

KPA-5

AID 1850-1X (7-71)	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	1. Cooperating Country Worldwide <i>310618</i>	Page 1 of 5 Pages
		2. PIO/T No. 931-11-190-09473	3. <input checked="" type="checkbox"/> Original or Amendment No. <i>9p</i>
PIO/T	PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES	4. Project/Activity No. and Title Applied Control of Vampire Bats	

DISTRIBUTION	5. Appropriation Symbol 72-11X1023		6.A. Allotment Symbol and Charge 402-31-099-00-20-61		6.B. Funds Allotted to: <input checked="" type="checkbox"/> A.I.D./W <input type="checkbox"/> Mission	
	7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document				8. Funding Period (Mo., Day, Yr.) From <i>7/1/75</i> to <i>6/30/76</i>	
	9.A. Services to Start (Mo., Day, Yr.) Between <i>11/1/75</i> and _____				9.B. Completion date of Services (Mo., Day, Yr.) <i>6/30/76</i>	
	10.A. Type of Action <input type="checkbox"/> A.I.D. Contract <input type="checkbox"/> Cooperating Country Contract <input checked="" type="checkbox"/> Participating Agency Service Agreement <input type="checkbox"/> Other					
	10.B. Authorized Agent AID/W					

Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars		<i>79,300</i>		<i>79,300</i>
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				FUNDS RESERVED BY
	B. Other				<i>OK</i> POSTED <i>3/29/76</i> SER./FM/OSD

13. Mission References:

14. Instructions to Authorized Agent:

The authorized PASA officer is requested to negotiate a PASA with the BSWF of the Department of Interior using \$79,300 funds provided by this PIO/T in order to accomplish the activity described herein. These funds are to be utilized as stated to facilitate the utilization of research results developed under Department of Interior, BSWF, PASA RA(ID)1-67; and to continue to demonstrate the economic and health benefits to livestock production in Latin America, implemented in FY 76.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate TA/AGR, MGall <i>[Signature]</i> Date: <i>9/24/75</i>	B. Funds for the services requested are available TA/PPU: MZozynski <i>[Signature]</i> Date: <i>3/22/76</i>
C. The scope of work lies within the purview of the initiating and approved Agency Programs TA/AGR, LHesser <i>[Signature]</i> Date: <i>10/24/75</i>	D. <i>[Signature]</i> Date: <i>10/31/75</i> TA/PPU/EUI, CLadenheim
TA/AGR, RHolmes <i>[Signature]</i> Date: <i>10/19/75</i>	F. <i>[Signature]</i> Date: <i>3/27/76</i> TA/PPU, CMolfetto

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to Signature and date:	17. For the Agency for International Development <i>Carl S. Frick</i> Signature: John Gunning, TA/PPU Title: Chief, Program Division	18. Date of Signature
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AID 1353-1X (9-70) PIO/T	Cooperating Country	PIO/T No.	Page 2 of 5 Pages
	Project/Activity No. and Title Applied Control of Vampire Bats		

SCOPE OF WORK

19. Scope of Technical Services.

A. Objective for which the Technical Services are to be Used To assist Latin American Countries in their campaigns to eliminate vampire bats so as to improve livestock production by reducing infection and death losses.

B. Description

1. Assist interested Latin American countries to develop indigenous capability to control vampire bats.
2. Integrate latest technical data and procedures into these programs.
3. Provide on-the-job training for LDC staff, when conditions indicate a need for training.
4. Evaluate effectiveness of programs in terms of results and the ability of country teams to operate without AID assistance within three years.

C. Technicians

(1) (a) Number	(b) Specialized Field	(c) Grade and/or Salary	(d) Duration of Assignment (Man-Months)
1	Biologist	GS 13/4	7
1	Biologist	GS 13/4	4
Various	TDY	----	5
1	Animal Science Consultant	-----	1

(2) Duty Post and Duration of Technicians' Services

Various Latin American countries on rotation basis for duration of PASA

(3) Language requirements

Spanish highly desirable

(4) Access to Classified Information

(5) Dependents Will Will Not Be Permitted to Accompany Technicians

D. Financing of Technical Services

(1) By AID - \$ 74,000

(2) By Cooperating Country -

ID 1350-1X (8-70) PIO/T	Cooperating Country	PIO/T No.	Page 3 of 5 Pages
	Project/Activity No. and Title Applied Control of Vampire Bats		

20. Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
	Drugs	200	
	Traps	300	
	Laboratory items	300	
	Specialized working items	200	
		<u>1,000</u>	

U.S. Supplied inputs for demonstrational purposes.

B. Financing of Equipment and Supplies

(1) By AID - \$ 1,000

(2) By Cooperating Country -

21. Special Provisions

- A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.
- B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.
- C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under

D. Other (specify): Prior to making any visits to LDCs, the Contractor will review his plans with TA/AGR. He will keep AID Missions in countries to be visited fully informed of proposed visits, ask them to provide any advice they wish regarding timing and content of the visits and to participate if they desire, and will inform the Missions of the outcomes of consultations. He will make his own appointments and logistics arrangements directly. Upon completion of any project funded travel, a copy of the trip report will be provided to the TA/AGR Project Manager. The report format will be established jointly by the Contractor and the Project Manager.

AID 1350-1X (9-70)	Cooperating Country	PIO/T No.	Page 4 of 5 Pages
PIO/T	Project/Activity No. and Title Applied Control of Vampire Bats		

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

In addition to usual administrative reports specified in the PASA Agreement, the following activity reports will be provided:

Quarterly progress report and a final report for each country assisted will be sent in five copies to AID project manager in TA/AGR. One copy of each such report will be sent to the AID PASA Officer.

The AID/Research Specialist is : Dr. Nels Konnerup
 Technical Assistance Bureau
 Office of Agriculture
 Agency for International Development
 Washington, D.C. 20523

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency: if necessary cross reference Block 19.C(4) above.)

Reports of previous research and demonstrations on vampire bat control are available from:

- a. AID-TA/AGR, Livestock Division
- b. U.S. Dept. of Interior, Bureau of Sports Fisheries and Wildlife, Denver, Colorado.

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

Advise AID Mission on activities in each country where project is implemented.

Hesser, Director TA/AGR and Dr. Nels Konnerup, Livestock Division.

AID 1350-1X (9-70)	Cooperating Country	PIO/T No.	Page 5 of 5 Pages
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LOGISTIC SUPPORT

25. Provisions for Logistic Support i. Specific Items (Insert "X" in applicable column at right. If entry needs qualification, insert asterisk and explain below in C. "Comments")	In Kind Supplied By		From Local Currency Supplied By	
	AID	Cooperating Country	AID	Cooperating Country
(1) Office Space				
(2) Office Equipment				
(3) Housing and Utilities				
(4) Furniture				
(5) Household Equipment (Stoves, Refrig., etc.)				
(6) Transportation in Cooperating Country				
(7) Interpreter Services				
Other: (8)				
(Specify) (9)				
(10)				
(11)				
(12)				
(13)				
(14)				
(15)				

B. Additional Facilities Available From Other Sources

Technical backstop will be provided by the BSWF Denver Wildlife Center utilizing PASA funds and regular budget resources.

PLAN OF WORK

The vampire bats which attack and feed on the blood of man and animals are found in most of Mexico, Central America, South America and the island of Trinidad. Annual losses attributed to vampire bat-transmitted rabies in Latin America are estimated at one-half million head for bovines, and about 2 million head for all livestock. In addition, loss of blood and secondary infection further contribute to economic loss, estimated by FAO/PAHO as \$250,000,000 each year.

