



*executive committee of
the directing council*

PAN AMERICAN
HEALTH
ORGANIZATION

*working party of
the regional committee*

WORLD
HEALTH
ORGANIZATION



80th Meeting
Washington, D.C.
June-July 1978

Provisional Agenda Item 15

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3 May 1978
ORIGINAL: SPANISH

REPORT ON THE XI INTER-AMERICAN MEETING, AT THE MINISTERIAL LEVEL,
ON FOOT-AND-MOUTH DISEASE AND ZONOSSES CONTROL

The XI Inter-American Meeting, at the Ministerial Level, on Foot-and-Mouth Disease and Zoonoses Control was held at the Headquarters of the Pan American Health Organization, Washington, D.C., from 11 to 14 April 1978, having been convened by the Director of the Pan American Sanitary Bureau pursuant to Resolution XIX approved by the Directing Council of PAHO at its XVII Meeting.

The Heads of Delegation met on 11 April to elect the following officers of the Meeting: President, Mr. Gustavo Pinto Cohen, Minister of Agriculture of Venezuela; Vice Presidents, Gen. Mario MacKay Jaraquemada, Minister of Agriculture of Chile, and Mr. Gavin B. Kennard, Minister of Agriculture of Guyana; and Rapporteur, Dr. Elmer Escobar, Chief of the Food and Zoonoses Division in the Ministry of Health of Colombia.

The following Governments were represented at the Meeting: Argentina, Bahamas, Barbados, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, France, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Netherlands, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, United States of America, Uruguay and Venezuela. The Meeting was also attended by Observers from Australia and from the following international organizations: Canadian International Development Agency, Food and Agriculture Organization of the United Nations, Inter-American Cattlemen's Association, Inter-American Development Bank, Inter-American Institute of Agricultural Sciences, International Bank for Reconstruction and Development, International Group for Agricultural Development in Latin America, International Office of Epizootics, Organization of American States, and Regional International Organization for Plant and Animal Health.

The country reports were presented for the groups of countries making up the PAHO Areas, as agreed by the Ministers of Agriculture at RICAZ VIII. These presentations summarized the work done during 1977 and evaluated the status of implementation of national programs and of the recommendations and achievement of the goals for animal health and veterinary public health established in the Ten-Year Health Plan for the Americas, approved by the Governing Bodies of the Pan American Health Organization in Santiago, Chile, in October 1972.

The draft programs and budgets of the Pan American Foot-and-Mouth Disease and Zoonoses Centers for 1979 were presented to the Meeting and, following appropriate analysis, were fully supported by the delegates. The two Centers reported on the technical cooperation they had provided to the countries and other activities carried on during 1977, and on projections for 1978 and 1979.

It was clear that, despite budgetary limitations, some technical collaboration activities had been stepped up, particularly those for the diagnosis of diseases and epidemiological surveillance.

Owing to financial limitations, the training and research work of the two Centers in collaboration with the countries, through the animal health veterinary public health projects of the Division of Disease Control (the series 3100, 3200 and 3300 projects), could not be carried on in full accordance with the needs and requests of the countries.

The delegates made clear their view that these activities had to be supported by additional funds obtained from international or national lending institutions. They stated that they would fully support any step taken by PAHO to obtain the funds that the Centers needed to provide the technical cooperation required by the countries, referring in particular to the projects for training in, and the transfer of the technology for, the production and use of oil adjuvant vaccine against foot-and-mouth disease, which PAHO would be presenting to the IDB in due course.

Resolutions VI and XVI of RICAZ XI reflect the views of the Ministers of Agriculture of the Hemisphere and recommend to the XX Pan American Sanitary Conference that it approve the proposed program and budgets as presented.

In RICAZ XI there were two panels on nutrition, foot-and-mouth disease and the marketing of animals and animal products in the Hemisphere.

In the panel on hemispheric surpluses and shortages of meat and animal products and their implications for human nutrition and industrial development, the following points were considered: 1. Status of and

prospects for the consumption of red meat, milk and milk products in the Region of the Americas; and 2. Sanitary constraints in the Hemisphere on the marketing of a) red meat, b) milk and milk products, c) wool, d) hides, and e) cattle semen.

The panel on policy for the marketing of animals and products of animal origin in relation to foot-and-mouth disease dealt with the following topics: 1. Countries and areas free of foot-and-mouth disease. Requirements and conditions; 2. Technical aspects to consider in legislating for the trade in products of animal origin between countries free of and infected by foot-and-mouth disease; 3. Status of quarantine systems in the Hemisphere; 4. The technology of foods and products of animal origin and the elimination of foot-and-mouth disease virus contamination; and 5. Evolution of the policy on access to meat markets in the Hemisphere.

Reports were presented on the epidemiological surveillance of rabies, the equine encephalitides and vesicular diseases in the Americas; the research program of the Pan American Foot-and-Mouth Disease Center, presented by the Scientific Advisory Committee of that Center; a project for the establishment of the Inter-American Network of Animal Disease Diagnostic Laboratories; the Special Fund for Animal Health Research; and the Report of the Fifth Regular Meeting of the South American Commission for the Control of Foot-and-Mouth Disease.

In addition to the two resolutions on the draft programs and budgets of the Pan American Foot-and-Mouth Disease and Zoonoses Centers, RICA XI approved 19 other resolutions on the following matters: an expression of thanks to the Canadian International Development Agency; the contribution of the Inter-American Development Bank to animal health programs in the Americas; the collaboration of the United Nations Development Program for animal health and veterinary public health projects; training in the epidemiological surveillance of animal diseases; the South American Commission for the Control of Foot-and-Mouth Disease; a vote of thanks to the Scientific Advisory Committee of the Pan American Foot-and-Mouth Disease Center; the place of the next meeting; safe methods of importing semen; quarantine controls to prevent the entry of diseases exotic to the Hemisphere; the social communication program in Central America and Panama; an inter-American system of animal disease diagnostic laboratories; the study of the animal health situation in the Americas; the application of laboratory animal sciences in animal health programs; the Special Fund for Animal Health Research; the establishment of an epidemiological surveillance service; commendation of Chile for having succeeded in establishing an area free of foot-and-mouth disease; a guide to the planning, organization and operation of animal quarantine stations; the Pan American Zoonoses Center; and an expression of appreciation to Dr. Carlos Ruíz Martínez.

A ceremony was held in which the Agreement between the Government of Argentina, the General Secretariat of the Organization of American States, and the Pan American Health Organization for the holding in Buenos Aires in November 1978 of the Hemispheric Meeting on Foot-and-Mouth Disease and the International Trade in Animals and Products of Animal Origin was signed by Dr. Julio C. Carasales, Ambassador of Argentina to the OAS, Mr. Alejandro Orfila, Secretary-General of the OAS, and Dr. Héctor R. Acuña, Director of PASB.

The high-level conference will be held by the Organization of American States and the Pan American Health Organization pursuant to Resolution XII of the IX Meeting, at the Ministerial Level, on Foot-and-Mouth Disease and Zoonoses Control, held at Caracas, Venezuela, from 5 to 8 April 1976.

Dr. Acuña, Mr. Orfila and Dr. Carasales emphasized the importance of that meeting for socioeconomic development and the solution of such problems as the uncertainty and instability of the international trade in beef and that of nutritional needs, the serious consequences of which for the population of the Hemisphere were well known.

The inclusion by several countries of Representatives of their Health Ministries on their delegations reflected the growing coordination between these ministries and those of agriculture in the execution of zoonoses control and veterinary public health programs. It is worth noting that a representative of a health ministry was elected Rapporteur of the Meeting.

The delegates approved by acclamation the proposal that RICAZ XII be held at Willemstad, Curaçao, in 1979.

Annexes



PAN AMERICAN HEALTH ORGANIZATION

CE80/10 (Eng.)
ANNEX I



WORLD HEALTH ORGANIZATION

XI INTER-AMERICAN MEETING, AT THE MINISTERIAL LEVEL, ON FOOT-AND-MOUTH DISEASE AND ZONOSSES CONTROL

Washington, D.C., U.S.A., 11-14 April 1978

RICAZ11/1, Rev. 2 (Eng.)
11 April 1978
ORIGINAL: ENGLISH-SPANISH

AGENDA

Document No.

1. Meeting of Heads of Delegation to Elect the President,
Two Vice Presidents and Rapporteur
2. Inaugural Session
3. Approval of the Agenda and Program of Sessions RICAZ11/1, Rev. 1,
and RICAZ11/2
4. Status of the Implementation of the Recommendations
and Achievement of the Goals for Animal Health and
Veterinary Public Health Established in the Ten-Year
Health Plan for the Americas, Approved by the Govern-
ing Bodies of the Pan American Health Organization,
Santiago, Chile, October 1972
5. Report of the Secretariat on the Implementation of
the Resolutions of RICAZ X RICAZ11/23
6. Program and Budget of the Pan American Zoonoses Center RICAZ11/8
7. Program and Budget of the Pan American Foot-and-Mouth
Disease Center RICAZ11/6
8. Panel on Hemispheric Surpluses and Deficits of Meat
and Products of Animal Origin. Their Implications
for Human Nutrition and Industrial Development
 - A. Status of and Prospects for the Consumption of
Red Meat, Milk and Milk Products in the Region
of the Americas RICAZ11/10
 - B. Marketing of Red Meat in the Hemisphere. Sanitary
Constraints RICAZ11/21

	<u>Document No.</u>
C. Marketing of Milk and Milk Products in the Hemisphere. Sanitary Constraints	RICAZ11/19
D. Marketing of Wool in the Hemisphere. Sanitary Constraints	RICAZ11/9
E. Marketing of Hides in the Hemisphere. Sanitary Constraints	RICAZ11/20
F. Marketing of Cattle Semen in the Hemisphere. Sanitary Constraints	RICAZ11/5
9. Panel on Policy for Marketing of Animals and Products of Animal Origin in Relation to Foot-and-Mouth Disease	
A. Countries and Areas Free of Foot-and-Mouth Disease. Requirements and Conditions	RICAZ11/15
B. Technical Aspects to Consider in Legislating for the Trade in Products of Animal Origin between Countries Free of and Infected by Foot-and-Mouth Disease	RICAZ11/17
C. Status of Quarantine Systems in the Hemisphere	RICAZ11/16
D. Technology of Foods and Products of Animal Origin and Elimination of Foot-and-Mouth Disease Virus Contamination	RICAZ11/7
E. Evolution of the Policy Concerning Access to Meat Markets in the Hemisphere	RICAZ11/22
10. Report on Epidemiological Surveillance of Equine Encephalitides in the Americas	RICAZ11/12
11. Report on Epidemiological Surveillance of Rabies in the Americas	RICAZ11/13
12. Report on Epidemiological Surveillance of Foot-and-Mouth Disease and other Vesicular Diseases in the Americas	RICAZ11/14
13. Canadian International Development Agency. Origins and Purposes	
14. Research Program of the Pan American Foot-and-Mouth Disease Center	RICAZ11/4

