

I. PROJECT IDENTIFICATION

PROJECT TITLE: **APPLIED CONTROL OF VAMPIRE BATS** 931-11-190-094

RECIPIENT (specify):  
 COUNTRY  
 REGIONAL  
 INTERREGIONAL **TAB**

LIFE OF PROJECT:  
 BEGINS FY: **76**  
 ENDS FY: **78**

APPENDIX ATTACHED:  
 YES  NO **11p**

2. PROJECT NO. (M.O. 1955.2)  
 5. SUBMISSION DATE: **10/24/75**  
 ORIGINAL  
 REV. NO. \_\_\_\_\_ DATE \_\_\_\_\_  
 CONTR./PASA NO. \_\_\_\_\_

II. FUNDING (USD), AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	B. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATES \$ US (U.S. DOLLAR)			
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN	(2) DDP COUNTRY	(3) JOINT	(4) SECRET
PRIOR THRU ACTUAL FY													
OPRM FY <b>76</b>	80	80	27					80	17				
BUDGET FY <b>77</b> TO	19	19	4					19	4				
BUDGET <b>77</b> 41 FY	84	84	17					84	17				
BUDGET <b>78</b> 42 FY	95	95	19					95	19				
BUDGET <b>78</b> 43 FY													
ALL SUBD. FY													
GRAND TOTAL	278	278	57					278	57				

OTHER DONOR CONTRIBUTIONS

NAME OF DONOR	KIND OF GOOD/SERVICES	AMOUNT \$
LDCs, FAO, IADB	Staff and operating expenses Development loans	5,000

III. ORIGINATING OFFICE CLEARANCE

DRAFTER	TITLE	DATE
K.P. Brundage	Program Analyst	2/13/76
CLEARANCE OFFICER	TITLE	DATE
L.F. Hesser	Director IA/AGR	2/13/76

IV. PROJECT AUTHORIZATION

CONDITIONS OF APPROVAL

CLEARANCES

BUR/OFF.	SIGNATURE	DATE	BUR OFF	SIGNATURE	DATE
LA/DR	<i>C.C. Brittenbach</i>	2/13/76	TA/PPU	John N. Gunning	3/9/76
PPC/DPRE	A. Handly		TA/PPU	Charles Molfetto	3/9/76
APPROVAL BY OFFICE DIRECTORS	SIGNATURE	DATE	APPROVAL BY (M.O. 1955.2) (M.O. 1955.2)	SIGNATURE	DATE
	<i>Corlis Farrar</i>	3/11/76			

ADMINISTRATOR, AGENCY FOR INTERNATIONAL DEVELOPMENT

Proj. No. 9310096  
PR

MEMORANDUM

DATE: March 9, 1976

TO : AA/TA, Mr. Curtis Farrar  
FROM : TA/PPU, John  Gunning  
SUBJECT: Applied Control of Vampire Bats Project Paper-GTS

Problem: Subject activity was a component part of a research effort on Vertebrate Pest Control Project under contract with the Department of Interior. On RAC recommendation that the utilization effort be continued, the activity is being presented as a separate project from the research effort.

Discussion: This project is designed to provide field services technical assistance to developing countries in Latin America in the control of vampire bats. AID has funded work with the U.S. Fish and Wildlife Service of the Department of the Interior since 1967 to research the problems of vampire bats and to develop means for their control. This research has developed two means of eliminating vampire bats in an ecologically specific manner. Research work on vampire bats has now been phased out of the project, Vertebrate Pests, as work continues on other problems. The RAC review of March 20-21, 1975 enjoined AID "to enhance the probabilities of the establishment of real-world damage control means at the earliest possible time." The technical assistance service (GTS) is currently being provided under the existing RSSA with the Department of Interior research effort. This project is intended to implement the intent of RAC instructions. *advice!*

The purpose of this project is to provide, upon request from cooperating LDCs, USAIDs and Latin American Bureau (AID), assistance in vampire bat control program planning, implementation and evaluation leading toward a more viable livestock industry with its benefits (increased availability of meat) available for local consumption.