In just 5 years, a team of biologists, starting with the most basic information, developed a solution to a problem that has plagued man for centuries. During the next 2 years, as we move from the flow of research success into the realities of application, we will test the limits of the procedures that have been developed. No wildlife problem that covers approximately one-eighth of the earth's land surface can be thought of as a simple problem. Since demonstrations in seven countries have conclusively proved that application of the control technique results in bat bite reduction of 95 to 100 percent, it is possible to present convincing testimony to develop control in other areas.

The demonstrated level of control will, if carried out in an organized program in bat infested areas, reduce losses in amounts indicated above. In several instances it has been documented that cattlemen were able to repay livestock development loans in situations where there had been a previous record of frequent default. This program can also be incorporated in other on-going animal health projects. The combined protection of animals against this and other diseases will result in increases in cattle productivity of 15 to 25 percent. The extension of these programs can be extended to wide areas of Latin America within a year and a half. The limiting factors in complete delivery throughout Latin America relate to time required for training and in organizing a fully qualified field personnel. The utilization research funding will play an important role in accelerating the acceptance and implementation of this research.

General Technical Assistance

In addition to the General Technical Assistance required for most effective application of the method, several studies were started or proposed during FY-1974 that will be continued during FY-1975. A study was started in Nicaragua to assess the effect of vampire bat control on weight changes and other secondary losses in beef cattle. A study was launched in Ecuador to assess the effect of vampire bat control on bovine milk production and is continuing. A similar study is planned for Colombia. These studies will be conducted in cooperation with the Section of Supporting Sciences at Denver.

Utilization Plan

The national vampire bat control program started in Nicaragua in FY-1974 will provide the model for work in other Latin American countries. Initial contacts and arrangements for assistance have been made for most of the Central American countries as well as Ecuador, Bolivia, and Colombia. Follow-up programs will be developed in these countries as rapidly as their responsible agencies can acquire support. Other country programs will be started depending upon available time and country interest. This work will be the primary concern of Dr. G.C. Mitchell. A program has been started in Brazil and will be continued during FY-1975; Mr. R.J. Burns will assist the Government of Brazil in planning a national vampire bat research and control campaign. It is the goal of this project to have self-sustaining in-country programs within the next 2 years.

The Inter-American Development Bank is interested in developing a program in Bolivia, and the Regional Representative has been in contact with PASA personnel in preliminary planning for an extensive program in two major livestock raising areas.

The project will provide 18 months of advisory services to Latin American countries in the development of national programs. Plans are being developed for a comprehensive economic analysis of the three-year program funded by the Nicaraguan Government. This project will require statistical and computer input available from AID/W and the Denver Wildlife Research Center. It is anticipated that the results of this economic analysis may be extrapolated for use in other countries.

Steps have been taken to establish linkages with the International Lending Agencies' Livestock Development Loan Programs and teams from AID/W and PASA technical personnel are being scheduled to make suitable contacts with government officials, national lending agencies and cattlemen's associations in all of the vampire bat-affected countries. The consultations with government officials in all vampire bat infested countries will be completed in November 1974.

AID/W and the PASA will make provisions for information materials, limited supplies and equipment, and continuing advisory services to initiate new programs in all the Latin American-affected areas.

The planning has taken into consideration effect on income distribution since meat and livestock products are major sources of foreign exchange in the Latin American LDCs. The livestock industry is also a major sector in employment generation, particularly in the processing and marketing areas. Livestock is extremely important to small farmers in terms of draft power, food by-products for family consumption and occasional sale of surplus stock. The loss of a single animal to a small producer is often disastrous.

One consultant under the contract will provide assistance in organization and development of demonstration programs in Latin America during the course of one month. His international travel and per diem are provided under the contract.

SPECIAL PROVISIONS

REPORTS

A. The following reports shall be submitted to the TA/AGR Research Specialist as stated in B below.

Quarterly progress report and a final report for each country assisted will be sent in five copies to AID project manager in TA/AGR. One copy of each such report will be sent to the AID PASA Officer.

B. The AID/Research Specialist is: Dr. Nels Konnerup
Technical Assistance Bureau
Office of Agriculture
Agency for International Development
Washington, D.C. 20523

General Program questions can be addressed to:

Mr. Ryland Holmes, Chief
Program Division
Technical Assistance Bureau
Office of Agriculture
Agency for International Development
Washington, D.C. 20523

C. Miscellaneous

Prior to making any visits to LDCs the Contractor will review his plans with TA/AGR. He will keep AID Missions in countries to be visited, fully informed of proposed visits, and ask them to provide any advice they wish regarding timing and content of the visits and to participate if they desire. He will make his own appointments and logistics arrangements directly. Upon completion of any project funded travel, a copy of the trip report will be provided to the TA/AGR Project Manager. The report format will be established jointly by the Contractor and the Project Manager.

BUDGET ESTIMATES

	FY-1976	*TO	FY-1977	FY-1978
Personnel	\$32,000 (16MM)		\$36,000 (17MM)	\$40,000 (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	<u>\$79,300</u>		<u>\$84,000</u>	<u>\$95,000</u>

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

PLAN OF WORK STATEMENT*

DENVER-BASED

4p

TDY - Vampire Bats

This activity concentrates on application of successful research findings. There is also need for a program of adaptive research to refine the procedures and correct deficiencies.

Research

In addition to the adaptive research required for most effective utilization, several studies started or proposed during FY 1976 will be continued or initiated during the interim quarter. Feasibility studies are being initiated for a new drug application with FDA for registration of Diphenadione for vampire bat control in Latin America. Proposed research includes developing methodology to apply Diphenadione to control vampire bat predation on swine and developing a method to assess the overall effectiveness of the vampire bat control program. Studies are conducted in cooperation with the Section of Supporting Sciences at Denver.

Utilization

The national vampire bat control program started in Nicaragua in FY 1974 has been the model for work in other Latin American countries. Initial contacts and arrangements for assistance have been made in most of the Latin American countries. Follow-up programs are being developed as rapidly as responsible country agencies can acquire support. This work will be the primary concern of Dr. G. Clay Mitchell. A large control program has been started in Brazil, and it is anticipated a U.S. Fish and Wildlife Service member will assist Brazil in this program during the interim quarter.

It is the goal of this project to develop self-sufficiency within the Latin American Community, with an interdependency on countries like Nicaragua, for the time when AID involvement ceases.

*Basically the same narrative as FY-76--only slight revisions.

PLAN OF WORK STATEMENT

DENVER-BASED

TDY - Vampire Bats

Vampire bats which attack and feed on the blood of man and animals are found in most of Mexico, Central America, South America, and the island of Trinidad. Annual losses attributed to vampire bat-transmitted rabies in Latin America are estimated at one-half million head for bovines, and about 2 million head for all livestock. In addition, loss of blood and secondary infection further contribute to economic loss, estimated by FAO/PAHO as \$250 million each year.

In just 5 years, a team of biologists, starting with the most basic information, developed a solution to a problem that has plagued man for centuries. During the next 2 years, as we move into the realities of application, we will test the limits of the procedures that have been developed. No wildlife problem that covers approximately one-eighth of the earth's land surface can be thought of as a simple problem. Since demonstrations in most of the affected countries have conclusively proven that application of the control technique results in bat bite reduction of 95 to 100 percent, it is possible to present convincing testimony to develop control in other areas by this project and other organizations.