		<u>Document No.</u>
15.	Progress Report on the Study of the Animal Health Situation in the Americas	RICAZ11/18
16.	Project for the Establishment of the Inter-American System of Animal Diseases Diagnostic Laboratories	RICAZ11/11
17.	Special Fund for Animal Health Research	RICAZ11/25
18.	South American Commission for the Control of Foot-and-Mouth Disease. Report of the Fifth Regular Meeting	RICAZ11/24
19.	Report on the Inter-American Program on Foot-and-Mouth Disease and Meat Technology	RICAZ11/26
20.	Participation by the Inter-American Development Bank in Animal Health Programs	RICAZ11/27
21.	Other Matters	



PAN AMERICAN HEALTH ORGANIZATION

CE80/10 (Eng.)
ANNEX II



WORLD HEALTH ORGANIZATION

XI INTER-AMERICAN MEETING, AT THE MINISTERIAL LEVEL, ON FOOT-AND-MOUTH DISEASE AND ZOO NOSES CONTROL

Washington, D.C., U.S.A., 11-14 April 1978

Provisional Agenda Item 7

RICAZ11/6 (Eng.)
2 March 1978
ORIGINAL: SPANISH

PROGRAM AND BUDGET OF THE
PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER
FOR 1978 AND PROPOSED ESTIMATES FOR 1979

I - INTRODUCTION

A. PROBLEM AND BASELINE SITUATION

Foot-and-mouth disease is recognized throughout the world as one of the most important animal diseases because of its economic importance, its damaging effects upon the production cost of meat, milk and other subproducts of animal origin, and its effect on international trade.

The disease is found throughout South America, except for Guyana, French Guiana and Surinam, and constitutes a constant threat to the remaining parts of the continent.

Foot-and-mouth disease tragic invasions of Mexico, in the '40s, and of Venezuela and Colombia, in the '50s, motivated the Organization of American States (OAS) to establish the Pan-American Foot-and-Mouth Disease Center (PAFMDC), for the purpose of promoting, orienting and coordinating the fight against the disease.

The Pan American Health Organization (PAHO), in cooperation with the Inter-American Institute of Agricultural Sciences (IIAS), prepared a technical cooperation project approved in 1950 by the XIII Pan American Health Conference, and at a later date by the Inter-American Economic and Social Council. Pan American Foot-and-Mouth Disease Center headquarters were established in Rio de Janeiro in 1950, pursuant to an agreement concluded between the Government of Brazil and PAHO.

During its first 17 years the PAFMDC functioned as a Program of Technical Cooperation of the OAS. In 1968, the project became a regular PAHO program, financed through contributions from its Member States.

The III Special Meeting of Ministers of Health of the Americas, held in Santiago, Chile, in October 1972, adopted the following recommendation concerning the control of foot-and-mouth disease, as part of a Ten-Year Health Plan for the Americas:

10. In order to control and eventually eradicate foot-and-mouth disease in South America and prevent introduction of the disease in the countries of the free zone

IT WILL BE REQUIRED, IN THE AFFECTED AREA:

To develop and consolidate national programs in the infected area and coordinate action thereof in such a manner that a harmonious campaign throughout the Continent will be achieved. Research on the improvement of vaccine efficiency must be continued. In the free zone, prevention of the disease must be consolidated through national programs structured within a concept of regional unity capable of achieving efficient surveillance, and endowed with sufficient resources for eradication of any outbreak of the disease. Part of this policy shall consist in carrying out a program of surveillance and control in the frontier area of Panama and Colombia, with the intent of expanding it to the territories of said countries through which the Pan American Highway's new route is to be built.

. To give a multinational character to zoonosis and foot-and-mouth disease control, in order to assure the possibility of future eradication of said diseases in the Continent, and that it may make possible a freer trade movement of food products and livestock in the Region and with other countries outside the Region.

All countries in the foot-and-mouth disease-free zone develop activities or programs for preventing the disease, under a common sanitary policy. Since the creation of the PAFMDC, only the Dutch Antilles and Guyana have had some foot-and-mouth disease outbreaks, which were successfully eradicated in every instance.

All infected countries are carrying out national programs of control and eradication, pursuant to a continental strategy. Generalized progress has been achieved, with significant results in Chile, Peru, Paraguay and Uruguay. Financial assistance contributed by the Inter-American Development Bank (IDB) is an important factor in the consolidation and the future of the Hemisphere's fight against foot-and-mouth disease.

II - THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

A. SOURCES OF FINANCING

The regular budget of the Center is financed by contributions from the Member Countries of the Pan American Health Organization, as per the schedule shown on page 4. This system was established by resolutions that were adopted respectively, by the Inter-American Economic and Social Council (Vina del Mar, Chile, June 1967), the Inter-American Committee of the Alliance for Progress (Rio de Janeiro, Brazil, September-October 1967), and the Directing Council of the Pan American Health Organization (Port-of-Spain, Trinidad and Tobago, October 1967). The Center also receives contributions from France, the Kingdom of the Netherlands, and the United Kingdom.

In addition to participating with its own quota, the Government of Brazil makes a grant to the Center for maintenance of headquarters' premises and installations, and for payment of the salaries of the workers assigned to this task.

In response to Resolution V of RICAZ IX, relative to fiscal year 1977, special contributions were received from Brazil, Colombia, Ecuador, Uruguay and Venezuela; contributions made in national currency or in kind for an approximate total of US\$160,000.

Project RLA/73/023, a United Nations Development Project carried out by the United Nations Food and Agriculture Organization (FAO), reinforced the Center's technical assistance services, and will be terminated in December 1978. During the current year, only one expert in communication will be available. The specialist in epizootic diseases terminated his functions in December 1977. The Center is of the opinion that this type of collaboration should be continued, and has prepared a Phase II of the Project for the 1979-1981 period.

For economic reasons, the United States Air Force, in mid-1977, suspended the assistance which had been granted to the Center since 1964 through the services of a laboratory and research specialist. There seem to be no prospects for renewal of this assistance in the near future.

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

Tentative 1979 Contribution

<u>Country</u>	<u>Per Cent</u>	<u>Amount (US\$)</u>
Argentina	7.72	200,287
Barbados	0.07	1,816
Bolivia	0.19	4,929
Brazil	7.30	189,390
Chile	1.33	34,505
Colombia	1.52	39,435
Costa Rica	0.19	4,929
Cuba	1.04	26,982
Dominican Republic	0.19	4,929
Ecuador	0.19	4,929
El Salvador	0.19	4,929
Grenada	0.03	778
Guatemala	0.28	7,264
Haiti	0.19	4,929
Honduras	0.19	4,929
Jamaica	0.19	4,929
Mexico	8.16	211,702
Nicaragua	0.19	4,929
Panama	0.19	4,929
Paraguay	0.19	4,929
Peru	0.66	17,123
Trinidad and Tobago	0.19	4,929
United States of America	66.00	1,712,289
Uruguay	0.57	14,788
Venezuela	3.04	78,869
		<hr/> 2,594,376
<u>Other Member Governments</u>		
Bahamas	0.06	1,557
Canada	6.94	180,050
Guyana	0.19	4,929
Surinam	0.12	3,114
		<hr/> 189,650
<u>Participating Governments</u>		
France	0.19	4,929
Kingdom of the Netherlands	0.07	1,816
United Kingdom	0.19	4,929
		<hr/> 11,674
	TOTAL	<hr/> <u>2,795,700</u>

Note must be taken of the fact that the increase in the Center's regular budget, amounting to 9.5% and 5%, respectively requested for 1978 and 1979, is not enough to cover the annual cost of operations, and much less than that needed to take care of the increasing demand of the governments for technical assistance,

Under these circumstances, extraordinary contributions from the countries and the reinforcement of other sources of financing are considered to be most necessary. A project on epidemiological surveillance of foot-and-mouth disease and other animal communicable diseases is being discussed with the United Nations Development Program (UNDP), as well as another project on foot-and-mouth disease oil adjuvant vaccine, with the IDB. The first project would entail a support of approximately US\$ 900,000 for a 4-year period, and the second project US\$ 500,000 for a 2-year period. Both projects aim at speeding the action taken by RICAZ for purposes which are of direct benefit for the prevention and control of foot-and-mouth disease programs of the countries.

B. PURPOSE AND OBJECTIVES

Purpose

The control, eradication and prevention of foot-and-mouth disease in the Americas.

Objectives

- Preventing the introduction and establishment of foot-and-mouth disease in the area of the Americas which is free from the disease.
- Control and eradication of foot-and-mouth disease in South America,
- Promotion and advising official animal health services charged with the control of foot-and-mouth disease.
- Coordination of national programs for the control, prevention and eradication of foot-and-mouth disease,
- Promotion, advice and development of a research plan in support of national foot-and-mouth disease control programs.

- Cooperation in training human resources charged with executing national programs of foot-and-mouth disease prevention, control and eradication.

C. ADMINISTRATIVE AND TECHNICAL ORGANIZATION

The Center's organization comprises the Director's Office and four departments: Laboratories, Training and Information, Technical Assistance, and Administration.

The Laboratories Department includes the Diagnostic Service, with a Reference Laboratory for the Americas; the Central Laboratory; the Vaccine Production Plant, and the Small Animal Laboratory.

The Department of Training Activities is responsible for stipends, the organization of training courses and of other scientific meetings, the library, publications and information services.

The activities of the Department of Technical Assistance are performed through the Department's professional staff from headquarters, in Rio de Janeiro, and through consultants located in several countries. Advisory services are provided on epidemiology, administrative methods, statistics, and planning and evaluating foot-and-mouth disease control campaigns.

The Department of Administration comprises the following sections: Finances, Personnel, Supplies, and General Services.

The Scientific Advisory Committee, which is made up of internationally known professionals, meets at the Center's headquarters every odd year, in order to discuss, analyze and comment on, jointly with the Director and the scientific staff of professionals, the various projects being carried out or planned.