This project is limited to a three year period FY 76 through FY 78 at a total estimated cost of \$254,000. Since it is a project of less than \$500,000 and its activities are specifically focused to benefit Latin America countries which are afflicted with vampire bats, the project has been cleared with LA and PPC rather than being submitted to R&DC for review. However, the approved PID a copy of which is attached, was circulated to all R&DC members. Memos of endorsement from LA and AFR were received in response and are attached. Their suggestions have been addressed in the attached Project Paper.

Recommendation: We recommended that you approve the Project Paper by signing the face sheet as indicated.

Attachments: a/s

UNITED STATES GOVERNMENT

# Memorandum

*1st Project Folder*

TO : TA/PPU, Mr. Carl R. Fritz

DATE: February 12, 1976

FROM : TA/AGR, Leon F. Hesser *LH*

SUBJECT: Project Paper, Applied Control of Vampire Bats.

REFERENCE: Your Memo of January 2, 1976.

In the referenced memo you circulated a copy of the first project-paper submitted on this activity. We have received comments from two Regional Bureaus, copies of which are attached.

On the strength of verbal instructions from Mr. Molfetto of your office, the old PROP face sheet has been used in lieu of the regular PP face sheet. This will allow clearances by the interested offices on the face sheet.

RAC had recommended that actual field control measures of pests be undertaken when the research project was last reviewed. This project has been oriented towards that objective.

Considerable assistance has been provided by members of your staff in developing the paper. The format has been guided by the headings presented in your Guidance 76-1 dated August 25, 1975. The scope of the project is less than \$500,000 so that it meets the provisions of Handbook 3, chapter 7, par. 7.B.2.

Funding for this activity was not listed at the time of budget preparation last summer. However, funds have been restricted in the Vertebrate Pest project of this KPA to provide the needed funds, i.e. \$465 shown in Red Book budget and \$380 on the PIO/T. Amounts are shown for each project in the CP budget sheets prepared in January 1976.

Since procedures for approval of projects submitting PPs have not yet become routine, we wish to assist you in every way possible to accomplish this step within the three week time frame prescribed in Handbook 3. Let us know, without delay, if further refinement is needed on this presentation so that it may pass through the approval process in an orderly manner.



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

In view of the Article in the Washington Star News of February 10, 1976 on vampire bat control, this could be a topic of discussion in the Congressional Presentation. Can we have the project approved and contracted by that time?

## PROJECT PAPER OF VAMPIRE BATS CONTROL - GTS

### Introduction:

This project is designed to provide field services technical assistance to Developing Countries in Latin America in the control of Vampire Bats. AID has funded work with the U.S. Fish and Wildlife Service of the Department of the Interior since 1967 to research the problems of vampire bats and to develop means for their control. This research has developed two means of eliminating vampire bats in an ecologically specific manner. Research work on vampire bats has now been phased out of the project, Vertebrate Pests, as work continues on other problems. The RAC review of March 20-21, 1975 enjoined AID "to enhance the probabilities of the establishment of real-world damage control means at the earliest possible time". This project is intended to implement the intent of RAC instructions.

The vampire bat has been a constraint to the development of a viable livestock industry. The animal bovine losses resulting from vampire bat transmitted-rabies are estimated at one million head which equates to approximately \$250,000,000 of loss per year. The problem is further aggravated by the daily loss of blood by afflicted cattle, mortality of other livestock and secondary infections such as rabies.

Since livestock furnishes much of protein for the populace in the developing countries of Latin America, the Technical Assistance Bureau initiated a research project in June 1968. The U.S. Fish and Wildlife Services (FWS) under a Participating Agency Service Agreement with AID conducted a successful research resulting in new techniques for controlling this type of vertebrate pests. The new technology has voided the previous destructive conventional methods of control such as dynamiting or gassing caves and roosts.

The new successfully tested techniques are innovative and involves (1) injecting cattle with blood anticoagulant drugs. Since this species of Vampire Bats has a low tolerance, the blood taken from the injected animal will cause the Bat to die. (2) Taking advantage of the vampire habits of constantly grooming and licking themselves and their neighbors while in roost, a mixture of petroleum jelly and anticoagulant is spreaded on the backs of captured bats. These bats are released to return to their roosts where they will contaminate themselves and their neighbors with anticoagulants.