The demonstrated level of control will, if carried out in an organized program in bat-infested areas, reduce losses in amounts indicated above. In several instances it has been documented that cattlemen were able to repay livestock development loans in situations where there had been a previous record of frequent default. This program can also be incorporated in other on-going animal health projects as shown in Brazil where it is incorporated in the hoof-and-mouth disease program. The combined protection of animals against this and other diseases will result in increases in cattle productivity. Also, as shown in Nicaragua, where paralytic rabies has been eliminated by controlling vampire bat populations, this eliminates the need of inoculating cattle with expensive antirabies vaccines. The extension of these programs can be extended to wide areas of Latin America within 2 years. The limiting factors in complete delivery throughout Latin America relate to time required for training and in organizing a fully qualified field personnel. The utilization research funding will play an important role in accelerating the acceptance and implementation of this research.

General Technical Assistance

In addition to the General Technical Assistance required for most effective application of the method, research efforts will be continued.

to answer questions in attempt to getting greater acceptance of the control methods in Latin America. A yearlong study will be started in Nicaragua to assess the effect of vampire bat control on weight changes and other secondary losses in beef cattle. Laboratory work, when deemed necessary, will be done at the DWRC as a part of getting a new drug application from FDA for the control compound. Presently, the control compound can only be applied under experimental conditions in the United States and Latin American nationals are reluctant to apply methodology which has restricted use in the U.S. A new drug application permit means the control compound could be used in the U.S. if the need arose. Unlike pesticides, all new animal drugs must be registered with FDA prior to exportation as specified in Chapter VIII, Section 801(d)(3) of the Food, Drug, and Cosmetic Act. These studies will be conducted in cooperation with the Section of Supporting Sciences at Denver.

Utilization Plan

The national vampire bat control program started in Nicaragua in FY 1974 will provide the model for work in other Latin American countries. Initial contacts and arrangements for assistance have been made for most of the Central American countries as well as Ecuador, Bolivia, and Colombia. Follow-up programs will be developed in these countries as rapidly as their responsible agencies can acquire support. Other country programs will be started depending upon available time and country interest. This work will be the primary concern of Dr. G. C. Mitchell. It is the goal of this project to have self-sustaining, in-country programs within the next 2 years.

The Inter-American Development Bank is interested in developing a program in Bolivia, and the Regional Representative has been in contact with PASA personnel in preliminary planning for an extensive program in two major livestock raising areas. Personnel from Nicaragua will assist Bolivia to implement an active control program. This should develop an interdependency among the Latin American community which will create a self-sufficiency when AID support is removed.

The project will provide 2 years of advisory services to Latin American countries in the development of national programs. Plans are being developed for a comprehensive economic analysis of the 2-year program funded by the Nicaraguan Government. This project will require statistical and computer input available from AID/W and the Denver Wildlife Research Center. It is anticipated that the results of this economic analysis may be extrapolated for use in other countries.

AID/W and the PASA will make provisions for information materials, limited supplies and equipment, and continuing advisory and consultation services to initiate new programs in all the Latin American affected areas. One consultant will provide assistance in organization and development of demonstration programs in Latin America during the course of 1 month. His international travel and per diem are provided under PASA ID/TAB-000-10-76.

The planning has taken into consideration effect on income distribution since meat and livestock products are major sources of foreign exchange in the Latin American LDCs. The livestock industry is also a major sector in employment generation, particularly in the processing and marketing areas. Livestock is extremely important to small farmers in terms of draft power, food byproducts for family consumption and occasional sale of surplus stock. The loss of a single animal to a small producer is often disastrous.

Contract 0

9310094
FD-222-572
374

1. INITIAL STARTING DATE (Mo., Day, Yr.) July 1, 1975	PASA PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND The U.S. Department of Interior Fish and Wildlife Service	6. <input checked="" type="checkbox"/> PASA ORIGINAL (5) <input type="checkbox"/> PASA AMENDMENT
2. PROJECTED COMPLETION DATE (Mo., Day, Yr.) June 30, 1977		7. PASA NUMBER ID/TAB-000-10-76 7p
3. CATEGORY [] IND [X] ASSIGNMENT		8. COUNTRY/AID/W OFFICE Worldwide
4. DURATION OF FUNDING <input checked="" type="checkbox"/> CURRENT YEAR <input type="checkbox"/> FORWARD FUNDING	5. PROJECT NO. AND TITLE Applied Control of Vampire Bats	9. TYPE <input type="checkbox"/> REIM. <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> LOAN
		10. YEAR FY 19 76

11. FUNDING				
A. CITATIONS	(1) APPROPRIATION NO. 72-11X1023	(2) ALLOTMENT NO. 402-31-099-00-20-61	(3) PIO/T/OBLIGATION NO. 931-11-190-094-73-3168618	
B. AMOUNT	(1) INITIAL OR CURRENT \$79,300	(2) CHANGE (+ OR -)	(3) NEW TOTAL	
C. TOTAL PROJECT COSTS	(1) PRIOR YEARS (FOR CONTINUOUS PROJECTS) ---	(2) FUTURE YEARS (INCLUDE CURRENT FUNDING-BLOCKS B(1) OR B(3)) \$277,300	(3) ESTIMATED TOTAL \$277,300	
D. PRINCIPAL COST COMPONENTS (BLOCK B)	(1) SALARIES, DIFFERENTIAL AND BENEFITS \$47,012	(2) TRANSPORTATION INCLUDING PER DIEM \$13,634	(3) MISCELLANEOUS \$10,679	(4) OVERHEAD \$7,975
E. SUPPLEMENTAL AID SUPPORT	(1) INITIAL OR CURRENT	(2) CHANGE (+ OR -)	(3) NEW TOTAL	

12. STATEMENT OF PURPOSE

A. Summary Description

The purpose of this PASA is to provide assistance to selected Latin American countries in their campaign to eliminate vampire bats so as to improve livestock production by reducing infection and death losses.

Specifically, the Denver Wildlife Research Center will:

1. Assist interested Latin American countries to develop indigenous capability to control vampire bats.
2. Integrate latest technical data and procedures into the control programs.

(continued)

13. GOVERNING PROVISIONS: PURSUANT TO THE GENERAL AGREEMENT DATED April 5, 1967 BETWEEN AID AND THE Dept. of Interior, THE AGENCY NAMED ABOVE AGREES TO PROVIDE THE SERVICES OUTLINED IN BLOCK 12 AMPLIFIED AS NEEDED BY APPENDIX A UNLESS OTHERWISE AUTHORIZED BY AID, ALL SERVICES SHALL BE OF U.S. ORIGIN. ANY APPENDICES ATTACHED HERETO ARE CONSIDERED PART OF THIS PASA.

14. SIGNATURES	
NAME: <u><i>William B. Kvernes</i></u>	NAME: <u><i>J. William Miller</i></u>
TITLE/OFFICE: <u>Acting Deputy Associate Director-Research</u>	TITLE/OFFICE: <u>CHIEF, PARTICIPATING AGENCY BRANCH CONTRACT MANAGEMENT, AID</u>
DATE: <u>JUN 21 1976</u>	DATE: <u>JUN 21 1976</u>

15. APPENDICES <input checked="" type="checkbox"/> APPENDIX A - SCOPE OF WORK <input checked="" type="checkbox"/> APPENDIX B - BUDGET PLAN <input type="checkbox"/> OTHER/REFERENCE	16. NEGOTIATING OFFICERS AID: <u>WFM</u> CM/SOD/PAS:WFMiller AGENCY: <u>INT/DWRC:JDeGrazio</u> (Cleared by phone 6/1)
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APPENDIX A SCOPE OF WORK Page <u>2</u> of <u>4</u>	PARTICIPATING AGENCY SERVICE AGREEMENT Between THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND The U.S. Department of Interior Fish and Wildlife Service	<input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> AMEND NO.
		PASA No. ID/TAB-000-10-76
		FISCAL YEAR 1976

3. Provide on-the-job training for LDC participants when conditions indicate a need for training.

4. Evaluate effectiveness of programs in terms of results and the ability of country teams to operate without AID assistance within three years.

