—include typed name, office symbol, telephone number and date for all clearances.

A. The project officer certifies that the specifications in the statement of work are technically adequate	Phone No. 3088	B. The statement of work lies within the purview of the initiating and approved Agency programs	Date
	Date		Date
Ronald Ruybal - ADO	7/27/87	AL Ford - AC/DIR	7/27/87
C	Date	D. Funds for the services requested are available	
Richard Byess - DRE	7/31/87	FUNDS AVAILABLE	7/31/87
E.	Date	Sylvia Jackson - AC/CONT	

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to	17. For the Agency for International Development
Signature <u>Gustave Ménager</u> Date <u>7/31/87</u>	Signature <u>Lance H. Jackson</u> Date <u>7-31-87</u>
Title <u>Minister of Agriculture</u>	Title <u>Agricultural Development Officer</u>

AID 1350-1 (18-79)  PIO/T	1. Cooperating Country Haiti	2. PIO/T No. 521-0170-2-70090	Page 2 of 10 Pages
	4. Project/Activity No. and Title 521-0170 Interim Swine Repopulation		

**SCOPE OF WORK**

18. THE SCOPE OF TECHNICAL SERVICES REQUIRED FOR THIS PROJECT ARE DESCRIBED IN ATTACHMENT NUMBER 2 HERETO ENTITLED "STATEMENT OF WORK".

**19. SPECIAL PROVISIONS**

- A.  LANGUAGE REQUIREMENTS (SPECIFY) None-Knowledge of French & Creole would be helpful  
(IF MARKED, TESTING MUST BE ACCOMPLISHED BY AID TO ASSURE DESIRED LEVEL OF PROFICIENCY)
- B.  ACCESS TO CLASSIFIED INFORMATION  WILL  WILL NOT BE REQUIRED BY TECHNICIAN(S).
- C.  DUTY POST(S) AND DURATION OF TECHNICIANS' SERVICES AT POST(S) (MONTHS) 24 months Port-au-Prince
- D.  DEPENDENTS  WILL  WILL NOT BE PERMITTED TO ACCOMPANY TECHNICIAN.
- E.  WAIVER(S) HAVE BEEN APPROVED TO ALLOW THE PURCHASE OF THE FOLLOWING ITEM(S) (COPY OF APPROVED WAIVER IS ATTACHED) N/A
- F.  COOPERATING COUNTRY ACCEPTANCE OF THIS PROJECT (APPLICABLE TO AID/AV PROJECTS ONLY)  
 HAS BEEN OBTAINED  HAS NOT BEEN OBTAINED  
 IS NOT APPLICABLE TO SERVICES REQUIRED BY PIO/T
- G.  OTHER (SPECIFY)

**20. BACKGROUND INFORMATION (ADDITIONAL INFORMATION USEFUL TO AUTHORIZED AGENT)**

Interim Swine Repopulation Project Paper and respective amendments.

**21. SUMMARY OF ATTACHMENTS ACCOMPANY THE PIO/T (INDICATE ATTACHMENT NUMBER IN BLANK)**

- 1 DETAILED BUDGET IN SUPPORT OF INCREASED FUNDING (BLOCK 12)
- N/A EVALUATION CRITERIA FOR COMPETITIVE PROCUREMENT (BLOCK 14)
- \_\_\_\_\_ JUSTIFICATION FOR NON-COMPETITIVE PROCUREMENT (BLOCK 14)
- 2 STATEMENT OF WORK (BLOCK 18)
- N/A WAIVER(S) (BLOCK 19) (SPECIFY NUMBER)

AID 1350-1 (10-79)	1. Cooperating Country Haiti	2. PIO/T No. 521-0170-2-70090	Page 3 of 10 Pages
	4. Project/Activity No. and Title 521-0170 Interim Swine Repopulation		

PIO/T

22. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities

USDA/APHIS/VS veterinarians will work under the technical direction of the APHIS/VS Representative for the Caribbean Region and under the administrative direction of the Agriculture Development Office, and be responsible to the assigned project officer.

B. Cooperating Country Liaison Official

Director of Animal Production, Ministry of Agriculture, Natural Resources and Rural Development.