Field experiments conducted in Mexico have proven these techniques to be successful in all aspects of ecology, and provided almost 100 percent reduction in vampire bats with reduced costs. Reputable biological scientists in the U.S. and Latin America have endorsed these new techniques for efforts to control vampire bats.

This activity will be limited to three years funding by the Technical Assistance Bureau. In that time period, local agencies will be developed to continue the work without AID assistance.

Contribution:

This project will assist in expanding livestock production by reducing losses of bovine and other livestock due to infections resulting from bites by vampire bats. It is estimated that through the use of proper control techniques and well designed national vampire bats control programs, an additional one million head of cattle will be available for local consumption in Latin American LDCs. Additional livestock produced accompanied with reduced losses should increase meat supplies in urban areas.

Services to Date:

The utilization of the new control techniques developed under the AID sponsored research contract was initiated in FY 1975 under PASA RA (1-67) with U.S. Wildlife Service. Control measures in Latin American countries are entirely handled by local agencies. Personal contact has been established with animal health agencies in most of the countries where bats are found. As a result the following conditions have been reported:

A. Countries with active control campaigns

Brazil  
Columbia  
Guyana  
Nicaragua  
Panama  
Venezuela

B. Training Programs held

Guyana  
Ecuador

C. Meetings to Plan Campaigns

Guatemala  
Honduras  
El Salvador  
Paraguay  
Peru

### Evaluation of Services:

The technical assistance services provided by the Contractor have been enthusiastically received by the requesting LDC. Limited vampire bats control programs using the new techniques have been successfully used in the countries indicated above. The contractor also played a significant role in the development and implementation of the successful country-wide vampire control program financed by the Government of Nicaragua.

### Expected Trends:

The successful results of field tests of the new vampire bats control methods developed under the AID sponsored research project has received wide recognition through those LDCs in Latin America which are plagued by this problem. As of December 1975, the proposed contractor has six requests for technical assistance. Bolivia was successful in obtaining a loan from the Interamerican Development Bank to plan and implement a country-wide vampire bat control program. Utah State has been requested to assist in this effort. Other Latin American countries are also increasing their resources and capabilities in this area.

### Alternate Sources:

The countries plagued with the vampire bats have been using the conventional method of control use of antirabies vaccination of cattle. However, this method requires annual vaccination of the cattle and also does not address the losses and disability from, loss of blood nor the secondary infections and infestations associated with wounds caused by bat bites. The costs involved in using the conventional method of control is much higher than the new technologies developed and are out of reach of the small farmer. The new technologies entail one time application either in the anticoagulant injection method or the painting of the back of the captured bats with a mixture of vaseline and diphenadione after which they are released.

### Project Design:

#### A. Project Purpose

##### 1. Statement of Purpose

The purpose of this project is to provide, upon request from cooperating LDCs, USAIDs and Latin American Bureau (AID), assistance in vampire bat control program planning, implementation and evaluation leading toward a more viable livestock industry with its benefits (increased availability of meat) available for local consumption. The Fish and Wildlife Service will provide advice in the following:

- a. to develop and implement effective programs in vampire bats control.
- b. LDCs have developed operational capability to implement program. Verified by number of people trained, quantity of anticoagulant imported and used.
- c. Increased availability of meats at lower cost in local markets. Verified by onsite inspection of market place (price comparison and meats availability, LDC Ministry of Agriculture records of heads of livestock sold for slaughter.
- d. Reduced number of people suffering from lack of protein. Hospital records and labor records.
- e. Eliminate attacks on humans by vampire bats.
- f. Increase in livestock production not only by reducing losses but expansion of production to small farmers who here-to-fore did not raise cattle because of the vampire bat plague. Verified by Ministry of Agriculture records and on-site inspections.