B. Background

The vampire bats which attack and feed on the blood of man and animals are found in most of Mexico, Central America, South America and the island of Trinidad. Annual losses attributed to vampire bat-transmitted rabies in Latin America are estimated at one-half million head for bovines, and about 2 million head for all livestock. In addition, loss of blood and secondary infection further contribute to economic loss, estimated by FAO/PAHO as \$250,000,000 each year.

In just 5 years, a team of biologists, starting with the most basic information, developed a solution to a problem that has plagued man for centuries. During the next 2 years, as we move from the flow of research success into the realities of application, we will test the limits of the procedures that have been developed. No wildlife problem that covers approximately one-eighth of the earth's land surface can be thought of as a simple problem. Since demonstrations in seven countries have conclusively proved that application of the control technique results in bat bite reduction of 95 to 100 percent, it is possible to present convincing testimony to develop control in other areas.

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In conjunction with the Denver Wildlife Research Center (DWRC) studies have been started in Nicaragua to assess the effect of vampire bat control on weight changes and other secondary losses in beef cattle; in Ecuador and Colombia to assess the effect of vampire bat control on bovine milk production.

C. Plan of Work

The national vampire bat control program started in Nicaragua in FY-1974 will provide the model for work in other Latin American countries. Initial contacts and arrangements for assistance have been made for most of the Central American

(continued)

<p>APPENDIX A SCOPE OF WORK Page <u>3</u> of <u>4</u></p>	<p>PARTICIPATING AGENCY SERVICE AGREEMENT Between THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND The U.S. Department of Interior Fish and Wildlife Service</p>	<p><input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> AMEND NO. NO. PASA No. ID/TAB-000-10-76 FISCAL YEAR 1976</p>
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countries as well as Ecuador, Bolivia, and Colombia. Follow-up programs will be developed in these countries as rapidly as their responsible agencies can acquire support. Other country programs will be started depending upon available time and country interest. This work will be the primary concern of Dr. G. C. Mitchell (DWRC). A program has been started assisting the Government of Brazil in planning a national vampire bat research and control campaign. It is the goal of this project to have self-sustaining in-country programs within the next 2 years.

The Inter-American Development Bank is interested in developing a program in Bolivia, and the Regional Representative has been in contact with PASA personnel in preliminary planning for an extensive program in two major livestock raising areas.

It is expected this PASA will provide 18 months of advisory services to selected Latin American countries in the development of national programs. Plans are being developed for a comprehensive economic analysis of the three-year program funded by the Nicaraguan Government. This project will require statistical and computer input available from AID/W and the Denver Wildlife Research Center. It is anticipated that the results of this economic analysis may be extrapolated for use in other countries.

Steps have been taken to establish linkages with the International Lending Agencies' Livestock Development Loan Programs and teams from AID/W and PASA technical personnel are being scheduled to make suitable contacts with government officials, national lending agencies and cattlemen's associations in all of the vampire bat-affected countries.

AID/W and the PASA will make provisions for information materials, limited supplies and equipment, and continuing advisory services to initiate new programs in all the Latin American-affected area.

The planning has taken into consideration effect on income distribution since meat and livestock products are major sources of foreign exchange in the Latin American LDCs. The livestock industry is also a major sector in employment generation, particularly in the processing and marketing areas. Livestock is extremely important to small farmers in terms of draft power, food by-products for family consumption and occasional sale of surplus stock. The loss of a single animal to a small producer is often disastrous.

One consultant under this PASA will provide assistance in organization and development of demonstration programs in Latin America during the course of one month.

SPECIAL PROVISIONS

REPORTS

A. The following reports shall be submitted to the TA/AGR Research Specialist as stated in B below.

Quarterly progress report and a final report for each country assisted will be sent in five copies to AID project manager in TA/AGR. One copy of each such report will be sent to the AID PASA Officer, William F. Miller, CM/SOD/PAS.

B. The AID/Research Specialist is: Dr. Nels Konnerup
Technical Assistance Bureau
Office of Agriculture
Agency for International Development
Washington, D.C. 20523

General Program questions can be addressed to:

Mr. Ryland Holmes, Chief
Program Division
Technical Assistance Bureau
Office of Agriculture
Agency for International Development
Washington, D.C. 20523

C. Miscellaneous

Prior to making any visits to LDCs the DWRC will review travel plans with TA/AGR and receive authorization from CM/SOD/PAS. Missions in countries to be visited will be kept fully informed of proposed visits, and asked to provide any advice regarding timing and content of the visits and to participate if they desire. PASA personnel will make their own appointments and logistics arrangements directly to the extent possible. Upon completion of any project funded travel, a copy of the trip report will be provided to the TA/AGR Project Manager. The report format will be established jointly by the DWRC and the Project Manager.

VAMPIRES FY-76

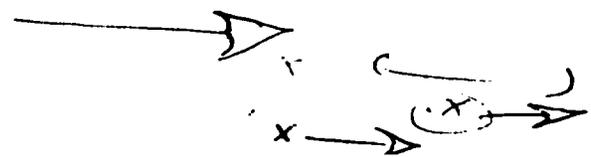
BUDGET PLAN APPENDIX B PAGE ___ OF ___	PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND BUDGET PLAN FOR FY 1976	1. PASA NO.	2. AMENDMENT NO.	3. FISCAL YEAR
		4. APPROPRIATION 72-	5. ALLOTMENT	6. AMOUNT \$79,300

Position	Class. Grade	Rate	Pay Periods	Salary	TOTAL	Personnel Benefits	Int'l.* Travel	Transpor- tation of Things	TOTAL
G. C. Mitchell	GS-13/4	\$24,815	26.1	\$24,815	\$24,815	\$2,109	\$5,617		\$32,541
J. W. De Grazio	GS-13/4	24,815	8.0	7,602	7,602	646			8,248
D. J. Scott	GS-5/9	11,069	9.0	3,834	3,834	326			4,160
D. J. Elias			0.0				717		717
DWRC Personnel (4 professionals)			0.0				2,800 ¹		2,800
Livestock Constultant (E. Shuart)			0.0	7,680			4,500		12,180
		60 days →							
			Total	43,931		3,081	13,634		60,646

¹ Vampire bat conference - Nicaragua

24 Printing and Reproduction	1,000
26 Supplies and Materials	7,890
31 Equipment	1,410
Overhead 22% (of GS salaries)	7,975
GRAND TOTAL	\$79,300