III - LABORATORIES

During 1977, services rendered and laboratory research activities carried out were necessarily limited, by reason of the increasing commitment of the staff and reduced physical resources available for the Center's training programs, plus a shortage of operational funds and a deficit of professionals and technicians. In view of this situation, activities were concentrated in order to give attention to priority areas, such as development of oil-adjuvanted vaccines, including potency control, intranasal application of attenuated live virus vaccines and epidemiological surveillance of some livestock farms.

A number of serological studies were carried out, related to the development of foot-and-mouth disease programs in the Continent.

Serological and immunological studies of field strains are being continued, as well as the work on improvement in production methods and control, and routine laboratory tests, which are required for epidemiological surveillance.

The Reference and Diagnostic Laboratory gave priority to the study of type A strains isolated from outbreaks that occurred in Brazil. In a cross-immunity test with vaccine production A₂₄ strain and field strains A-Venceslau and A-Bagé, the need to replace the production strain by the field strains was shown.

The vaccine production plant functioned at full capacity; research aimed at improving production methods was carried out. Among these activities, mention must be made of the studies to develop optimum conditions for cell growth and virus production. Special attention was given to antigen concentration and purification. The use of poly-ethylen-glycol (PEG) to remove specific antibodies in bovine sera used in vaccine production was introduced.

A. DIAGNOSIS AND REFERENCE

Classification of foot-and-mouth disease viruses requires a standardized methodology in order to achieve similar and reproducible results which can be interpreted in the same way in every diagnostic center in South America. This requires

maintaining an up-to-date collection of strains, standardization of techniques and the holding of frequent meetings of specialized professionals from all the countries.

A complicating factor in the prevention or eradication of foot-and-mouth disease is the existence of other diseases presenting similar symptoms, such as vesicular stomatitis, vesicular exanthema and swine vesicular disease, all of which makes it imperative to have available a speedy and precise differential diagnostic service.

Therefore, the diagnostic and reference laboratory carries out the activities listed below:

1. Acts as Reference Center for the Americas, in close coordination with the World Reference Laboratory.
2. Makes differential diagnoses of vesicular diseases through samples sent from the countries.
3. Types and subtypes all samples received, in order to obtain accurate information on which viruses exist in the field.
4. Carries out serological and immunological classification of all strains which may be epidemiologically important.
5. Maintains an up-to-date strain collection, including all strains with wide epidemiological range, classified in the order of important subtypes and adapted to the different systems for antigen production.
6. Coordinates and imparts instruction on the diagnosis of vesicular diseases, at the continental level.
7. Carries out all diagnostic and reference work for the various research projects of the Center.

Since its establishment, the Center has examined about 27,000 vesicular disease samples from 19 American countries. From 1952 to 1977, a total of 10,871 samples of foot-and-mouth disease viruses from South American countries was diagnosed; distribution of these samples is shown in Table 1. During the 1958-1977 period, the Center identified 21 virus subtypes of foot-and-mouth disease, and 2 of vesicular stomatitis.

TABLE 1

SAMPLES DIAGNOSED BY THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER,
BY COUNTRY AND YEAR. SOUTH AMERICA. 1952 - 1977

C o u n t r y	1952/70	1971	1972	1973	1974	1975	1976	1977	T o t a l
Argentina	1,480	81	44	48	-	46	69	-	1,768
Bolivia	82	1	17	-	3	14	1	8	126
Brazil	5,177	279	441	77	78	73	228	485	6,838
Colombia	257	11	5	3	-	6	2	8	292
Chile	36	50	5	3	2	-	17	54	167
Ecuador	473	14	4	-	2	21	-	11	525
Guyana	36	-	-	7	-	-	-	-	43
Paraguay	452	10	-	2	6	52	16	1	539
Peru	114	31	10	-	-	15	9	-	179
Uruguay	225	5	7	-	-	-	2	3	242
Venezuela	107	36	2	-	6	-	1	-	152
T o t a l	8,439	518	535	140	97	227	345	570	10,871

TABLE 2

FIELD SAMPLES FROM AMERICAN COUNTRIES AFFECTED BY FOOT-AND-MOUTH DISEASE. 1977

C o u n t r y	Foot-and-mouth disease					Neg.	Total
	O ₁	A	A ₂₄	A ₂₇	C ₃		
Argentina	-	-	-	-	-	-	-
Bolivia	-	2	3	-	2	1	8
Brazil	20	274	-	-	31	160	485
Colombia	1	1	-	1	-	-	3
Chile	8	5	-	-	19	22	54
Ecuador	9	2	-	-	-	-	11
Paraguay	-	1	-	-	-	-	1
Peru	-	-	-	-	-	-	-
Uruguay	1	1	-	-	1	-	3
Venezuela	-	-	-	-	-	-	-
T o t a l	39	286	3	1	53	183	565

In the course of 1977, 3,216 biological samples from countries affected by foot-and-mouth disease were typed and sub-typed. Of this total, 570 correspond to cases of foot-and-mouth disease that occurred in the field (Table 2), also including 2,646 sera from different species in which the presence of VIA antibodies was studied.

Diagnostic activities increased considerably in the course of 1977, since the laboratory continues to give full support to the countries in order to carry out complete comparative studies among the strains utilized in vaccine production and those having epidemiological importance in the field. These studies determine the coverage of production strains vis-a-vis field strains, by means of serological and immunological relationships obtained by complement fixation and serum-protection tests. With this purpose in mind, national diagnostic laboratories are promoting the creation of immunized bovine sera banks with the vaccines utilized in the campaigns.

A seminar on diagnosis of vesicular diseases, for Brazilian technicians, was held at the Center. Through reports brought to the seminar, foot-and-mouth disease virus strains predominant in Brazil were characterized.

The Center supplies sera and reference viruses to the diagnostic and control laboratories of the countries. During 1977, every country in the affected area received biological material for diagnosis, research and vaccine control (Table 3). Taking into account the increase in diagnostic activities carried out in the different countries, it is estimated that it will be necessary to increase substantially that supply in the coming years.

A total of 2,210 samples, as part of the research work carried out at the Center, was tested in 1977.

Insofar as typing and subtyping of vesicular stomatitis virus is concerned, the Center, during 1977, tested 361 samples forwarded from Central American countries and Panama, 235 of which were found to be positive (Table 4). Table 5 summarizes the number of vesicular samples tested during the 1967-1977 period. A total of 2,642 sera was also studied.

The Center continues to give priority attention to diagnostic activities on vesicular diseases in the countries free from foot-and-mouth disease. The number of samples coming from this area is increasing every year.

TABLE 3

BIOLOGICAL MATERIALS SUPPLIED BY THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER
TO THE COUNTRIES IN 1977

Country	Hyper-immune sera (ml)	Hemo-lysin (ml)	VIA (ml)	Anti-VIA serum (ml)	V i r u s				Cell culture (btl)	Vaccines (doses)	
					Guinea pig (g)	Epith.cattle (g)	BHK (ml)	Frenkel (ml)		Mono-valent	Tri-valent
Argentina	48	-	-	-	-	3	-	-	-	-	59,600
Bolivia	-	-	-	-	-	-	-	-	-	-	600
Brazil	301	9	-	-	8	-	1,318	-	36	91,000	162,300
Colombia	51	-	-	-	-	-	-	-	-	3,700	-
Chile	-	-	5	50	-	-	-	-	-	-	-
Ecuador	25	-	3	10	5	-	15	-	-	-	-
England	11	-	-	-	2	-	20	-	-	-	-
Paraguay	18	12	-	-	-	-	50	200	-	-	-
Peru	9	-	8	21	2	-	-	-	-	-	-
Uruguay	30	6	-	-	-	-	-	-	6	-	-
Venezuela	42	-	-	10	4	-	-	-	12	-	-
USA -Plum Island	6	-	-	-	-	-	15	-	1	-	-
T o t a l	541	27	16	91	21	3	1,418	200	55	94,700	222,500

TABLE 4

FIELD SAMPLES (EPITHELIUM AND SERUM) FROM FREE COUNTRIES. 1977

C o u n t r y	Vesicular stomatitis			Neg. Total	
	New Jersey	Indiana ₁	New Jersey and Indiana ₁		
Aruba	-	-	-	-	-
Belize	-	-	-	1	1
Costa Rica	79	10	18	38	145
Curaçao	2	-	-	-	2
El Salvador	34	2	1	9	46
Guatemala	10	3	1	6	20
Honduras	10	1	-	20	31
Nicaragua	42	2	9	42	95
Panama	11	-	-	10	21
T o t a l	188	18	29	126	361

TABLE 5

VESICULAR SAMPLES FROM CENTRAL AMERICA AND PANAMA EXAMINED AT THE
PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER. 1967 - 1977

Country	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Aruba	-	-	-	-	-	-	-	-	-	1	-
Belize	-	2	-	-	1	2	5	2	4	2	1
Costa Rica	3	7	4	4	29	39	18	11	20	43	145
Curaçao	-	-	-	-	-	-	-	-	-	-	2
El Salvador	1	13	9	8	6	10	24	34	32	62	46
Guatemala	3	1	1	2	19	33	18	3	18	5	20
Honduras	3	60	11	8	22	19	14	33	31	58	31
Nicaragua	3	8	6	4	88	15	24	138	153	138	95
Panama	76	9	8	7	4	3	1	24	31	34	21
T o t a l	89	100	39	33	169	121	104	245	289	343	361

The Center also provides direct advisory services to Member Countries through periodic visits to diagnostic laboratories; said visits are carried out by the Center's professional staff assigned to that sector.

The Diagnostic and Reference Laboratory developed the following project in 1977:

-Improvement of laboratory diagnosis techniques, through physico-chemical purification of VIA, and its quantification by immuno-electrodiffusion and immuno-electroforesis.

B. PRODUCTION OF INACTIVATED VACCINES

Foot-and-mouth disease control in South America is based chiefly on systematic vaccination of cattle. Vaccines are prepared with inactivated virus and with aluminum hydroxide adjuvant. They are often strengthened by the addition of saponin. However, these vaccines only produce short-term immunity, making it necessary to repeat vaccination every four (4) months. The purpose of the Center's program is to improve every phase of the production of vaccine in order to ensure a final product with greater efficiency and efficacy.

The antigen production method most extensively used in South America is that of cell culture. Research work endeavors to determine optimum conditions and methods for cell culture growth, in monolayers or in suspension, for the multiplication of the virus in said cells.