C. AID Liaison Officials

USAID Interim Swine Repopulation Project Officer  
Agriculture and Rural Development Office

LOGISTIC SUPPORT

23. Provisions for Logistic Support

A. Specific Items (Insert "X" in applicable column as right. If entry needs qualification, insert asterisk and explain below in C. "Comments")	IN KIND SUPPLIED BY		FROM LOCAL CURRENCY SUPPLIED BY		TO BE PROVIDED OR ARRANGED BY SUPPLIER
	AID	COOPERATING COUNTRY	AID	COOPERATING COUNTRY	
(1) Office Space		X			
(2) Office Equipment		X			
(3) Housing and Utilities	^				
(4) Furniture	X				
(5) Household Equipment (Stoves, Refrig., etc.)	X				
(6) Transportation in Cooperating Country	X				
(7) Transportation To and From Country					X
(8) Interpreter Services/Secretarial					X
(9) Medical Facilities	X				
(10) Vehicles (official)	X				
(11) Travel Arrangements/Tickets					X
(12) Pouch Facilities	X				
(13)					
(14)					
(15)					

(OTHER SPECIFY)

B. Additional Facilities Available From Other Sources

APO/FFPO

PX

COMMISSARY

OTHER (Specify, e.g., duty free entry, tax exemption)

According to Mission policy used for U.S. Direct Hire employees. Transportation, shipment HHE, POV, travel arrangements to post, to be arranged by PASA agency.

UNITED STATES INTERNATIONAL  
DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR  
INTERNATIONAL DEVELOPMENT

Worksheet  Invoice

PAGE 4 OF 10 PAGES

CONTINUATION  
SHEET

- PIO/C  
 PIO/P  
 PIO/T  
 PA/PR

1. Cooperating Country  
Haiti

2a. PIO Number  
521-0170-2-70090

2b. Amendment  
 Original OR No.

3. Project Number and Title  
521-0170  
Interim Swine Repopulation

Indicate block  
numbers

Use this form to complete the information required in any block of a PIO/P, PIO/T or PA/PR. For PIO/C, furnish the item number, quantity, description/specifications, including catalog stock number and price when available.

14a.

SER/PROC is requested to negotiate a PASA with the U.S. Dept. of Agriculture (USDA) for the services described in Attachment 2 - Statement of Work for two APHIS veterinarians to strengthen the GOH's Ministry of Agriculture by establishing a National Swine Health Surveillance Program. This PIO/T provides funding for a two-year period.

The GOH has requested USAID to assist them on establishing a swine health regulatory unit which is similar to the USDA/APHIS system. The Mission has determined that the private sector does not have the experience or capability to assist the GOH on the establishment of a National Swine Health Surveillance System. The proposed agreement is exempt from the provisions of Circular A-76 because (1) it is for the provision of technical assistance and (2) the facilities and resources of the USDA are uniquely suitable for the technical assistance being provided and are not competitive with private enterprise.

CONTINUATION SHEET	UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY AGENCY FOR INTERNATIONAL DEVELOPMENT	<input checked="" type="checkbox"/> Worksheet <input type="checkbox"/> Loanance	PAGE <u>5</u> OF <u>10</u> PAGES
	<input type="checkbox"/> PIO/C <input type="checkbox"/> PIO/P <input checked="" type="checkbox"/> PIO/T <input type="checkbox"/> PA/PR	1. Cooperating Country Haiti	2b. Amendment <input checked="" type="checkbox"/> Original OR No. _____
		2a. PIO Number 521-0170-2 - 70090	3. Project Number and Title 521-0170 Interim Swine Repopulation

Indicate block numbers Use this form to complete the information required in any block of a PIO/P, PIO/T or PA/PR. For PIO/C, furnish the item number, quantity, description/specifications, including catalog stock number and price when available.

ATTACHMENT 1 (a)

ILLUSTRATIVE BUDGET

Two USDA/APHIS Veterinarians:

Salaries	\$
Post Differential w/OICD overhead (PASA)	\$ 56,600
Allowances	239,650
Per Diem for in-country travel	12,000
Contingencies	13,750
AID overhead	24,000
TOTAL:	\$346,000

\*Salaries for the two veterinarians will be paid by USDA/APHIS/VS.

CONTINUATION  
SHEET

- PIO/C  
 PIO/P  
 PIO/T  
 PA/PR

1. Cooperating Country

Haiti

2a. PIO Number

521-0170-2-70090

2b.

Amendment  
 Original OR No. \_\_\_\_\_

3. Project Number and Title

521-0170

Interim Swine Repopulation

Indicate block  
numbers

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ATTACHMENT 2

BACKGROUND

Because of African Swine Fever (ASF) all pigs in Haiti were eradicated in 1981-1983. The Interim Swine Repopulation Project was established on September 1983 to restore the standard of living of the Haitian farmer to the level existing prior to the outbreak of ASF. This would be accomplished by producing and distributing improved breeding stock to Haitian farmers. In the summer months of 1986, the mid-term evaluation team and another team consisting of U.S. swine industry representatives strongly recommended that a nationwide swine health surveillance program be established to include prevention, detection and emergency eradication. The Director of USDA/APHIS agreed to provide two USDA/APHIS/VS veterinarians to assist Haiti on the development of this program. Listed below are their respective scopes of work to attain this objective.