*Estimated Per Diem



EXPENSE DETAILS

Latin America - Vampire Bats

	<u>Travel</u>	<u>Expenses & P.D.</u>	<u>Total</u>
Item 21 - Travel			
<u>G. C. Mitchell</u>			
Washington, D.C. (3 trips)	826	285	1,111
California	125	233	358
Latin America (4 trips)	<u>2,110</u>	<u>1,938</u>	<u>4,048</u>
Subtotal	3,151	2,466	5,617
 <u>DWRC Personnel</u>			
C. M. Loveless, R. D. Thompson, D. J. Elias, R. W. Bullard			
Nicaragua	1,900	900	2,800 ¹
 <u>D. J. Elias</u>			
Nicaragua	455	262	717
 <u>Livestock Consultant</u>			
E. Shuart			
Latin America (2 trips)	<u>2,077</u>	<u>2,423</u>	<u>4,500</u>
Denver (1 trip)			
Subtotals	7,583	6,051	13,634

¹Vampire bat conference - Nicaragua

Item 24 - Printing and Reproduction		\$ 1,379
Item 26 - Supplies and Materials		
Chemical (Diphenadione) for demonstrations and training		1,900
Syrings sets (17 @ \$70)		1,190
Miscellaneous supplies and materials		1,950
Vitamin K and toxicity studies to meet new drug application		<u>2,850</u>
	Subtotal	7,890
Item 31 - Equipment		1,410
	GRAND TOTAL	\$24,313

1. INITIAL STARTING DATE (Mo., Day, Yr.) July 1, 1975		PASA PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND The U.S. Department of Interior Fish and Wildlife Service		6. <input type="checkbox"/> PASA ORIGINAL <input checked="" type="checkbox"/> PASA AMENDMENT <u>1</u>	
2. PROJECT COMPLETION DATE (Mo., Day, Yr.) June 30, 1977				7. PASA NUMBER ID-TAB-000-10-76 (4)	
3. CATEGORY <input type="checkbox"/> TDY <input checked="" type="checkbox"/> ASSIGNED				8. COUNTRY/AID/W OFFICE WORLDWIDE	
4. DURATION OF FUNDING <input checked="" type="checkbox"/> CURRENT YEAR <input type="checkbox"/> FORWARD FUNDING		5. PROJECT NO. AND TITLE 931-11-190-094 Applied Control of Vampire Bats		9. TYPE <input type="checkbox"/> REIM. <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> LOAN	
10. YEAR TQ FY 1976					
11. FUNDING					
A. CITATIONS		(1) APPROPRIATION NO. 72-11X1023	(2) ALLOTMENT NO. 402-31-099-00-20-51	(3) PIO/T/OBLIGATION NO. 931-11-190-094-72-31186	
B. AMOUNT		(1) CURRENT TQ \$19,000	(2) CHANGE (+ OR -)	(3) NEW TOTAL \$19,000	
C. TOTAL PROJECT COSTS		(1) PRIOR YEARS (FOR CONTINUOUS PROJECTS) FY76 \$79,300	(2) FUTURE YEARS (INCLUDE CURRENT FUNDING BLOCKS B(1) OR B(3))	(3) ESTIMATED TOTAL	
D. PRINCIPAL COST COMPONENTS (BLOCK B)		(1) SALARIES, DIFFERENTIAL AND BENEFITS \$10,172	(2) TRANSPORTATION INCLUDING PER DIEM \$5160	(3) MISCELLANEOUS \$1627	(4) OVERHEAD \$2,238
E. SUPPLEMENTAL AID SUPPORT		(1) INITIAL OR CURRENT	(2) CHANGE (+ OR -)	(3) NEW TOTAL	

12. STATEMENT OF PURPOSE

A. Summary Description

The purpose of this PASA is to provide assistance to selected Latin American countries in their campaign to eliminate vampire bats so as to improve live-stock production by reducing infection and death losses.

This PASA amendment provides funds for the Transitional Quarter as outlined in the attached budget plan. The Plan of Work Statement is basically the same as FY76. The attached statement indicates only slight revisions. All other provisions in the original PASA remain unchanged.

13. GOVERNING PROVISIONS: PURSUANT TO THE GENERAL AGREEMENT DATED April 9, 1967 BETWEEN AID AND THE Dept of Interior, THE AGENCY NAMED ABOVE AGREES TO PROVIDE THE SERVICES OUTLINED IN BLOCK 12 AMPLIFIED AS NEEDED BY APPENDIX A UNLESS OTHERWISE AUTHORIZED BY AID. ALL SERVICES SHALL BE OF U.S. ORIGIN. ANY APPENDICES ATTACHED HERETO ARE CONSIDERED PART OF THIS PASA.

14. SIGNATURES

NAME: Richard W. Smith
 TITLE/OFFICE: Acting DAIT
 DATE: 8/16/76

NAME: William F. Miller
 TITLE/OFFICE: CHIEF, PARTICIPATING AGENCY BRANCH CONTRACT MANAGEMENT, AID
 DATE: AUG 11 1976

15. APPENDICES

- APPENDIX A - SCOPE OF WORK
- APPENDIX B - BUDGET PLAN
- OTHER/REFERENCE

16. NEGOTIATING OFFICERS

AID: CM/PAS:WFMiller
 AGENCY: INT/DWRC:JDeGrazio John V. DeGrazio

PLAN OF WORK STATEMENT

DENVER-BASED

TDY - Vampire Bats

This activity concentrates on application of successful research findings. There is also need for a program of adaptive research to refine the procedures and correct deficiencies.

Research

In addition to the adaptive research required for most effective utilization, several studies started or proposed during FY 1976 will be continued or initiated during the interim quarter. Feasibility studies are being initiated for a new drug application with FDA for registration of Diphenadione for vampire bat control in Latin America. Proposed research includes developing methodology to apply Diphenadione to control vampire bat predation on swine and developing a method to assess the overall effectiveness of the vampire bat control program. Studies are conducted in cooperation with the Section of Supporting Sciences at Denver.

Utilization

The national vampire bat control program started in Nicaragua in FY 1974 has been the model for work in other Latin American countries. Initial contacts and arrangements for assistance have been made in most of the Latin American countries. Follow-up programs are being developed as rapidly as responsible country agencies can acquire support. This work will be the primary concern of Dr. G. Clay Mitchell. A large control program has been started in Brazil, and it is anticipated a U.S. Fish and Wildlife Service member will assist Brazil in this program during the interim quarter.

It is the goal of this project to develop self-sufficiency within the Latin American Community, with an interdependency on countries like Nicaragua, for the time when AID involvement ceases.

*Basically the same narrative as FY-76--only slight revisions.

TRANSITIONAL QUARTER

VOL. 085
SUBJECT

76 \$19,000 rounded

PASA BUDGET PLAN By Object Class	PARTICIPATING AGENCY SERVICE AGREEMENT WITH BUDGET PLAN FOR FY 1976	ACCOUNT	\$19,197	PASA CONTROL NO.	ID/TAB-000-10-76
		APPROPRIATION		PICT NO.	931-11-190-09472-3118607
Object Class		ALLOTMENT			

Position	Class Grade	FC Grade	Rate	Pay Periods	Salary	TOTAL	Personnel Benefits	Int'l. Travel	Transportation of Things	TOTAL
<u>Biologist</u>										
C. Mitchell	GS-13/4		25,198	6.6	6,395	6,395	607	2,660		9,662
<u>Biologist</u>										
W. De Grazio	GS-13/4		25,198	2.0	1,938	1,938	184			2,122
<u>Secretary and Program Assistant</u>										
J. Scott	GS-5/9		11,309	2.2	957	957	91	350 ¹		1,398
<u>Biologist</u>										
				0				2,150 ²		2,150
TOTAL					9,290		882	5,160		15,332