## 2. Basic Assumptions for Achieving Purpose:

Achievement of the full purpose of this project will depend in large measure on the following assumptions:

- a. Agricultural officials and planners in the Missions and cooperating countries recognize the importance of increase livestock production to provide protein for local consumption.
- b. That the governments of cooperating LDCs recognize the need for reducing losses in livestock due to vampire bats and are willing to commit necessary financial and manpower resources for training of key personnel in the management and operational aspects of the program.
- c. That the cooperating LDCs have effective agricultural extension services to demonstrate new techniques in vampire bats control and make available to the small farmers anticoagulants.
- d. That short-term services are effective means of stimulating changes or initiating programs.

## Project Outputs

Specific outputs will in general result from other projects for which this project provides inputs and will be largely determined by the number and nature of requests received from the USAIDs, LDCs and AID Latin America Regional Bureau for the available technical assistance and services. In general, however, the following kinds of outputs are

expected. These outputs will be verified by reports submitted by USAIDs and LDCs reflecting type and quality of services provided by the contractor and degree of implementation of advice provided.

The kinds of outputs expected under this service project concern advice provided to requesting LDCs to develop and implement vampire bat control programs. Depending on the nature of the requests for assistance the advice provided will vary from one to all of the following aspects of vampire bat control.

1. Advice provided in the development of LDC policies on vampire bats control.
2. Advice provided in designing programs and arranging for necessary supplies.
3. Advice provided on improving organizational structure and administration of vampire bats control programs.
4. Advice and assistance to LDCs in developing training programs in use of new control technologies.
5. Advice and assistance to LDCs in developing and conducting training seminars and meeting with livestock producers.
6. Advice to LDCs on special problems concerning vampire bats control activities.

#### Outputs Basic Assumptions

Realization of the foregoing outputs is dependent on the following assumptions:

1. Technical assistance and services available under this project will be requested by LDCs through USAIDs and Latin America Bureau.
2. Financial resources needed for the development of the vampire bats program will be made available by the assisted LDCs and/or other donors, either as grants or loans.
3. Manpower needed to implement and manage the programs.
4. Commitment by LDC to vampire bats control will be of sufficient depth and duration to permit the establishment of an effective program.
5. Small farmers acceptance of anticoagulants as vehicle for vampire bat control.
6. That LDCs will implement advice and suggestions provided by the contractor.

D. Project Inputs

The following inputs are required if the outputs are to be achieved.

1. (a) LDC Inputs

No firm projection can be made of the resources committed by each of the LDC countries that are active in this program. Rough estimates would place the LDC costs for personnel, supplies and equipment plus operating costs in the range of 20 to 100 times the U.S. involvement.

(b) U.S. Inputs

	FY-1976	*T0	FY-1977	FY-1978
Personnel	\$32,000		\$36,000	\$40,000
	(16MM)		(17MM)	(19MM)
Consultant	3,000	(1MM)		
Benefit Costs	3,000		3,500	4,000
Overhead	7,000		8,700	9,600
International Travel	21,300		22,000	25,500
Supplies & Materials	8,000		8,300	9,400
Equipment	2,000		2,500	3,000
Printing, etc.	3,000		3,000	3,500
Total	\$79,300		\$84,000	\$95,000

<u>U.S. Inputs</u>	*TQ Funding
Total	\$19,000
Personnel	9,000
	(4MM)
Benefit Costs	855
Overhead	1,980
International Travel	7,165
Total	\$19,000

UNITED STATES GOVERNMENT

Memorandum

~~1. Otto~~ 1140  
2. Holmes / Brundage  
3. Komerup  
JAN 6/1976

TO : TA/AGR, Mr. Leon Hesser

DATE: January 5, 1975

FROM : AFR/DP/PPA, Frank J. Moore /fr

SUBJECT: PID - Applied Control of Vampire Bats.

I have no problem with this one at all. Considering the proven usefulness of the method and the potential pay-off, I don't think that it matters very much whether the funds come from Central or Regional Funds.

All things being equal, however, it clearly would be preferable to have LA fund the project, provided this can be done without delaying implementation.

cc:  
TA/PPU, Mr. Carl Fritz