SCOPE OF WORK AND SKILLS REQUIRED

I. LABORATORY CO-DIRECTOR

A. The incumbent must have a degree equivalent of DVM and specialize in one of the following areas: vaccine production and quality control, virology, bacteriology, parasitology, or pathology. He/she must have at least five years experience in the above areas plus five years experience in laboratory management. He/she must have the ability to interact with counterpart personnel and local government officials at all levels on the technical, operational and administrative components of the diagnostic laboratory.

B. Duties:

Under the technical direction of the APHIS/VS Representative for the Caribbean and the administrative direction of the USAID

90

CONTINUATION  
SHEET

UNITED STATES INTERNATIONAL  
DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR  
INTERNATIONAL DEVELOPMENT

Worksheet  Invoice

PAGE 8 OF 10 PAGES

PIO/C

PIO/P

PIO/T

PA/PR

1. Cooperating Country  
Haiti

2a. PIO Number  
521-0170-2 - 70090

2b. Amendment  
 Original OR No. \_\_\_\_\_

3. Project Number and Title

521-0170

Interim Swine Repopulation

Indicate block  
numbers

Use this form to complete the information required in any block of a PIO/P, PIO/T or PA/PR. For PIO/C, furnish the item number, quantity, description/specifications, including catalog stock number and price when available.

Project Officer, the Specialist will have the primary responsibility to:

1. Develop an implementation plan that will make the diagnostic laboratory functional.
2. Identify the necessary lab equipment for the laboratory and supervise the purchasing and installation of this equipment.
3. Cooperate with the GOH officials in developing and prioritizing the diagnostic capabilities of the laboratory in progressive stages as the funding, training, and equipment become available.
4. Establish and organize the overall administrative and operational mechanism of an animal disease diagnostic laboratory, with organizational charts and specific scopes of work for all technicians.
5. Train a cadre of laboratory technicians on basic disease diagnosis.
6. Develop a time table as to the development capabilities of the laboratory in a prioritized manner in the diagnostic fields of serology, virology, bacteriology, mycology, pathology, and parasitology.

## II. NATIONAL VETERINARY SERVICES ADVISOR

A. The incumbent must have a degree equivalent of DVM. He/she must have the ability to interact with counterpart personnel and local government officials at all levels on the technical, operational and administrative components of the National Swine Health Surveillance Program. He/she must have a minimum of five years experience in the areas of:

1. Animal disease reporting systems.
2. Market Cattle Inspection (MCI) and Market Swine Inspection (MSI) systems of serum surveillance models.

CONTINUATION  
SHEET

UNITED STATES INTERNATIONAL  
DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR  
INTERNATIONAL DEVELOPMENT

Worksheet  Invoice

PAGE 9 OF 10 PAGES

PIO/C

PIO/P

PIO/T

PA/PR

1. Cooperating Country

Haiti

2a. PIO Number

521-0170-2- 70090

2b.

Original OR Amendment  
No.

3. Project Number and Title

521-0170

Interim Swine Repopulation

Indicate block  
numbers

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3. International and Interstate Import/Export experience covering compliance and certification of quarantine, inspection, shipping, and receiving of swine and cattle.

4. USDA, APHIS, PPO inspection system of vessel and vehicle inspection for animal and animal product contraband at airports, seaports, and land border ports.

5. USDA, APHIS, VS Regional Emergency Animal Disease Organization (READO) as the nucleus for Task Force-Type Emergency Disease Eradication and Control.

B. Duties:

Under the technical direction of the APHIS/VS Representative for the Caribbean and the administrative direction of the USAID Project Officer, the Specialist will have the primary responsibility to:

1. Strengthen the animal health field units so they can render animal health assistance to the Haitian farmer.
2. Improve GOH management of quarantine stations and implementation of animal import regulations.
3. Implement a surveillance system of vessel and vehicle inspection for animal and animal product contraband at airports, seaports, and land border ports. This will include incinerator placement for appropriate disposal of contraband, plus a reporting system that reports back to the central office.
4. Institute a GOH system for emergency disease surveillance and alertness, early detection and quick response; with the execution of classroom and field test exercises to evaluate this system.

CONTINUATION  
SHEET

- FIO/C  
 FIO/P  
 FIO/T  
 PA/PR

1. Cooperating Country  
Haiti

2a. FIO Number  
521-0170-2.70090

2b. Amendment  
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3. Project Number and Title  
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Interim Swine Repopulation

Indicate block  
number

Use this form to complete the information required in any block of a FIO/P, FIO/T or PA/PR. For FIO/C, furnish the item number, quantity, description/specifications, including catalog stock number and price when available.