1 Travel to Washington, D.C.

2 One trip to Brazil

22 Transportation of Things	150
24 Printing and Reproduction	250
26 Supplies and Materials	1,025
31 Equipment	202
Overhead 22%	2,238
(Includes salary and benefits)	

Rounded \$19,197
\$19,000

EXPENSE DETAILS

Empire Bats - Latin America

Item 21 - Travel	<u>Travel</u>	<u>Expenses & Per Diem</u>	<u>Total</u>
<u>G. C. Mitchell</u>			
Latin America (open 2 trips)	1,275	1,050	2,325
Atlanta (September - conference)	230	105	335
<u>D. J. Scott</u>			
Washington, D.C. (open)	240	110	350
<u>Biologist</u>			
Latin America (Brazil - open)	<u>1,250</u>	<u>900</u>	<u>2,150</u>
Subtotal	2,995	2,165	5,160
Item 22 - Transportation of Things			
Ship miscellaneous equipment and supplies to Latin America			150
Item 24 - Printing and Reproduction			
			250
Item 26 - Supplies and Materials			
Chemical (Diphenadione) for demonstrations and training			425
Syringe sets (5 @ \$70)			250
Miscellaneous supplies and materials			<u>350</u>
		Subtotal	1,025
Item 31 - Equipment			
			<u>202</u>
		GRAND TOTAL	6,787

9310094-0
 10-ALL-572
 379

Contract 1

1. INITIAL STARTING DATE (Mo., Day, Yr.) July 1, 1975	PASA PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND The U.S. Department of Interior Fish and Wildlife Service	6 <input type="checkbox"/> PASA ORIGINAL <input checked="" type="checkbox"/> PASA AMENDMENT <u>2</u>
2. PROJECTED COMPLETION DATE (Mo., Day, Yr.) September 30, 1977		7. PASA NUMBER ID-TAB-000-10-76 <i>6p</i>
3. CATEGORY <input type="checkbox"/> TDY <input checked="" type="checkbox"/> ASSIGNED	5. PROJECT NO. AND TITLE 931-11-190-094 Applied Control of Vampire Bats	8. COUNTRY/AID/W OFFICE WORLDWIDE
4. DURATION OF FUNDING <input checked="" type="checkbox"/> CURRENT YEAR <input checked="" type="checkbox"/> FORWARD FUNDING		9. TYPE <input type="checkbox"/> REIM. <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> LOAN
		10. YEAR TO - 77 FY 19

11. FUNDING			
A. CITATIONS	(1) APPROPRIATION NO. 72-11X1023	(2) ALLOTMENT NO. 402-31-099-00-20-51	(3) PIO/T/OBLIGATION NO. 931-11-190-094-72-3118607
B. AMOUNT	(1) INITIAL OR CURRENT \$19,000 (TQ)	(2) CHANGE (+ OR -) +\$84,000 (FY 77)	(3) NEW TOTAL \$103,000
C. TOTAL PROJECT COSTS	(1) PRIOR YEARS (FOR CONTINUOUS PROJECTS) FY-76 \$ 79,300	(2) FUTURE YEARS (INCLUDE CURRENT FUNDING-BLOCKS B(1) OR B(3))	(3) ESTIMATED TOTAL
D. PRINCIPAL COST COMPONENTS (BLOCK B)	(1) SALARIES, DIFFERENTIAL AND BENEFITS \$52,641	(2) TRANSPORTATION INCLUDING PER DIEM \$19,974	(3) MISCELLANEOUS \$18,804
E. SUPPLEMENTAL AID SUPPORT	(1) INITIAL OR CURRENT	(2) CHANGE (+ OR -)	(3) NEW TOTAL \$11,581

12. STATEMENT OF PURPOSE

A. Summary Description

The purpose of this PASA is to provide assistance to selected Latin American Countries in their campaign to eliminate vampire bats so as to improve livestock production by reducing infection and death losses.

This PASA amendment provides funds for Fiscal Year 1977 as outlined in the attached budget plan. Budget details and Plan of Work Statement are attached. All other provisions in the original PASA remain unchanged.

13. GOVERNING PROVISIONS: PURSUANT TO THE GENERAL AGREEMENT DATED April 9, 1967 BETWEEN AID AND THE Dept. of Interior, THE AGENCY NAMED ABOVE AGREES TO PROVIDE THE SERVICES OUTLINED IN BLOCK 12 AMPLIFIED AS NEEDED BY APPENDIX A UNLESS OTHERWISE AUTHORIZED BY AID, ALL SERVICES SHALL BE OF U.S. ORIGIN. ANY APPENDICES ATTACHED HERETO ARE CONSIDERED PART OF THIS PASA.

14. SIGNATURES

NAME: <u>Alvin B. Hoover</u>	NAME: <u>J. William Auer</u>
TITLE/OFFICE: <u>Chief, Division of Population Regulation Research, USFWS</u>	TITLE/OFFICE: <u>CHIEF, PARTICIPATING AGENCY BRANCH CONTRACT MANAGEMENT, AID</u>
DATE: <u>9-23-76</u>	DATE: <u>SEP 22 1976</u>

15. APPENDICES <input checked="" type="checkbox"/> APPENDIX A - SCOPE OF WORK <input checked="" type="checkbox"/> APPENDIX B - BUDGET PLAN <input type="checkbox"/> OTHER/REFERENCE	16. NEGOTIATING OFFICERS AID: <u>CM/SOD/PAS:WFMiller</u> AGENCY: <u>INT/DWRC:JWDeGrazio</u>
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PLAN OF WORK STATEMENT

DENVER-BASED

TDY - Vampire Bats.

Vampire bats which attack and feed on the blood of man and animals are found in most of Mexico, Central America, South America, and the island of Trinidad. Annual losses attributed to vampire bat-transmitted rabies in Latin America are estimated at one-half million head for bovines, and about 2 million head for all livestock. In addition, loss of blood and secondary infection further contribute to economic loss, estimated by FAO/PAHO as \$250 million each year.

In just 5 years, a team of biologists, starting with the most basic information, developed a solution to a problem that has plagued man for centuries. During the next 2 years, as we move into the realities of application, we will test the limits of the procedures that have been developed. No wildlife problem that covers approximately one-eighth of the earth's land surface can be thought of as a simple problem. Since demonstrations in most of the affected countries have conclusively proven that application of the control technique results in bat bite reduction of 95 to 100 percent, it is possible to present convincing testimony to develop control in other areas by this project and other organizations.

The demonstrated level of control will, if carried out in an organized program in bat-infested areas, reduce losses in amounts indicated above. In several instances it has been documented that cattlemen were able to repay livestock development loans in situations where there had been a previous record of frequent default. This program can also be incorporated in other on-going animal health projects as shown in Brazil where it is incorporated in the hoof-and-mouth disease program. The combined protection of animals against this and other diseases will result in increases in cattle productivity. Also, as shown in Nicaragua, where paralytic rabies has been eliminated by controlling vampire bat populations, this eliminates the need of innoculating cattle with expensive antirabies vaccines. The extension of these programs can be extended to wide areas of Latin America within 2 years. The limiting factors in complete delivery throughout Latin America relate to time required for training and in organizing a fully qualified field personnel. The utilization research funding will play an important role in accelerating the acceptance and implementation of this research.