Virus suspensions used to prepare vaccines contain undesirable cellular proteins, making it necessary to purify the virus prior to vaccine preparation. This purification process also allows for a better physical determination of the antigenic mass, which hopefully will lead to more standardized products.

The advantages of treating cattle sera with PEG for vaccine production were determined. The vaccine was applied in the field with no undesirable effects.

Studies on the means to stabilize antigens have been continued; the purpose of these studies is to prevent the loss of immunogenicity during the vaccine preparation process and during the storage of the vaccine.

If, during an emergency situation, vaccine should be

needed, the Center possesses sufficient capacity to produce the antigen against an exotic type or against a new subtype. Nevertheless, since the plant was originally planned only as a training vehicle, there are some deficiencies in the mixing, bottling and storing sector. Improvement in these aspects of the process requires serious attention, since present commercial and official laboratories will probably not be in a position to produce sufficient adequate vaccines in an emergency situation.

C. OIL-ADJUVANTED VACCINE

The Center is rapidly expanding its research work on oil-adjuvanted vaccine, a task which can be divided into three main areas:

- a) Application of simple water emulsion vaccine in oil, in a substantial number of cattle. Field tests are being carried out in Rio de Janeiro, Rio Grande do Sul (Brazil) and Uruguay, with coverage of an approximate cattle population of 100,000 head. The purpose is to determine possible occurrences of unwanted effects, such as local or systemic reactions. These tests also serve to verify the degree of acceptance of vaccination schemes and procedures by the rural community, and to evaluate the immunity of the herd.
- b) Determination of characteristics and parameters of simple and double emulsions presenting the best possible immunological response. This includes particle stability and dispersion, viscosity, etc.: this information is required for bio-engineering studies in order to select emulsification equipment, and for the design of vaccine production plants. The Center is presently engaged in studying different emulsifiers, including locally produced mineral oils.
- c) Good progress has been achieved in developing an oil-adjuvanted vaccine for pigs. One double emulsion vaccine, applied once at weaning time, intraperitoneally, has given protection to pigs until the time when they are slaughtered, at the age of 6 months. No undesirable side effects have been detected.

D. VACCINE CONTROL

Vaccine control is one of the major problems faced by heads of foot-and-mouth disease control programs in South America. Frequently, vaccine potency testing in cattle has proven to be impracticable. Emphasis is being put on a broad-range research program, for the purpose of developing practical methods to control all stages of vaccine production, starting with the selection of virus strains and continuing until the vaccine is injected into the animal. Research work on reproducible test systems in small laboratory animals, such as guinea pigs, will be continued, and attempts will be made to relate the results of those tests to the resistance against the disease under conditions comparable to those which exist under field exposure.

Special attention is being given to problems related to the control of oil vaccine strength, and to this effect an experimental program is being continued in Uruguay.

E. ATTENUATED LIVE VIRUS VACCINES

One of the Center's major efforts has been to develop attenuated live virus foot-and-mouth disease vaccine. Although this type of vaccine is partially restricted, at present, because of limitations in the international meat market, research work continues to explore its potential under certain conditions.

Experimental work conducted at the Center in this specific field, along with new data on the transmission of the disease and virus multiplication in cattle, points to the feasibility of the use of attenuated virus vaccine administered nasally or orally. Preliminary results reveal the possibility of obtaining adequate immune response in livestock through intranasal vaccination,

Cooperative work with Venezuela is being continued to determine the minimum number of immunizing doses of Venezuelan vaccine, applied intranasally. It has been proven that, in the case of type O vaccine, it can be used diluted ten-fold without any loss of potency.

F. EPIDEMIOLOGICAL STUDIES

The following epidemiological studies were carried out:

-The VIA test (virus-infection associated antigen) differentiates between those animals which have only acquired neutralizing antibodies by vaccination and those infected. In a number of countries (Brazil, Colombia, Chile and Paraguay) studies have been carried out which are providing basic information on the evaluation of this test in the field. A VIA survey in sheep was effected in Bolivia, combined with the study of neutralizing antibodies. This survey has supplied important epidemiological data, since the sheep were not vaccinated, thus permitting determination of the sensitivity of the VIA test.

-A project was submitted to study survival of foot-and-mouth disease virus in milk and milk products, to be carried out in cooperation with Argentina's State Secretariat for Agriculture.

-Epidemiological study of vesicular stomatitis in El Salvador, in cooperation with the Ministry of Agriculture. The Center effected tests on antibodies of Indiana and New Jersey viruses in a sampling of the cattle population of that country. This study also showed complete absence of VIA antibodies.

-Epidemiological surveillance of foot-and-mouth disease in several cattle herds in Brazil, including examination of circulating antibodies, VIA antibodies and viruses carriers.

-Continuation of the field work carried out with oil-adjuvanted vaccine, in Bagé, State of Rio Grande do Sul, on 15 livestock farms, with an approximate total of 20,000 cattle. This work comprises epidemiological surveillance, evaluation of the immunity level, data collection on local reactions which may occur, as well as all matters concerning the operational aspects of oil vaccine application.

G. SMALL ANIMAL LABORATORY

Although the primary function of the small animal laboratory continues to be raising animals for laboratory use, it has also become important as a training area for courses on laboratory animal medicine and colony management.

A central air-conditioning system was installed in the guinea pig colony; it is hoped that this will bring about a significant improvement in the production of these animals, which had previously suffered from severe summer heat. Also, through the valuable financial assistance of the Ministry of Agriculture of Brazil, new cages made of plastic, which compare favorably with the old wooden ones, were installed. These improvements result in more regular production of guinea pigs at a lower cost.

IV - TRAINING AND INFORMATION

There are a number of reasons that make imperative the training of personnel in charge of national services to control and prevent foot-and-mouth disease: the expansion of the geographic area and population coverage of programs engaged in controlling foot-and-mouth disease and which are carried out in the majority of the South American countries; the undertaking of new programs; the need for up-dating the technical knowledge of said personnel; the introduction of new techniques and methods; the need for revision of concepts and principles, and the maintenance of standardizations of the techniques which are applied, educational deficiencies occurring in regard to several subjects of learning; the need to improve information services in areas affected by foot-and-mouth disease and in areas which remain free, and the general benefit resulting from acquainting technicians in the areas free from foot-and-mouth disease about the losses it causes.

The Center developed specific infrastructure for co-operating with the countries in this endeavor, which is reflected in the increase in the number of courses and seminars and in the number of professionals taking part in them. Such increase, which was remarkable in 1976 and 1977, was made possible through the Technical Assistance Agreement which was entered into by Brazil and the Pan American Health Organization, financed with funds from the Technical Assistance Agreement of the Ministry of Agriculture of Brazil/IDB - ATP/SF-1026-BR.

A. INDIVIDUAL TRAINING

Fourteen veterinarians from 5 countries came to the Center's headquarters to receive individual training in laboratory and field activities; the distribution of said professionals, by countries, was as follows: Brazil (5); Ecuador (2); Mexico (2); Peru (4), and Venezuela (1).

An academic in-service training program was begun in 1977; the program is based on specific research projects (epidemiology, information systems, oil-adjuvanted vaccines, attenuated live virus vaccines, and survival of foot-and-mouth disease virus in milk and milk products), which are projects that respond to specific problems faced by the countries. During the year, one Brazilian veterinarian participated in important research work on swine vaccines. Several proposals are being studied for 1978.

B. COURSES

Twelve courses were organized by the Center during 1977, with a total of 157 participants from 12 countries, distributed as follows:

- a) One four-month course on cell culture and its application to virology attended by six students from Colombia (1), Chile (1), Panama (1), Peru (1), Uruguay (1) and Venezuela (1).
- b) One four-month course on diagnosis of vesicular diseases, with 5 veterinarians participating: from Brazil (2), Colombia (1), Ecuador (1), and Venezuela (1).
- c) One nine-month course on production and control of foot-and-mouth disease, attended by four students, from: Brazil (3), and Ecuador (1).
- d) One six-month course on information systems (statistics), in which 13 veterinarians participated, from: Brazil (10), Paraguay (1), and Peru (2).
- e) One six-month course on epidemiology, with 14 participants, coming from: Brazil (9), Colombia (1), Ecuador (1), Paraguay (1), and Peru (2).
- f) One four-month course on communication, with 16 students participating, from Argentina (1), Bolivia (1), Brazil (11), Colombia (1), Ecuador (1) and Mexico (1).
- g) One two-month course on vaccine efficacy, attended by 8 participants from: Brazil (5), Colombia (1), Ecuador (1), and Peru (1).
- h) Four one-month courses for field veterinarians, which were attended by a total of ninety-one participants, from Brazil (85), Ecuador (4), and Paraguay (2).

For reasons explained below, the program for 1978 comprises only four courses: 1) Cell culture and its application to virology; 2) Production and Control of foot-and-mouth disease vaccines; 3) Diagnosis of vesicular diseases and; 4) Quality control of foot-and-mouth disease vaccines.

C. SEMINARS

Three seminars were held in 1977. One of the seminars dealt with the evaluation of foot-and-mouth disease programs, and was held at the Center's headquarters. Ten professionals took part in this seminar one from each of the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela. Two other seminars were held in countries in the free area. One of them, which was international, dealt with the Epidemiology of Vesicular Diseases, and was held in Managua, Nicaragua, and was attended by 24 professionals, as follows: Costa Rica (3); El Salvador (2); Guatemala (2); Honduras (2), Mexico (2); Nicaragua (11), and Panama (2). The second seminar was held in Mexico, with 21 Mexican veterinarians participating in a field exercise which simulated an outbreak of foot-and-mouth disease. The above-mentioned seminars benefited from the valuable cooperation extended to them by the Ministries of Agriculture of the respective host countries.

Pursuant to the above-mentioned Technical Assistance Agreement, and with financing provided by it, four national seminars were held in the Center: one, on strategy in the foot-and-mouth disease control program in Brazil; another seminar on diagnosis of vesicular diseases; the third was on control of foot-and-mouth disease vaccines; and the fourth seminar dealt with communication in animal health, with the participation of 24, 9, 14 and 22 veterinarians from Brazil, respectively.

Three international seminars have been programmed to take place in 1978: one, on administration of health programs; another seminar on quality control of foot-and-mouth disease vaccines, and the third seminar will deal with the epidemiology of vesicular diseases.