5. Coordinate with the diagnostic laboratory to support animal health field activities such as serum surveys of approximately 5,000 random samples to create a National Swine Herd Disease Profile.
6. Monitor and investigate reports of feral and striped pigs that potentially could be a reservoir of African Swine Fever.
7. Assist in creating greater cooperation and exchange of information with the Dominican Republic disease monitoring system, and national herd health program.
8. Work with GOH personnel to develop a central office infrastructure to maintain the continuation of the above-mentioned programs while implementing future programs as they are identified.
9. Work with the GOH on the development of the national veterinary laboratory until the arrival of the USDA/APHIS/VS laboratory director.
10. Develop an implementation plan to develop the National Swine Health Surveillance Program.

III. REPORTING REQUIREMENTS FOR THE TWO USDA/APHIS VETERINARIANS

- A. Submit a semi-annual report in French and English to USAID Haiti, Ministry of Agriculture and USDA/APHIS/VS on the progress towards the development of the National Swine Health Surveillance Program. The report must indicate achievements, problems encountered, and the recommended solutions to resolve any implementation problems that arise.

THE PROJECT WILL BE IMPLEMENTED ACCORDING TO THE  
 FOLLOWING IMPLEMENTATION PLAN:

A: NATIONAL VETERINARY DIAGNOSTIC LABORATORY

	<u>Date</u>	<u>Activity</u>	<u>Responsibility</u>
<b>PREPARATION:</b>			
<b>Step A</b>			
	July 1987	Procurement of Electricity	USDA/MARNDR
<b>Step B</b>			
	July 1987	Identification of Furniture	USDA/MARNDR
	July 1987	Procurement of Furniture Vender	USDA/MARNDR
<b>Step C</b>			
	Aug. 1987	Identification and Prioritization of Equipment	USDA/MARNDR
	Sept. 1987	Submission of Equipment Lists to Vendors	USDA/MARNDR
	Sept. 1987	Installation and Maintenance Contracts for Specific Equipment	USDA/MARNDR
<b>ESTABLISHMENT OF LABORATORY</b>			
<b>Step A</b>			
	Sept. 1987	Repairs to Buildings (broken window, seal south windows of lab, install cattle guard)	USDA/MARNDR
	As soon as electricity is available	Water Supply	USDA/MARNDR
	Nov. 1987	Installation of Emergency	USDA/MARNDR

**B. NATIONAL VETERINARY SERVICES**

<u>Date</u>	<u>Activity</u>	<u>Area</u>	<u>Responsibility</u>
Aug. 87	Purchase of suitable field vehicle	Quarantine Inspection Service	AID/IICA
Sept. 87	Evaluation of Agricultural Inspection Service at the (7) established border ports	" "	USDA/MARNDR
Oct. 87	Implementation of Reporting System to Central Office (Damien) Quarantine Service	" "	USDA/MARNDR
Nov. 87	Development of statistically valid national swine serum survey for the detection of ASF, hog cholera, and pseudorabies	Animal Surveillance & Monitoring	USDA/MARNDR
Dec. 87	Studies implemented at the seaports of Gonaives, St. Marc, Montrouis, Jeremie, Cayes, Petit Goave, and Jacmel to assess the volume of contraband swine and pork products entering from these ports	Quarantine inspection Service	USDA/MARNDR
Dec. 87	Emergency Animal Disease Response Training - classroom	Emergency Disease Alertness	USDA/MARNDR
Nov. 87	Serum Survey to begin	Animal Sur-	USDA/MARNDR

	with the collection of 200 sera per week for 10 weeks	veillance & Monitoring	
Dec. 87	Expansion of Quarantine Inspec- tion Service to (7) additional experts with training for all inspectors this month	Quarantine Inspection Service	USDA/MARNDR
Jan.-Feb. 88	Analysis of Initial Serum Survey of 2,000 samples and planning done for the collection of 3,000 additional samples by 12/31/87	Animal Sur- veillance & Monitoring	USDA/MARNDR

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For 1987, swine and swine product import regulation can be continued on a case-by-case basis until the volume increases significantly and it is possible to establish national quarantine laws and regulations.