General Technical Assistance

In addition to the General Technical Assistance required for most effective application of the method, research efforts will be continued

to answer questions in attempt to getting greater acceptance of the control methods in Latin America. A yearlong study will be started in Nicaragua to assess the effect of vampire bat control on weight changes and other secondary losses in beef cattle. Laboratory work, when deemed necessary, will be done at the DWRC as a part of getting a new drug application from FDA for the control compound. Presently, the control compound can only be applied under experimental conditions in the United States and Latin American nationals are reluctant to apply methodology which has restricted use in the U.S. A new drug application permit means the control compound could be used in the U.S. if the need arose. Unlike pesticides, all new animal drugs must be registered with FDA prior to exportation as specified in Chapter VIII, Section 801(d)(3) of the Food, Drug, and Cosmetic Act. These studies will be conducted in cooperation with the Section of Supporting Sciences at Denver.

Utilization Plan

The national vampire bat control program started in Nicaragua in FY 1974 will provide the model for work in other Latin American countries. Initial contacts and arrangements for assistance have been made for most of the Central American countries as well as Ecuador, Bolivia, and Colombia. Follow-up programs will be developed in these countries as rapidly as their responsible agencies can acquire support. Other country programs will be started depending upon available time and country interest. This work will be the primary concern of Dr. G. C. Mitchell. It is the goal of this project to have self-sustaining, in-country programs within the next 2 years.

The Inter-American Development Bank is interested in developing a program in Bolivia, and the Regional Representative has been in contact with PASA personnel in preliminary planning for an extensive program in two major livestock raising areas. Personnel from Nicaragua will assist Bolivia to implement an active control program. This should develop an interdependency among the Latin American community which will create a self-sufficiency when AID support is removed.

The project will provide 2 years of advisory services to Latin American countries in the development of national programs. Plans are being developed for a comprehensive economic analysis of the 2-year program funded by the Nicaraguan Government. This project will require statistical and computer input available from AID/W and the Denver Wildlife Research Center. It is anticipated that the results of this economic analysis may be extrapolated for use in other countries.

AID/W and the PASA will make provisions for information materials, limited supplies and equipment, and continuing advisory and consultation services to initiate new programs in all the Latin American affected areas. One consultant will provide assistance in organization and development of demonstration programs in Latin America during the course of 1 month. His international travel and per diem are provided under PASA ID/TAB-000-10-76.

The planning has taken into consideration effect on income distribution since meat and livestock products are major sources of foreign exchange in the Latin American LDCs. The livestock industry is also a major sector in employment generation, particularly in the processing and marketing areas. Livestock is extremely important to small farmers in terms of draft power, food byproducts for family consumption and occasional sale of surplus stock. The loss of a single animal to a small producer is often disastrous.

O-2-3 (6-64) PASA BUDGET PLAN By Object Class	PARTICIPATING AGENCY SERVICE AGREEMENT WITH BUDGET PLAN FOR FY <u>1977</u>	AMOUNT: \$84,000 APPROPRIATION	PASA CONTROL NO. ID/TAB-000-10-76	Page _____ of _____ Pages
		ALLOTMENT	PLOT NO.	

Position	Class. Grade	FC Grade	Rate	Pay. Periods	Salary	11	12	21	22	TOTAL
						TOTAL	Personnel Benefits	Int'l. Travel	Transportation of Things	
<u>Biologist</u>										
G. C. Mitchell	GS-13/4 ¹		26,570	26.1	26,570	26,570	2,524	11,239		40,333
<u>Biologist</u>										
J. W. De Grazio	GS-13/4 ¹		26,570	8.0	8,176	8,176	778	1,100		10,054
<u>Secretary and Program Assistant</u>										
D. J. Scott	GS-5/10		12,064	8.7	4,037	4,037	384			4,421
<u>Biologist</u>				0				1,800		1,800
<u>Physiologist or Biologist</u>				0				675		675
Total					38,783 ²		3,686	14,814		57,283

¹ 1.0 pp GS-13/5
² Includes anticipated 5% salary increase 10/10/76

22 Transportation of Things	850
24 Printing and Reproduction	950
26 Supplies and Materials	14,600
31 Equipment	974
Overhead 22% (Includes salary and personnel benefits)	9,343
GRAND TOTAL	\$84,000

EXPENSE DETAILS

Latin America - Vampire Bats

	<u>Travel</u>	<u>Expenses & P.D.</u>	<u>Total</u>
Item 21 - Travel			
<u>G. C. Mitchell</u>			
Latin America (5 open trips)	5,925	4,974	10,899
Washington, D.C. (1 open trip)	225	115	340
<u>J. W. De Grazio</u>			
Latin America (1 open trip)	650	450	1,100
<u>Biologist</u>			
Latin America (1 open trip)	1,200	600	1,800
<u>Physiologist or Biologist</u>			
Latin America (1 open trip)	<u>500</u>	<u>175</u>	<u>675</u>
Subtotal	8,500	6,314	14,814
 Item 22 - Transportation of Things			
Ship miscellaneous equipment and supplies to Latin America			850
 Item 24 - Printing and Reproduction			
			950
 Item 26 - Supplies and Materials			
Chronic toxicity studies for new drug application			11,000
Chemical (Diphenadione) for demonstrations and training			1,500
Syringe sets for demonstrations and training (10 @ \$75)			750
Miscellaneous supplies and materials			<u>1,350</u>
Subtotal			14,600
 Item 31 - Equipment			
Mist nets, head lamps, etc.			<u>974</u>
TOTAL			32,188

Date:

10p

MEMORANDUM FOR: Members of the Research and Development
Committee

FROM: TA/PPU, Carl R. Fritz

SUBJECT: Approved Project Identification Document

Attached is a copy of a Project Identification Document (PID) which has been approved by the Assistant Administrator for Technical Assistance for project design and the drafting of a Project Paper (PP):

Project Title: Applied Control of Vampire Bats (KPA-5, GTS)

Project Number: 931-11-190-094

Initial FY: 1976

Responsible Office: TA/AGR

If you have any comments, questions or issues which you would like to see addressed in the PP, please send them directly to the responsible office listed above with a copy to TA/PPU. They should be received by that office within two weeks/~~one month~~, so that the comments can be addressed by the drafter.

The draft PP will be submitted to the Research and Development Committee for review and comment. However, we encourage your comments as early in the design process as feasible so that the project can be responsive to Agency concerns.

Attachment: a/s

cc: TA Technical Office

MEMORANDUM

DATE: December 11, 1975

TO : AA/TA, Mr. Curtis Farrar

FROM : TA/PPU, John N. Manning

SUBJECT: PID Clearance

Project Title: Applied Control of Vampire Bats (KPA-5, GTS)

Begins FY 1976.

1. The PID complies with the following AA/TA instructions if the appropriate block is checked. Otherwise, comments are attached.

a. Main points of Program Guidance #3 covered. See attached.

b. AA/TA budget review comments have been incorporated or adequately appealed in the narrative. See attached.

c. Proposed funding is within limits described in TA Bureau FY 76/77 Program Submission to PPC and/or as amended by current OYB. See attached.

d. Dates of PP development, approval and project initiation are realistic and consistent with the Program Submission.

2. This PID has been in TA/PPU and staff work is incomplete because of TA/PPU work pressure, or Tech office work pressure. We recommend you return the PID for further review prior to your final decision.

3. We recommend the following action:

a. Approval

(1) subject to LA Bureau collection

b. Disapproval or delay for reasons specified in attached.