Table 6 summarizes the number of professionals from the various countries trained at the PAFMDC during the 1952 to 1977 period. The number of Brazilian trainees, in recent years, showing a substantial increase, is registered in the table. This is due to the Technical Assistance Agreement Brazil/PAHO (ATP/SF-1026-BR) which, in addition to financing Brazilian trainees, allowed for the organization of different courses which were also made available to professionals from other countries.

This agreement came to an end in 1977, and consequently, from 1978 onwards, training of human resources will undergo a decline, inasmuch as said activities will have to be financed

TABLE 6

NUMBER OF PROFESSIONALS WHO RECEIVED INDIVIDUAL TRAINING OR PARTICIPATED IN
COURSES OR SEMINARS AT THE PAN-AMERICAN FOOT-AND-MOUTH DISEASE CENTER. 1952-1977.

Countries	1952/60	1961/70	1971	1972	1973	1974	1975	1976	1977	Total
Argentina	44	14	4	1	2	8	6	2	2	83
Bahamas	2	—	1	—	—	—	—	—	—	3
Barbados	—	1	—	—	—	—	—	—	—	1
Belize	—	—	2	—	—	—	1	—	—	3
Bolivia	6	12	3	2	—	—	6	2	2	33
Brazil	73	84	26	84	78	114	192	233	200	1084
Canada	1	—	—	—	—	—	—	—	—	1
Colombia	34	24	4	2	24	4	3	7	6	108
Costa Rica	8	3	6	2	—	—	2	—	3	24
Cuba	5	2	1	—	—	—	—	—	—	8
Chile	12	15	1	3	2	3	1	1	2	40
Dominican Rep	3	2	1	—	—	1	—	1	—	8
Dutch Antilles	2	—	—	—	—	—	—	—	—	2
Ecuador	7	23	3	1	2	9	9	2	12	68
Egypt	1	—	—	—	—	—	—	—	—	1
El Salvador	5	2	2	1	24	—	2	—	2	38
French Guiana	3	—	—	—	—	—	—	—	—	3
Grenada	—	—	1	—	—	—	—	—	—	1
Guatemala	6	4	2	4	—	—	2	2	2	22
Guyana	4	2	2	—	—	—	—	—	—	8
Haiti	1	—	—	—	—	—	—	—	—	1
Honduras	4	4	2	1	—	—	2	1	2	16
Jamaica	4	—	—	1	1	—	—	—	—	6
Japan	—	—	1	—	—	—	—	—	—	1
Martinique	2	—	—	—	—	—	—	—	—	2
Mexico	3	9	—	1	2	1	2	4	26	48
Montserrat	—	—	1	—	—	—	—	—	—	1
Nicaragua	3	3	3	1	—	—	2	—	11	23
Panama	14	6	4	1	2	—	8	1	3	39
Paraguay	8	20	5	9	2	8	3	3	5	63
Peru	8	13	—	3	2	—	6	6	11	49
Surinam	1	1	9	1	—	—	—	—	—	12
Trinidad and Tobago	2	1	1	—	—	—	—	—	—	4
U S A	10	3	—	—	1	—	—	—	—	14
Uruguay	15	16	2	3	3	6	1	2	2	50
Venezuela	7	21	2	4	2	2	2	4	4	48
Total	298	285	89	125	147	156	250	271	295	1916

CPFA, January, 1978.

chiefly from the Center's regular budget. It must be noted, in this respect, that even in cases in which travel expenses and stipends of trainees are covered by their respective countries or through funds from Inter-American Development Bank credits, their training implies a substantial expenditure in instructors' salaries, equipment, supplies, glassware, drugs, experimental animals, etc.

Two seminars have been planned for 1979, as well as the continuation of the same program of courses of 1978.

D. INFORMATION

The biweekly report published by the Center on the occurrence of vesicular diseases on the Continent, was continuously published until May 1977. As of that month, and in order to make the information more flexible and useful, two modifications were introduced, as follows:

- a) the bi-weekly report became a monthly publication, while maintaining the same characteristics, and
- b) a new report is being published weekly, containing more up-to-date information on the existence of outbreaks, by means of a simple system of grid maps from the reporting countries.

Five issues of the Center's Boletin were published, catching up in major part with the delays experienced during recent years. This handicap has been partially coped with, and it is hoped that the publication shall come out on schedule in the course of 1978.

Publication of the Technical Manual Series reached title Nº 11 during 1977. The Bibliography Series already has 28 different titles, and periodic up-dating thereof is maintained.

The Center attributes great importance to information activities, endeavoring continuously to improve and rationalize its action in this field, within the means afforded by available resources.

V - TECHNICAL ASSISTANCE

Inasmuch as the major part of the Center's activities involves technical assistance, the present chapter shall be limited to actions developed at the level of the countries themselves. To this effect, the Center has assigned consultants to Panama, Colombia, Ecuador, Paraguay, Chile and Argentina. The work of these consultants is complemented by visits of specialists from headquarters.

The consultants operate in cooperation with the heads of national programs to control foot-and-mouth disease, and with the higher levels of the respective ministries of agriculture, whenever necessary. Their primary responsibility can be synthesized as follows: technical advisory services in planning, organization, execution and evaluation of programs; consulting services; local coordination among neighboring countries and the carrying out of advisory services required by the Center's headquarters.

Coverage of the area of priority attention in the Americas is carried out according to the following grouping of countries, with the location of consultants as indicated below:

<u>Countries</u>		<u>Consultancy headquarters</u>
Mexico, Central America and Panama	-	Panamá City
Colombia and Venezuela	-	Bogotá
Ecuador and Peru	-	Quito
Bolivia and Paraguay	-	Asunción
Chile	-	Santiago
Argentina and Uruguay	-	Buenos Aires
Brazil	-	Rio de Janeiro

Technical assistance for Brazil and Uruguay is provided for by the Center's headquarters.

In several countries, the work of the consultants is coordinated and strengthened with human resources under contract, following technical cooperation agreements held between the respective countries and PAHO, pursuant to loan arrangements with the IDB.

A. COUNTRIES IN FOOT-AND-MOUTH DISEASE AREAS

Canada, the United States of America, Mexico, Central America, the countries, territories and islands of the Caribbean, Guyana, Surinam, French Guiana, and Chilean and Argentine Patagonia, continue to be free from foot-and-mouth disease.

Mexico, the Central American countries and Panama represent the sector of highest risk in foot-and-mouth disease prevention, due especially to their territorial continuity with infected areas and the confused problems which are raised by reason of the endemic presence of vesicular stomatitis in all of these countries.

Surveillance of vesicular stomatitis is essential for the prevention of foot-and-mouth disease. The only countries in the free area having laboratories for the identification of causal agents of vesicular stomatitis are: Canada, the United States of America and Mexico, and these laboratories, for security reasons, can only take care of their own needs. As far as all other countries are concerned, the service is provided by the Diagnostic and Reference Laboratory of the Pan American Foot-and-Mouth Disease Center. This activity has continued to increase significantly in recent years, as a consequence of the evolution of epidemiological surveillance programs in Central America and Panama, as shown in Table 5 (page 14). The vital interest of the countries and the need to consolidate these programs permit the assumption that this trend will continue. In conformity with Resolution XVII of RICAZ 8, the Pan American Health Organization carried out a study forestablishing in Panama a Regional Laboratory for the Diagnosis of Vesicular Diseases, which would serve the above-mentioned country as well as those of Central America. The United Nations Development Program (UNDP) has approved financing this project, RLA/75/045, for four (4) years, which will be carried out by the Center.

Implementation of this project has not yet been executed due to difficulties encountered in transferring the installations. While negotiations are continuing, an alternative plan presented by the Government of Panama is being studied.

During the year 1977, the Center tested 261 samples of vesicular diseases from Aruba, Belize, Costa Rica, Curaçao, El Salvador, Guatemala, Honduras, Nicaragua and Panama; the results of these tests are shown in Table 4 (page 13). In 188 opportunities the virus type New Jersey, of vesicular stomatitis was diagnosed, virus type Indiana₁ in 18 cases, in 29 cases virus types New Jersey and Indiana₁, and 126 samples were found to be negative.

B. COUNTRIES IN THE AFFECTED AREA

All countries affected by foot-and-mouth disease, located in South America, are presently carrying out national plans for the control of the disease.

Besides diagnosis, general research and training of human resources, the aspects which are most in need of technical advisory services now and in the foreseeable future, are the production and control of vaccine, the establishment of information systems and epidemiological surveillance, the review of the administrative organization, laboratory planning, small animals laboratories and animal quarantine stations and control posts of animal movements, diagnoses of situation in order to reformulate programs, program evaluation and consolidation of cooperative agreements between neighboring countries in the control of foot-and-mouth disease.

One particular subject which should be specifically emphasized is the development of the continental system of epidemiological surveillance of vesicular diseases, as proposed by the Center in 1973, and which is being successfully carried out in several countries. The system is structured in such a manner that it can serve the entire animal sector. Formation of human resources from the countries is included in the Center's training program, and in order to speed this endeavor a special project is being negotiated with the UNDP.

Much attention is also given to the process of program evaluation, taking advantage of the experience already obtained in the application of the guide developed in 1974.

VI - ADMINISTRATION

The administrative sector covers the following areas:

- A - Finances
 - Budget and Accounting
- B - Personnel
- C - Supplies and Warehouse
- D - General Services

During fiscal 1977, the following activities were developed, which can be summarized as follows:

A. FINANCES

Budget

The comparative budget situation, in fiscal years 1977, 1978 and 1979, is as follows:

Budget (in US\$)	1977	1978	1979
a) Personnel	1,760,220	1,810,800	1,971,100
b) Operational costs	671,570	851,900	824,600
Total budget	2,431,790	2,662,700	2,795,700
Annual increase		9.5%	5.00%

Under the heading of operational costs, the largest expense is for supplies and equipment, the detail of which, discriminated by year, is shown below, together with other important items:

Budget (in US\$)	1977	1978	1979
a) Supplies & equipment	322,200	366,000	339,100
b) Service-related travel	116,200	139,300	134,300
c) Common services	111,120	211,600	190,700
d) Training stipends	65,000	85,500	95,000
e) Other expenses	57,050	49,500	65,500
Total operational costs	671,570	851,900	824,600
Percentage of budget	27.7%	32.0%	29.5%

The percentage of budget expenses for fiscal 1978 is as follows:

	Budget/78	Percentage
a) Personnel costs	1,810,800	68.0
b) Operational costs	851,900	32.0
	2,662,700	100.0

Taking into consideration the fact that servicing the requirements of the American countries in foot-and-mouth disease control, prevention and eradication should be a permanent and systematic activity, necessary emphasis should be put upon the increase in the percentage of operational costs, which in 1978 will reach 31.9%. Said increase has been made possible through a readjustment effected in personnel costs.