JANUARY 1988 THROUGH SEPTEMBER 30, 1989

1. Expand central office (Damien) staff to include three Veterinary Nurses to assume full-time responsibility in each of the areas of Quarantine Inspection Service, Animal Surveillance and Monitoring, and Emergency Disease Alertness.
2. Continue on-the-job training with MARNDR counterpart to develop all the components of the Haitian National Veterinary Services.
3. Plan observation tour in Emergency Disease Test Exercises held by the Dominican Republic, Puerto Rico, or in the U.S.
4. Identify and assist in the procurement of cleaning and disinfection equipment that can be on "stand-by" for the Emergency Disease Response Team.
5. Continue serum survey to reach 10,000 sera which will be the basis for a National Swine Health Herd Profile - i.e. disease status of the national swine herd.
6. Add routine sanitary inspection for acute health

**Generator**

	Nov. 1987	Installation of Incinerator	USDA/MARNDR
	Nov. 1987	Perimeter Fence Installation	USDA/MARNDR
Step B	Aug. 1987	Installation of Furniture	USDA/MARNDR
Step C	Aug. 1987	Order Equipment	USDA/MARNDR
	Dec. 1987	Receive Equipment	USDA/MARNDR
	Feb. 1988	Equipment Operational	USDA/MARNDR
Step D	Dec. 1987	Identification of Supplies Needs	USDA/MARNDR
	Sept. 1987	Order Supplies	USDA/MARNDR
	Dec. 1987	Receive Supplies	USDA/MARNDR
Step E	Aug. 1987	Identification of Lab Staff Needs	USDA/MARNDR
	As Needed	Identification and Hiring of Personnel	USDA/MARNDR

**FUNCTIONAL DEVELOPMENT**

	Oct. 1987	Move Old Lab Equipment and Supplies to New Lab	USDA/MARNDR
	Dec. 1987	Organization of Virology Section	USDA/MARNDR
	On-going	General Training of Personnel	USDA/MARNDR
	Feb. 1988	Screening of Samples for ASF and Hog Cholera	USDA/MARNDR

**EVOLUTION AND EXPANSION**

Step A	Dec. 1/87 - Sept. 30/89	Expansion of Virology Testing Function (Other Viral Swine Disease)	USDA/MARNDR
	March 1/88 - Sept. 30/89	Viral Cattle Diseases	USDA/MARNDR
	March 1/88 -	Viral Diseases of Other	USDA/MARNDR

	Sept. 30/89	Species	
p B	Dec. 1/87 - Sept. 30/89	Brucellosis and Leptospirosis Serology	USDA/MARNDR
	March 1/88 - Sept. 30/89	Other Bacterial Swine Diseases	USDA/MARNDR
	March 1/88 - Sept. 30/89	Bacterial Diseases in Other Species	USDA/MARNDR
p C	June 88	Swine Parasite Survey and Identification	USDA/MARNDR
	December 88	Other Parasites	USDA/MARNDR
p D	Contingent on Adequate Lab Per- sonnel	Gross Pathology Examinations	USDA/MARNDR
	Same	Histopathology	USDA/MARNDR
p E	As Need Arises	Other Laboratory Procedures	USDA/MARNDR

PLETION OF PROJECT

	Sept. 30/89	Laboratory is adequately equipped and personnel are adequately trained (including a Haitian Lab Director) to diagnose both exotic and endemic viral, bacterial, and parasitic diseases of swine, cattle, and other species with a reasonable degree of accuracy.	USDA/MARNDR
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problems in swine at concentration points such as livestock markets and slaughter sites; plus trace-backs to the farm or village of origin.

7. Evaluate the incidence of feral and striped pig (usually indicative of domestic and feral swine cross-breeds) sightings and possible trapping instigated for the detection of any latent reservoir of ASF virus.
8. Assist MARNDR to establish regular collaboration with the Dominican Republic for the exchange of disease incidence information, common problems in animal health, and possible joint border control programs.

#### 1989 GOALS

1. Expand Quarantine Inspection Service to the seaports of St. Louis du Nord, Mole St. Nicolas, and Jean Rabel.
2. Equip inspection posts with motorcycle transportation and expand service to include "spot-checks" for weekend and holiday coverage.
3. Provide USDA Foreign Animal Disease training to one of the Haitian Veterinarians at USDA expense.
4. Hold a field test exercise to evaluate the Emergency Animal Disease Response Team.
5. Begin collection of blood for analysis from major swine slaughter sites.
6. Respond to emerging Caribbean animal disease problems like Amblyoma spp. tick infestations, screwworm, hog cholera, and Newcastle disease.