4. AA/TA Action

Approved *ncu*

Subject to Investigation of partial funds from non-TOB sources - eg. county program, other donors, or host country reimbursement

Disapproved

Curtis Farrar
Signature

12/15/75
Date

The successful results in vampire bat control carried out as part of the Vertebrate Pests research project led to TA/PM approval a small utilization activity under the Evaluation and Utilization project. The amounts involved were \$40,000 in FY 1974 and \$60,000 in FY 1975 which were approved incrementally. TA/AGR noted in its budget presentation last summer that it expected to continue this pattern and included a utilization amount in its research project. However, when it became evident that the utilization activity was projected to continue for three more years and that the research element relating to vampire bats was completely closed out, TA/AGR and TA/PPU agreed that the utilization element should be presented as a discrete project for approval.

In view of the success of the research, the need to utilize the new technologies developed and the degree of interest indicated by the LDCs in Latin America, we believe that AID should continue to support the Department of Interior utilization efforts. However, the exclusive focus on Latin America does raise the question as to whether this project should be funded by LA.

Funds are available within the amount TA/AGR has budgetted for the Vertebrate Pests research project in the PPC submission. The Office proposes to make room for it even at the reduced FY 76 and FY 77 CP levels now under discussion.

UNITED STATES GOVERNMENT

Memorandum

TO : TA/PPU, Mr. Carl Fritz

DATE: October 15, 1975

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

SUBJECT: Project Paper for GTS Project.

The attached Project Paper (PP) has been prepared in line with the format presented in your memo GUIDANCE 76-1.

This GTS Project, Applied Control of Vampire Bats, is a spin-off from previous research work on the control of vampire bats. Various countries in Latin America are mounting campaigns to control bats with their own financial and personnel resources. Continued AID guidance, inspiration, on-the-job training and evaluation of results will be provided by this modest program in a multi-country activity.

This activity was not indicated as GTS in the budget presentation but had been considered in the research project package. The project design was revised to comply with the RAC motion of March "... AID closely guide both of its aspects in whatever directions may be judged to enhance the probabilities of the establishment of real-world damage control means..." The mandate indicated the need for a field service project. Funds are available in the \$460,000 budgeted for the Vertebrate Pest Research Project for FY 76. Only \$380,000 has been requested for the research aspects of this project, the utilization phase of this program will require \$75,000 in FY 76.

Since this activity is designed to utilize the results of AID's research effort and the PP method of project presentation is new, will you inform me of the next steps to follow so that the PIO/T can be processed.

cc:TA/AGR, MGalli
NKonnerup



AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE
(IX) APPROPRIATE BOX)

ORIGINAL CHANGE
 ADD DELETE

PP

DOCUMENT
CODE
3

2. COUNTRY/REGIONAL ENTITY/GRAANTEE
Interregional

3. DOCUMENT REVISION NUMBER

4. PROJECT NUMBER

5. BUREAU

6. ESTIMATED FY OF PROJECT COMPLETION

931-11-170-094

A. SYMBOL

B. CODE

TAB

6

FY 75

7. PROJECT TITLE - SHORT (STAY WITHIN BRACKETS)

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION

Applied Control of Vampire Bats

A. INITIAL MO. YR. 11 76 B. FINAL FY 78

9. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)

10. ESTIMATED TOTAL COST (\$000 OR EQUIVALENT, \$1# —)

A. PROGRAM FINANCING	FIRST YEAR			ALL YEARS		
	B. FX 76	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	(75)	()	()	(254)	()	()
(LOAN)	()	()	()	()	()	()
OTHER 1.						
U.S. 2.						
HOST GOVERNMENT						
OTHER DONOR(S)						
TOTALS						

11. ESTIMATED COSTS/AID APPROPRIATED FUNDS (\$000)

A. APPROPRIATION PRIORITY CODE (ALPHA CODE)	B. PRIMARY TECH. CODE	FY 76		FY 77		FY 78		ALL YEARS	
		D. GRANT	E. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN	J. GRANT	K. LOAN
		75		84		95		254	
TOTALS									

12. ESTIMATED EXPENDITURES

13. PROJECT PURPOSE(S) (STAY WITHIN BRACKETS) CHECK IF DIFFERENT FROM PID/PP

This GTS project to apply previous results of vampire bat control research. Assistance will be provided to campaigns funded and staffed by LA countries. Guidance provided for technical inputs, training and evaluating results.

14. WERE CHANGES MADE IN THE PID/PPR FACESHEET DATA NOT INCLUDED ABOVE? IF YES, ATTACH CHANGED PID AND/OR PPR FACESHEET.

Yes No

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE

TITLE Leon F. Hesser
Director, TA/AGR

DATE SIGNED

MO. DAY YR.
09 30 75

16. DATE RECEIVED IN AID/W.
OR FOR AID/W DOCUMENTS,
DATE OF DISTRIBUTION

MO. DAY YR.

AID 1330-4 (5-75)

Project Paper - Applied Control of Vampire Bats, TA/AGR

1. Contributions. Vertebrate pests constitute a major barrier in providing protein food for hungry populations throughout the world. The program for control of these pests was devised to erase food losses and to make more food available in the most needed areas.
2. Services to date. The program for utilization of research results in the control of vampire bats was initiated under PASA RA(ID)1-67 in FY 1975. This program involves the expertise of one full time expert and advisory services of one expert periodically for about one third of a year. These experts provide advisory and demonstration services in bat control programs throughout Latin America on request and coordinate training to technicians at appropriate centers where actual control programs are in progress. Services are expected to continue at the same level for three years.
3. Evaluation of Services. The services to date have been highly successful in Brazil, Colombia, Ecuador, Guyana, Guatemala, Panama and Nicaragua. Nicaragua under nationally financed campaign has successfully implemented a program and provided assistance in training technicians from other countries. Bolivia with support from the Interamerican Development Bank is planning a program which will utilize advisory services of the PASA under a Task Order.

Expanded programs can markedly reduce the estimated \$250,000,000 annual losses attributed to vampire bats. However, it is necessary to improve systems for dissemination of the techniques on a much wider scale in the more seriously affected areas to reap large economic benefits that could accrue to the industry in Latin America.

4. Expected trends. Application of bat control techniques are expanding and there is a constant demand for advisory assistance from a wide range of interested government agencies and private interests. The interest of the Regional Bureau and USAID Missions with a few exception has been minimal since animal agriculture programs are a major concern of the Host Countries and not the USAID Missions. However, a series of seminars and more direct contact between the PASA advisors and USAID Mission personnel is planned to develop a better understanding as to the role and benefit such animal disease control programs may contribute to economic development objects.
5. Alternate sources. The only other source of relief from the consequences (rabies in cattle) is vaccination. This system addresses only the disease problem and not the losses and debility from loss of blood nor from secondary infections and infestations associated with the wounds caused by the biting of bats. The cost of the vaccine is relatively high and a vaccination program must be maintained annually whereas the bat control program is essentially permanent after the initial program.

6. Other issues. Rabies in cattle is only one of many diseases and other factors that adversely impact on productivity. In order to maximize the benefits to the livestock industry the control of the vampire bat should be incorporated into an overall disease control and improved livestock management system. Control of rabies will impact on the problem of rabies in the human population.
7. The budget for this project was projected at approximately \$75,000 for FY 76 and is to operate for three years. It involves the full time services of one expert, part time services of one secretary and other technical experts, travel and a modest sum for supplies materials and reproduction of technical papers.

Budget	<u>FY 1976</u>	<u>FY 1977</u>	<u>FY 1978</u>
	75,000	84,000	95,000

Outputs are expected to be marked reduction of rabies in cattle through elimination of bats in affected areas, improved condition in cattle and elimination of secondary debilitating conditions such as screw worms in wounds inflicted by biting.

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