Attached hereto are the tables showing the figures of the Center's budget for fiscal years 1978 and 1979.

Extraordinary contributions

The Oil Vaccine Research Project, established by the Government of Brazil early in 1976, with a four (4) year duration, continued its normal course; the amount of 520,000 cruzeiros - equivalent to US\$33,700 - was received for the 1977 operations.

The Vallée Laboratory contributed to experiment N° 1 of the Research Project on Oil-Adjuvanted Foot-and-Mouth Disease Vaccine in Pigs; the sum of 75,000 cruzeiros - equivalent to US\$4,860 - plus 110 pigs (valued at 33,000 cruzeiros - equivalent to US\$2,139), were received.

By the same token, the Secretariat of Agriculture of the State of Paraná, Brazil, contributed with 33,070 cruzeiros - equivalent to US\$2,143 - to the Oil-Adjuvanted Program in Pigs.

B. PERSONNEL

Action has been started to revise and update job descriptions, and to adjust the personnel structure by operational units of the Center.

Personnel requirements

In order to satisfactorily carry out the tasks required by the goals which have been programmed by the Center and meet the everincreasing needs of the American countries, it will become necessary to reinstate the following staff positions in the 1978 budget:

- | | |
|---|-------|
| a) 1 specialist in laboratory animal breeding | - P.4 |
| b) 1 serologist | - P.4 |
| c) 1 research officer | - P.4 |
| d) 1 communications officer | - P.4 |
| e) 1 publications technician | - P.4 |
| f) 1 consultant in campaign evaluation | - P.4 |
| g) 1 systems analyst | - P.4 |
| h) 1 budget officer | - P.2 |
| i) 2 laboratory assistants | - G.5 |
| j) 2 laboratory assistants | - G.4 |

These positions, which are required for 1978, were deleted from the 1977 draft budget.

C. SUPPLIES AND WAREHOUSE

The supply purchasing program was carried out in 100% of the amount budgeted for 1977. The volume of purchases was increased as a means of prevention and a safeguard against

inflation, mainly in view of the constant increases in the price of materials and supplies.

Physical assets of the Center were increased through acquisition of new property. Deteriorated materials accounted for in previous budget were disposed of, as previously authorized by the Central Office.

D. GENERAL SERVICES

Transportation

New transportation units were acquired with the money acquired from the sale of unused vehicles. Financing was obtained for the purchase of transportation units, chiefly for the bus which is used to transport personnel from Rio de Janeiro to the municipality of Duque de Caxias (100 Km round-trip per day). Control of repair purchases and other supplies for said vehicles was strengthened.

Maintenance

Maintenance work was carried out employing labor available at the Center. A number of building units were remodelled at reduced costs.

E. OTHER

Agreements

The Technical Assistance Agreement BRAZIL/PAHO-77/PG/BRA-3201 and 77/PG/BRA-3202, was terminated on 30 November 1977, showing a balance of US\$90,424, applied at the start of the current year in a special stipend program, pursuant to negotiations effected with the Government of Brazil and with IDB authorities.

Training of human resources

The Administration participated in the Courses on Epidemiology and Information Systems, and Communication contributing with topics of its specialization. Informal seminars on administration, with personnel from this sector, are being continued, for the purpose of improving the Center's support services.

TABLE 7

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER STAFF. 1978

1. Type and number of staff

a) PAHO program	
- International staff	24
- Local staff	144
	<hr/>
	168
b) UNDP/FAO/PAHO program	1
c) Ministry of Agriculture Program	80
d) Special services (IDB)	1
e) Special contracts (laboratory assistants)	1
	<hr/>
	251
	===

2. Professional staff

The professional staff of the Center as of 31 December 1977 is as follows:

Abaracón, Daniel	(Uruguay)	Vaccine Consultant
Alonso Fernández, Albino	(Spain)	Serologist
Alves da Cunha, Francisco H.	(Brazil)	Assistant Administrator
Angulo Navajas, Humberto F.	(Bolivia)	Administrator
Astudillo, Vicente	(Chile)	Biostatistician
Augé de Mello, Paulo	(Brazil)	Research Officer
Casas Olascoaga, Raúl	(Uruguay)	Director
Centeno, Eduardo R.	(Argentina)	Biochemist
Costa, Kleise de Freitas	(Brazil)	Assistant Researcher
Chain, Patricia	(USA)	Communications Officer
Faria, José Freire de	(Brazil)	Consultant stationed in Asunción, Paraguay
Ferreira, Maria Elma V.	(Brazil)	Assistant Researcher
Gaggero, Aldo	(Chile)	Consultant stationed in Bogotá, Colombia
Giacometti Viera, Homero	(Uruguay)	Research Officer
Goiç M., Roberto	(Chile)	Chief, Field Activities
Gomes, Ivo	(Brazil)	Principal Associate Researcher
Honigman, Moysés Natan	(Brazil)	Consultant stationed in Quito, Ecuador
Magallanes, Nelson	(Uruguay)	Consultant stationed in Buenos Aires, Argentina
Mesquita, Julio de A.	(Brazil)	Associate Researcher
Moscoso, Víctor Hugo	(Ecuador)	Consultant stationed in Santiago, Chile
Rosenberg, Félix J.	(Argentina)	Epidemiologist
Söndahl, Magnus Ståel	(Brazil)	Associate Researcher
Sutmöller, Paul	(Holland)	Chief, Laboratories
Vieira, Antonio	(Brazil)	Principal Associate Researcher

Service-related travel

Table 8 shows the number of service-related travel effected by the Center's personnel, discriminated by countries and by activities. From a total of 105 trips, 72 corresponded to the area of the Americas affected by foot-and-mouth disease, involving 264 working days; 30 trips within the area free from foot-and-mouth disease, totalling 176 working days; and 3 trips to Europe, 17 days, making a grand total of 457 working days.

F. MANAGEMENT OF ADMINISTRATIVE DOCUMENTS AND CORRESPONDENCE

Handling of administrative documents and correspondence is carried out through a system of centralization by areas and by subjects, respectively. During fiscal 1977, the following figures were recorded:

1. Administrative documentation

a) Documents requiring various procedures.	4,910
b) PAHO pay vouchers	1,774
c) Other services pay vouchers	296
d) Supply requisitions	1,750
e) Orders for local purchases	798
f) Orders for foreign purchases	62

2. Correspondence

a) Correspondence received (letters, memoranda, telegrams, etc.)	4,700
b) Correspondence sent (letters, memoranda)	1,850
c) Telegrams, telex, etc. sent	1,157

3. Other

a) Personnel correspondence (vacation requests, leave forms, insurance documents, etc.)	4,320
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G. MOVEMENT OF PROFESSIONAL PERSONNEL

Dr. Hernán Málaga Cruz, epidemiologist, submitted his resignation on 31 March 1977.

Dr. Paul W. Schilling, veterinarian, United States Air Force, left the Center on 30 June, after completion of his period of service.

TABLE 8
SERVICE-RELATED TRAVEL BY COUNTRY AND ACTIVITY
1977

Country	Director	Administrator	Chief of		Advisors in		Area* Consultants	Total
			Lab.	Field Serv.	Lab.	Field		
AMERICA								
<u>FMD-affected area</u>								
Argentina	1	-	2	1	5	-	1	10
Bolivia	-	-	1	2	1	1	2	7
Brazil**	5	2	1	8	9	-	8	33
Colombia	1	1	-	-	-	1	-	3
Chile	-	-	-	2	-	-	-	2
Ecuador	1	1	-	-	1	1	1	5
Paraguay	1	-	-	-	-	1	-	2
Peru	-	-	-	-	-	2	3	5
Uruguay	1	-	-	1	1	-	-	3
Venezuela	-	-	1	-	1	-	-	2
Subtotal	10	4	5	14	18	6	15	72
<u>FMD-free area</u>								
Netherlands								
Antilles	-	-	1	-	-	-	-	1
Costa Rica	1	-	-	-	-	-	2	3
El Salvador	-	-	-	-	-	-	2	2
USA	3	-	1	1	-	-	4	9
Guatemala	1	-	-	1	-	-	2	4
Mexico	-	-	-	-	-	2	-	2
Nicaragua	-	-	-	-	-	1	2	3
Panama	1	-	-	-	-	1	-	2
Puerto Rico	-	-	-	-	-	2	-	2
Dominican Rep.	1	-	-	-	-	-	-	1
Trinidad	-	-	-	-	-	1	-	1
Subtotal	7	-	2	2	-	7	12	30
EUROPE								
France	1	-	-	-	-	-	-	1
England	1	-	-	-	1	-	-	2
Subtotal	2	-	-	-	1	-	-	3
TOTAL	19	4	8	16	18	13	27	105

* Travel outside duty station country.

** Travel to advise vaccine programs and other research is not included, only those trips to places far away from Rio de Janeiro are considered.

NOTE: a) Working days affected area: 264
b) Working days free area: 176
c) Working days Europe: 17

Total: 457

Dr. Martin Hugh-Jones, regional veterinarian, FAO, assigned to the Center, terminated his functions on 31 December 1977.