HAITI  
SWINE REPOPULATION PROJECT  
1987, 1988

	<u>Year 1</u>		<u>Year 2</u>		<u>TOTAL</u>
	<u>Vet. 1</u>	<u>Vet. 2</u>	<u>Vet. 1</u>	<u>Vet. 2</u>	
<b>USDA:</b>					
Salary/Benefits	\$ 74,198	\$ 42,560	\$ 77,950	\$ 45,000	\$ 239,708
<b>USAID:</b>					
Post Differential	<del>12,420</del>	<del>8,200</del>	<del>12,600</del>	<del>10,000</del>	<del>44,220</del>
(20%) 25%	15,525	10,250	17,000	12,500	55,275
OIGB/APHIS O/H (28%)	3,480	2,300	3,800	2,800	12,380
Post Assignment	13,400	10,200			23,600
Air Fare	(3,000)	(1,000)			
Travel - P/D	(500)	(200)			
Excess Baggage	(500)	(100)			
Air Freight	(1,200)	(700)			
BBE Shipment	(5,000)	(5,000)			
POV Shipment	(2,000)	(2,000)			
Storage Per Eff	(1,200)	(1,200)			
Repatriation	-0-	-0-	14,700	11,200	25,900
Medical Evac/ Emerg. Travel	2,000	2,000	2,000	2,000	8,000
Allowances:	35,700	23,750	42,500	23,400	125,350
Education	(4,000)	-0-	(12,000)	-0-	
Housing	(13,500)	(11,000)	(14,000)	(12,000)	
Utilities	(7,500)	(800)	(8,200)	(1,000)	
Prepary	(800)	(800)	-0-	-0-	
Transfer	(700)	(350)	-0-	-0-	
Guard Services	(4,500)	(4,500)	(5,000)	(5,000)	
Renovation-house	(1,500)	(1,000)	-0-	-0-	
Maintenance-house	(1,200)	(600)	(1,300)	(700)	
Separate Mtce	-0-	(4,700)	-0-	(4,700)	
Educational travel(2,000)	-0-	-0-	(2,000)	-0-	
Other	24,200	22,750	-0-	-0-	46,950
Furniture	(15,000)	(15,000)	-0-	-0-	
Appliances	(7,000)	(7,000)	-0-	-0-	
Rest/Recuperation	(2,200)	(750)	-0-	-0-	
Medical Exams	-0-	-0-	1,000	600	1,600
Immunizations	-0-	-0-	150	100	250
Language Training	2,000	2,000	2,000	2,000	8,000
In-country Per diem	1,000	5,000	1,000	5,000	12,000
Sub Total	\$ <del>94,200</del> 97,305	\$ <del>76,200</del> 78,250	\$ <del>89,750</del> 84,150	\$ <del>57,100</del> 59,600	\$ <del>308,250</del> 314,305
AID Contingency (10%)	\$ <del>9,400</del> 9,700	\$ <del>7,650</del> 7,800	\$ <del>8,100</del> 8,400	\$ <del>5,700</del> 6,000	\$ <del>30,850</del> 31,900
AID Overhead	6,000	6,000	6,000	6,000	24,000
<b>TOTAL</b>	\$ <del>109,600</del> 113,005	\$ <del>89,850</del> 92,050	\$ <del>94,850</del> 98,550	\$ <del>68,800</del> 71,600	\$ <del>363,100</del> 375,205
Subtract: AID contingency	9,700 <del>- 9,400</del>	7,800 <del>- 7,650</del>	8,400 <del>- 8,100</del>	6,000 <del>- 5,700</del>	31,900 <del>- 30,850</del>
<b>TOTAL</b>	\$ <del>100,200</del> 103,305	\$ <del>82,200</del> 84,250	\$ <del>86,750</del> 90,150	\$ <del>63,100</del> 65,600	\$ <del>332,250</del> 343,305
Add: AID contingency					2,695 <del>- 13,750</del>
<b>TOTAL</b>					\$ 346,000

JUN 9 1987

# PEACE CORPS

**ACTION COPY**



Int'l. Mail :  
Port-au-Prince  
Department of State  
Washington, D.C. 20520

Corps de la Paix  
Haïti

10, Rue Jean-Baptiste  
Canapé-Vert  
P.O. Bx 1761  
Port-au-Prince, Haïti  
Tél.: 5-2094  
5-3294  
5-4090

00995

Port-au-Prince, June 3, 1987

Mr. Ronald Ruybal  
Project Officer  
RDO/USAID  
Boulevard Harry Truman  
Port-au-Prince, Haïti

## OFFICIAL FILE

Dear Mr. Ruybal:

In response to your letter of May 26, 1987 I wish to inform you that steps are being taken to comply with IICA's request. Peace Corps Haiti is proud to participate along with IICA and AID in the national effort aimed at restoring the standard of living of pig farmers to the level existing before eradication.

I am trying to cut through the administrative procedures to shorten the delay of recruitment. As a matter of fact, one Volunteer has already been assigned to the Project. The other posts will be filled as opportunity arises.

Thank you for your interest in Volunteers placements.