Having reached the age limit, the following professionals retired:

Dr. W. H. Horacio Mónico
Eng. Osvaldo Fernández Balmaceda
Dr. Miguel Alberto Sandoval

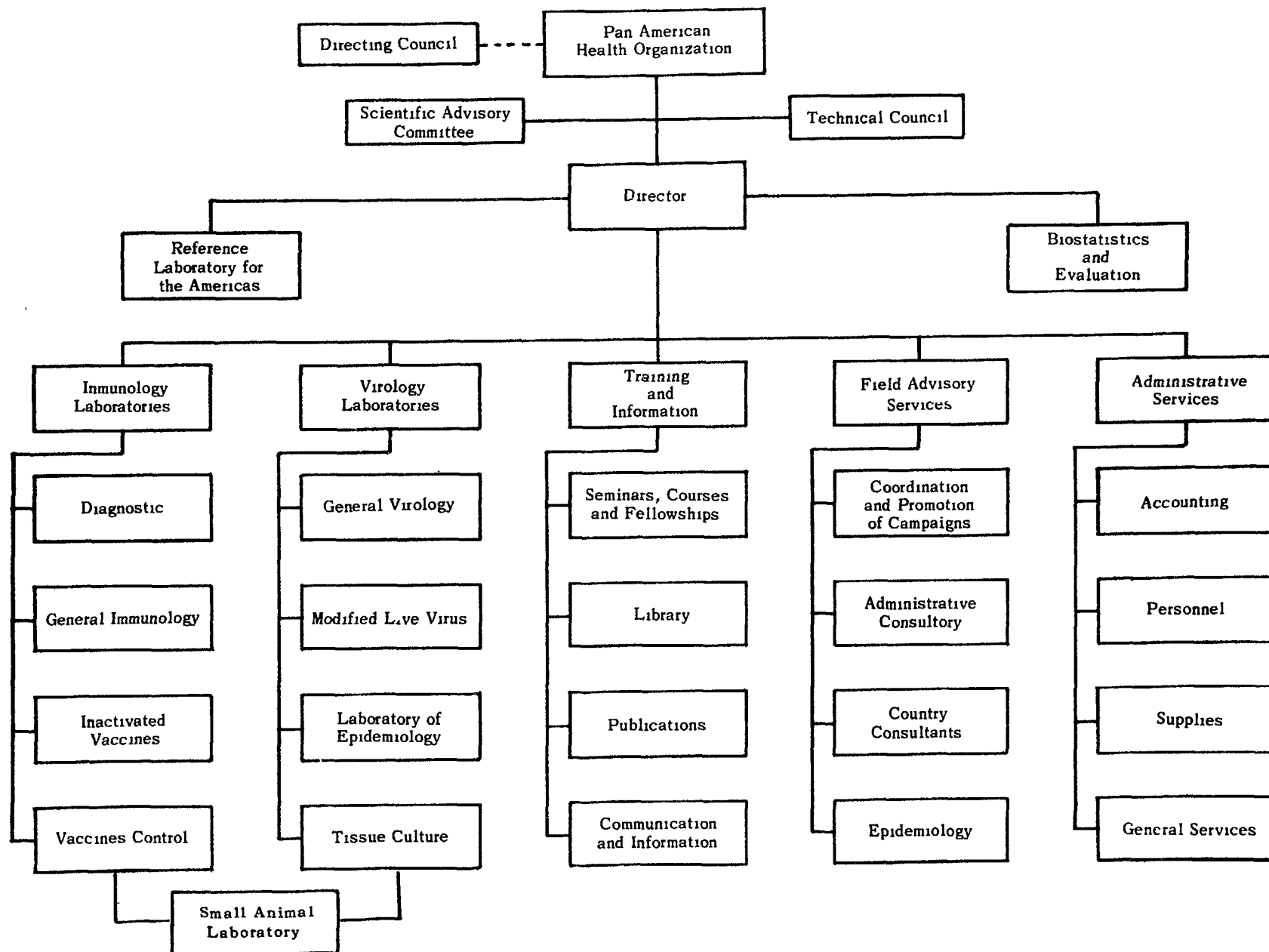
Dr. Nelson Magallanes, from Uruguay, assumed the functions of Area Consultant for Argentina, starting on 29 August 1977.

H. ORGANIZATION CHART OF THE PAN AMERICAN FOOT-AND-MOUTH
DISEASE CENTER

Table 9 presents the organization chart of the Center, with its present structure.

TABLE 9

ORGANIZATIONAL CHART OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER



PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

BREAKDOWN OF THE BUDGET IN ACCORDANCE WITH THE PROGRAM OF DIRECT SERVICES TO GOVERNMENTS

1978 - 1979

YEAR	LABORATORY AND RESEARCH ACTIVITIES (1)		TRAINING, COMMUNICATION AND INFORMATION SERVICES (2)		SERVICES (3)		TOTAL BUDGET	
	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%
1978	1,208,200	45.3	276,000	10.4	1,178,500	44.3	2,662,700	100.0
1979	1,246,800	44.5	286,600	10.3	1,262,300	45.2	2,795,700	100.0

- (1) Includes the item for diagnostic and reference laboratories and costs of laboratory consultants providing direct services to Governments and the cost of supplies sent to the countries.

Includes the costs of research undertaken by headquarters laboratories in coordination with the institutes or laboratories of some countries. Includes costs of personnel, supplies and equipment, and administrative costs.

- (2) These funds include the budget of the Training Department (personnel, fellowships, national and international courses, short-term consultants, supplies and equipment, and publications) and the costs of personnel, supplies, and other administrative costs for other departments involved in training.

- (3) In addition to the budget for field advisory services, includes costs of personnel and administrative staff of field studies on vaccines, epidemiology of the disease, carriers, etc., carried out jointly by the field advisory and laboratory departments. Also includes cost of meetings.

Funds intended for the general administration costs of the Center - finances, personnel, supplies and general services.

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

BREAKDOWN OF THE BUDGET FOR 1978

Regular Budget	*Laboratory and Research Activities	Training, Communication and Information Services	*Services	Total	% of Total
1. Personnel - Posts	917,700	109,600	777,500	1,804,800	67.8
2. Personnel-Consultants	-	6,000	-	6,000	0.2
3. Duty Travel	36,500	6,900	95,900	139,300	5.2
4. Printing and Binding	-	15,000	-	15,000	0.6
5. Seminar and Conference Costs	-	-	34,000	34,000	1.3
6. Hospitality	-	-	500	500	0.1
7. Supplies and Equipment	218,000	28,000	120,000	366,000	13.7
8. Fellowships	-	85,500	-	85,500	3.2
9. Common Services	36,000	25,000	150,600	211,600	7.9
10. Contractual Services	-	-	-	-	
Total	1,208,200	276,000	1,178,500	2,662,700	
Percentage of Total	45.3	10.4	44.3		100.0

* Include research, training and field services

PAN AMERICAN FOOT-AND-MOUTH DISEASE
CENTER

BUDGET

1 January - 31 December 1978

<u>Laboratory and Research Activities</u>	<u>1,208,200</u>
Salaries and Allowances	917,700
Professional staff (8)	
.0626 Chief of Laboratories, P.5	
.3231 Serologist, P.4	
.0633 Research Officer, P.4	
.3062 Biochemist, P.4	
.2049 Research Officer, P.4	
.3232 Vaccine Consultant, P.4	
.0639 Research Officer, P.3	
.0640 Research Associate, P.2	
Local Staff (114)	
Duty travel	36,500
Supplies and equipment	218,000
Supplies	198,000
Equipment	<u>20,000</u>
Common Services	36,000
	=====

1978 BUDGET (continued)

<u>Training Communication and Information Services</u>	<u>276,000</u>
Salaries and allowances	109,600
Professional staff (1)	
.2050 Chief of training activities, P.4	
Local staff (10)	
Duty travel	6,900
Short-term consultants	6,000
Fellowships	85,500
<u>Residents</u>	64,800
24 fellows from: Argentina (1), Bolivia (2), Brazil (2), Chile (1), Colombia (2), Cuba (1), Dominican Republic (1), Ecuador (2), Guatemala(1), Haiti (1), Jamaica (1), Panama (1), Paraguay (1), Peru (2), Uruguay (1), Venezuela (2), United States of America (1)	
<u>Seminars</u>	
In Rio de Janeiro, Brazil	9,900
11 fellows from: Argentina, Bolivia, Brazil (2), Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela	

1978 BUDGET (continued)

Seminar in Panama	10,800
12 fellows from: Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Nicaragua Jamaica, Surinam, Panama	
Printing and Binding	15,000
Supplies and Equipment	28,000
Supplies	28,000
Common services	<u>25,000</u>
<u>Services</u>	1,178,500
Salaries and Allowances	777,500
Professional staff (15)	
.0624 Director, P.5	
.0625 Chief of field services, P.5	
.0636 Administrative officer, P.4	
.0627 Veterinarian, P.4	
7 country consultants, P.4	
.3757 Biostatistician, P.4	
.3063 Statistician, P.4	
.3230 Administrative consultant. P.4	
.0642 Finance Officer, P.1	
Local staff (19)	

1978 BUDGET (continued)

Duty travel		95,900
Supplies and equipment		120,500
Supplies	80,500	
Equipment	40,000	
Common services		150,600
<u>Meetings</u>		34,000
Technical Council Meeting		
Duty travel	12,000	
Per diem	10,000	
Short-Term consultants	3,000	
Interpreters	6,000	
Local transportation , printing and general services	1,500	
Secretariat personnel	<u>1,500</u>	
	Total	<u>2,622,700</u>

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

1978 - BUDGET

LABORATORY AND RESEARCH ACTIVITIES

	Total	% of Total
<u>Personal Services and Allowances</u>		
International Staff	313,700	26.0
Local Staff	604,000	50.0
<u>Duty Travel</u>	36,500	3.0
<u>Supplies and Equipment</u>	218,000	18.0
<u>Common Services</u>	36,000	3.0
 T o t a l	 1,208,200	 100.0

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

1978 - BUDGET

TRAINING, COMMUNICATION AND INFORMATION SERVICES

	Total	% of Total
<u>Personal Services and Allowances</u>		
International Staff	40,500	14.7
Local Staff	69,100	25.0
<u>Duty Travel</u>	6,900	2.5
<u>Fellowships</u>	85,500	31.0
<u>Short-Term Consultant</u>	6,000	2.2
<u>Supplies and Equipment</u>	28,000	10.1
<u>Common Services</u>	25,000	9.1
<u>Printing and Binding</u>	15,000	5.4
T o t a l	276,000	100.0

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

1978 - BUDGET

SERVICES

	Regional Advisers	Advisers at Headquarters	Total	% of Total
<u>Personal Services and Allowances</u>				
International Staff	283,500	323,100	606,600	51.5
Local Staff	-	170,900	170,900	14.5
<u>Duty Travel</u>	31,000	64,900	95,900	8.1
<u>Supplies and Equipment</u>	-	120,500	120,500	10.2
<u>Common Services</u>	-	150,600	150,600	12.8
<u>Meetings</u>	-	34,000	34,000	2.9
Total	314,500	864,000	1,178,500	
Percentage of Total	26.7	73.3		100.0

PAN-AMERICAN FOOT-AND-MOUTH DISEASE CENTER

BREAKDOWN OF THE BUDGET FOR 1979

Regular Budget	*Laboratory and Research Activities	Training, Communication and Information Services	*Services	Total	% of Total
1. Personnel - Posts	977,700	116,900	869,700	1,964,300	70.3
2. Personnel-Consultants	-	6,800	-	6,800	0.2
3. Duty Travel	34,500	6,900	92,900	134,300	4.8
4. Printing and Binding	-	15,000	-	15,000	0.5
5. Seminar and Conference Costs	-	-	50,000	50,000	1.8
6. Hospitality	-	-	500	500	0.1
7. Supplies and Equipment	202,000	26,000	111,100	339,100	12.1
8. Fellowships	-	95,000	-	95,000	3.4
9. Common Services	32,600	20,000	138,100	190,700	6.8
10. Contractual Services	-	-	-	-	
Total	1,246,800	286,600	1,262,300	2,795,700	
Percentage of Total	44.5	10.3	45.2		100.0

* Include research, training and field services.