With best regards,

Lionel Richard, Agr.  
Associate Peace Corps Director  
for Agriculture

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ACTION TAKEN  
Date: 6/12/87  
RFR

6-12-87  
JED

May 26, 1987

Mr. Lionel Richard  
Director of Agriculture  
Peace Corps/Haiti  
Port-au-Prince

Dear Mr. Richard:

I am writing you with reference to IICA's letter AC/RE 0467 dated May 13, 1987, to you in which they request that 10-12 Peace Corps Volunteers be assigned to the Interim Swine Repopulation Project.

My reason for writing is to add my support to this request. As an RPCV, I believe the description of activities provided by IICA will be most amenable to the goals of Peace Corps/Haiti, and I know that this extra support staff will be able to make a substantial contribution to the Swine Project as we move into a phase emphasizing extension training and development of alternative swine feed resources.

Thank you for your careful consideration.

Sincerely,

Ron F. Ruybal  
Project Officer

Clearance: JVDLewis, D/C, RLO \_\_\_\_\_  
VGusumano, C/RDO \_\_\_\_\_

RFR:mabr

**COPIE**

INSTITUT INTERAMERICAIN DE COOPERATION POUR L'AGRICULTURE  
 REPRESENTATION EN HAITI  
 B.P. 2020  
 PORT-AU-PRINCE, HAITI

AC/HT 0467  
 May 13, 1987

*Income  
 IICA*

Mr. Lionel Richard  
 Director of Agriculture  
 Peace Corps | Haiti  
 Port-au-Prince

Dear Mr. Richards:

We received your letter of May 5, 1987 in which you informed us of the termination of services of volunteers Mr. Huber and Mr. Rund. Thank you for the advanced notice so that we may plan accordingly.

Mr. Rex Rund has informed us that he has extended his services with Peace Corps until December 1987 and will be available to work with us until that time. If this is not the case, we would appreciate to be informed of such so that we can plan ahead. We would also like to take this chance to compliment you on the services rendered to the project by these 2 volunteers and specially for the honors that have been given to Mr. Rund as the Inter-America Volunteer of the year. It is a great pride to know that someone who works with us in helping get back pigs to the Haitian peasants receive such a high acknowledgement.

After talking with Rex and discussing his Peace Corps experience, he along with ourselves feel that there is an important work that can be done by Peace Corps Volunteers within the project. The project has a high possibility of going into a third phase which will be dedicated to work at level of the small Haitian farmers on extension, swine husbandry and development of alternative feed sources.

You will find enclosed with this letter a job description of what the volunteers would be doing in this third phase. The volunteers would be living in a community. The running around that the volunteers used to do is now part of the past, we will hope to do local intensive extension. We would like to have volunteers that would live in local agricultural community, become part of that community and be in charge of developing test plots in his community and help the farmers introduce and develop alternative feed sources and showing the farmers basic husbandry practices.

...2...

*Received  
 5/13/87*

## INSTITUT INTERAMÉRICAIN DE COOPERATION POUR L'AGRICULTURE

DESTINATAIRE: M. Lionel Richard..... FEUILLE No. 2..... CODE INT 0467.....

The volunteers would be in a place and available at all times in the locality to help teach and disseminate new ideas which will be appropriate to the level of the Haitian farmers.

We are trying to take away the pigs from the sophistication of piggeries and imported feeds and develop feeds plots feeding the animals with locally produced feed. The volunteers should be very much involved in disseminating this information.

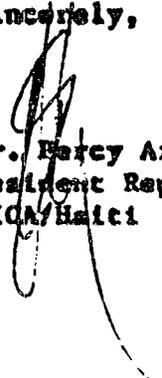
Since we would be in charge of training in the field and teaching appropriate technology, we do not need people with specialization on agriculture or nutrition; we would only need people who are generalists and who have the will to help.

If you can see the possibility of giving us 10 to 12 volunteers who would be available to live in a small community, use local transportation and be interested in teaching small farmers, we would be interested in talking in more details. We are certain that the new volunteers will be as successful as the two that are terminating.

Thank you for your time and consideration. Thank you once again for the services rendered to our project by the Peace Corps Volunteers.

Looking forward to hearing from you soon.

Sincerely,



Dr. Percy Aitken-Soux  
Resident Representative  
IICA/Haiti

RA/vd

cc: C. Ruybal/USAID - Haiti  
D. Gingerich/Pork Producers Council  
E. Hinojosa/USDA  
F. Malhern/USDA

Encl.

- 7 -

## 5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only: B(1) applies to all projects funded with Development Assistance; B(2) applies to projects funded from Development Assistance loans; and B(3) applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1987 Continuing Resolution Sec. 523; FAA Sec. 634A. Describe how authorization and appropriations committees of Senate and House have been or will be notified concerning the project. A Congressional Notification was submitted, and it expired on July 9, 1987.
2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U.S. of the assistance? No such engineering plans will be required.
3. FAA Sec. 611(a)(2). If legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance? N/A.
4. FAA Sec. 611(b); FY 1987 Continuing Resolution Sec. 501. If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.) N/A.

- 8 -

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? N/A.
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. No.
7. FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions. (a) No. (b) The project is principally implemented by NGOs. (c) The project encourages groupement formation; (d) N/A. (e) The project will encourage agricultural innovation. (f) N/A.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise). N/A.
9. FAA Secs. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. The US owns no surplus Haitian currency.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No.

- 9 -

11. FY 1987 Continuing Resolution Sec. 521. This is not an export project.  
 If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?
12. FY 1987 Continuing Resolution Sec. 558 (as interpreted by conference report). (a) No. (b) No.  
 If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities (a) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (b) in support of research that is intended primarily to benefit U.S. producers?
13. FY 1987 Continuing Resolution Sec. 559. No.  
 Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 007," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

- 10 -

14. FAA Sec. 118(c). Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (a) stress the importance of conserving and sustainably managing forest resources; (b) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (c) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (d) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (e) help conserve forests which have not yet been degraded, by helping to increase production on lands already cleared or degraded; (f) conserve forested watersheds and rehabilitate those which have been deforested; (g) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (h) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (i) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (j) seek to increase the awareness of

Yes. An IEE is appended.  
(a) - (j) N/A.

- 11 -

U.S. government agencies and other donors of the immediate and long-term value of tropical forests; and (k) utilize the resources and abilities of all relevant U.S. government agencies?

(k) Yes.

15. FPA Sec. 119(g)(4)-(6). Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?

(a) Yes. (b) - (d) No.

16. FPA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)?

Not a Sahel Project.

17. FY 1987 Continuing Resolution Sec. 532. Is disbursement of the assistance conditioned solely on the basis of the policies of any multilateral institution?

No.

## B. FUNDING CRITERIA FOR PROJECT

### 1. Development Assistance Project Criteria

a. FPA Secs. 102(b), 111, 113, 211(a). Describe extent to which activity will (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and

(a) The project stresses low-technology solutions to livestock production for Haiti's smallest farmers;

- 12 -

- insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.
- (b) the project encourages groupement formation;
- (c) N/A;
- (d) Yes ;
- (e) The prime grantee is an international organization of the OAS.
- b. FAA Secs. 103, 103A, 104, 105, 106, 120-21. Does the project fit the criteria for the source of funds (functional account) being used? Yes.
- c. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)? Yes.
- d. FAA Secs. 110, 124(d). Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? For the bilateral portion of the project, yes.
- e. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority? Yes.

- 13 -

- f. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government. N/A.
- g. FY 1987 Continuing Resolution Sec. 540. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? No.
- Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations? No.
- Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? No.
- h. FY 1987 Continuing Resolution. Is the assistance being made available to any organization or program which has been determined to support or participate in the management of a program of coercive abortion or involuntary sterilization? No.
- If assistance is from the population functional account, are any of the funds to be made available to voluntary family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services? N/A.
- i. FA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes.

- 14 -

- j. FY 1987 Continuing Resolution. How much of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)? None.
- k. FAA Sec. 118(c)(13). If the assistance will support a program or project significantly affecting tropical forests (including projects involving the planting of exotic plant species), will the program or project (a) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (b) take full account of the environmental impacts of the proposed activities on biological diversity? It will not.
- l. FAA Sec. 118(c)(14). Will assistance be used for (a) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (b) actions which significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas? No.
- m. FAA Sec. 118(c)(15). Will assistance be used for (a) activities which would result in the conversion of forest lands to the rearing of livestock; (b) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undegraded forest lands; (c) the colonization of forest lands; or (d) the construction of dams or other water (a) - (e) No.

- 15 -

control structures which flood relatively undegraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

2. Development Assistance Project Criteria  
(Loans Only)

- a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.
- b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?
- c. FY 1987 Continuing Resolution. If for a loan to a private sector institution from funds made available to carry out the provisions of FAA Sections 103 through 106, will loan be provided, to the maximum extent practicable, at or near the prevailing interest rate paid on Treasury obligations of similar maturity at the time of obligating such funds?
- d. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

- 16 -

### 3. Economic Support Fund Project Criteria

- a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?
- b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purposes?
- c. ISDCA of 1985 Sec. 207. Will ESF funds be used to finance the construction, operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such country is a party to the Treaty on the Non-Proliferation of Nuclear Weapons or the Treaty for the Prohibition of Nuclear Weapons in Latin America (the "Treaty of Tlatelolco"), cooperates fully with the IAEA, and pursues nonproliferation policies consistent with those of the United States?
- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?