PAN-AMERICAN FOOT-AND-MOUTH DISEASE CENTER

BUDGET

1 January - 31 December 1979

<u>Laboratory and Research Activities</u>		<u>1,246,800</u>
Salaries and allowances		977,700
Professional staff (11)		
Chief of Laboratories, P.5		
Serologist, P.4		
Research Officer, P.4		
Biochemist, P.4		
Vaccine Consultant, P.4		
Small Animal Breeding Specialist, P.4		
Research Officer, P.4		
Research Officer, P.4		
Serologist, P.4		
Research Officer, P.3		
Research Associate, P.2		
Local Staff (115)		
Duty travel		34,500
Supplies and equipment		202,000
Supplies	198,000	
Equipment	<u>4,000</u>	
Common services		<u>32,600</u>

1979 BUDGET (continued)

<u>Training, Communication and Information Services</u>	<u>286,600</u>
Salaries and allowances	116,900
Professional Staff (3)	
Chief of training activities, P.4	
Communication officer, P.4	
Technical publications officer, P.2	
Local Staff (10)	
Duty travel	6,900
Short-term consultants	6,800
Fellowships	95,000
<u>Residents</u>	72,000
24 fellows from: Argentina (1), Bolivia (2), Brazil (2), Chile (1), Colombia (2), Cuba (1), Dominican Republic (1), Ecuador (2), Guatemala (1), Haiti (1), Jamaica (1), Panama (1), Paraguay (2), Peru (2), Uruguay (1), Venezuela (2), United States of America (1)	
<u>Seminars</u>	
In Argentina	11,000
11 fellows from: Argentina (1), Brazil (2), Paraguay (1), Bolivia (1), Ecuador (1), Colombia (1), Venezuela (1), Peru (1), Chile (1), Uruguay (1)	

1979 BUDGET (continued)

Seminar in Mexico	12,000	
12 fellows from: Nicaragua, Guatemala, Panama, El Salvador, Honduras, Costa Rica, Cuba, Haiti, Dominican Republic, Jamaica, Guyana, Surinam		
Printing and Binding		15,000
Supplies and equipment		26,000
Supplies	26,000	
Common services		20,000 =====
<u>Services</u>		<u>1,262,300</u>
Salaries and allowances		869,700
Professional Staff (17)		
Director, P.5		
Chief of Field Services, P.5		
Administrative Officer, P.4		
Veterinarian, P.4		
8 Country Consultants, P.4		
Administrative Consultants, P.4		
Biostatistician, P.4		
Statistician, P.4		
Campaign Evaluation Consultant, P.4		
Finance Officer, P.1		
Local Staff (19)		
Duty travel		92,900
Supplies and equipment		111,600
Supplies	91,600	
Equipment	<u>20,000</u>	
Common services		138,100

1979 BUDGET (continued)

Meetings

50,000

Technical Council Meeting

34,000

Duty travel	11,600
Per diem	10,000
Short-term consultants	3,400
Interpreters	6,000
Local transportation, printing and general services	1,500
Secretariat personnel	<u>1,500</u>

Scientific Advisory Committee

16,000

Duty travel	10,000
Per diem	<u>6,000</u>

Total

2,795,700

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

1979 - BUDGET

LABORATORY AND RESEARCH ACTIVITIES

	Total	% of Total
<u>Personal Services and Allowances</u>		
International Staff	332,800	26.7
Local Staff	644,900	51.7
<u>Duty Travel</u>	34,500	2.8
<u>Supplies and Equipment</u>	202,000	16.2
<u>Common Services</u>	32,600	2.6
 Total	 1,246,800	 100.0

PAN-AMERICAN FOOT-AND-MOUTH DISEASE CENTER

1979 - BUDGET

TRAINING, COMMUNICATION AND INFORMATION SERVICES

	Total	% of Total
<u>Personal Services and Allowances</u>		
International Staff	43,000	15.0
Local Staff	73,900	25.8
<u>Duty Travel</u>	6,900	2.4
<u>Fellowships</u>	95,000	33.1
<u>Short-Term Consultant</u>	6,800	2.4
<u>Supplies and Equipment</u>	26,000	9.1
<u>Common Services</u>	20,000	7.0
<u>Printing and Binding</u>	15,000	5.2
Total	286,600	100.0

PAN-AMERICAN FOOT-AND-MOUTH DISEASE CENTER

1979 - BUDGET

SERVICES

	Regional Advisers	Advisers at Headquarters	Total	% of Total
<u>Personal Services and Allowances</u>				
International Staff	344,000	342,900	686,900	54.4%
Local Staff	-	182,800	182,800	14.5%
<u>Duty Travel</u>	31,700	61,200	92,900	7.4%
<u>Supplies and Equipment</u>	-	111,600	111,600	8.8%
<u>Common Services</u>	-	138,100	138,100	10.9%
<u>Meetings</u>	-	50,000	50,000	4.0%
Total	375,700	886,600	1,262,300	
% of Total	29.8	70.2		100.0



PAN AMERICAN HEALTH ORGANIZATION

CE80/10 (Eng.)
ANNEX III



WORLD HEALTH ORGANIZATION

XI INTER-AMERICAN MEETING, AT THE MINISTERIAL LEVEL, ON FOOT-AND-MOUTH DISEASE AND ZONOSSES CONTROL

Washington, D.C., U.S.A., 11-14 April 1978

Provisional Agenda Item 6

RICAZ11/8 (Eng.)
2 March 1978
ORIGINAL: SPANISH

PROGRAM AND BUDGET OF THE
PAN AMERICAN ZONOSSES CENTER FOR 1978
AND PROPOSED ESTIMATES FOR 1979

PROGRAM AND BUDGET OF THE PAN AMERICAN ZOONOSSES CENTER FOR
1978 AND PROPOSED ESTIMATES FOR 1979

I. INTRODUCTION

In answer to a request from the Latin American countries concerning the need for an integrated and multinational approach in combatting and controlling zoonoses, the Pan American Sanitary Bureau established in 1956 a Pan American Zoonoses Center. Argentina, the country from which the proposal had originated, was chosen to host the institution.

The technical cooperation provided by the Center includes, mainly:

- the planning, execution and evaluation of programs;
- the training of personnel;
- the provision of reference services for the diagnosis of zoonoses, and the production and control of biologics;
- research aimed at improving the control of zoonoses, and
- the distribution of specialized information.

In accordance with the programming and evaluation system adopted by PAHO, the demand for technical cooperation from the countries should be geared to the possibilities of providing the services required. Consequently, in formulating its program, the Center has made every effort to meet the requirements of the countries to the best of its ability.

The growing demand for technical cooperation makes it necessary for the Center to increase its human and physical resources. The efforts that this entails are limited by both financial reasons and the inadequacy of the Center's present facilities. In the course of the IX and X Inter-American Meetings, at the Ministerial Level, on Foot-and-Mouth Disease and Zoonoses Control, the

Government of Argentina was asked to seek a solution which, while providing for the Center's expansion, would allow it to maintain an adequate flow of communication with the countries of the Region.

The Center proposes to continue its activities in the following fields:

a. Training

Training is one of the most important activities of the Center and is directly related to the rising demands from the countries. To meet their requirements in the best possible way, planning for 1978 includes some courses for groups of fellows, in addition to individual training. As in previous years, the Center will provide training in the following fields: planning in animal health, brucellosis, hydatidosis, leptospirosis, some parasitic zoonoses, rabies, tuberculosis, food hygiene, and breeding and handling of laboratory animals.

b. Technical advisory services

The implementation of programs for zoonoses control in a great number of countries has resulted in an increased demand for advisory services, both as regards the administrative aspects and related laboratory services. In this respect, the experts of the Center will continue to collaborate with the national officials in seeking solutions that are compatible with the characteristics of each country and within the framework of the technical standards recommended by the Pan American Sanitary Bureau and the World Health Organization.

c. Laboratory services

The Center, in compliance with the mandate received from the countries, will continue to fulfill its responsibility to act as regional reference center.

Consequently, it will carry on distributing strains for the production of antigens and vaccines for reference purposes, and receiving pathologic materials and strains for diagnosis, as well as vaccines, sera, and antigens produced in different countries of the Region for their quality control.

d. Research

The Center's research activities are aimed at solving various priority problems existing in the countries in the fields of epidemiology, diagnostic methods, and treatment and control of zoonoses.

Research programs are reviewed every two years by the Scientific Advisory Committee, composed of well-known scientists of the Americas and Europe appointed by the Director of PAHO. The reports of the Committee constitute excellent guidelines for the Center's work and an assurance of the proper use of funds allotted to research.

e. Technical information

The Center distributes updated information on the different aspects of zoonoses. The Latin American countries lack some of the elements required for a wide distribution of scientific literature; this constitutes a limiting factor to the establishment of efficient programs for zoonoses control. For this reason, the Center will continue to cooperate actively with the countries in this respect.

II. ACTIVITIES CARRIED OUT DURING 1977

1. Programs for the prevention and control of zoonoses

1.1 Brucellosis

The Center cooperated with Guatemala and Nicaragua in formulating the control programs to be submitted by these countries to the Inter-American Development Bank (IDB) to request financial support.

1.2 Hydatidosis and Immunology

Collaboration with the health authorities of Argentina in the national and provincial programs was continued. In this respect, a sample survey was carried out in the Province of Neuquen to detect hydatid cyst carriers among children of the rural school population; 870 samples were collected to this end. Cooperation is also continued with the pilot program of the Province of Chubut in the form of latex supplies.

Likewise, the Center collaborated with the authorities of the Province of Corrientes in carrying out a serologic survey in the rural population to determine the degree of hydatid infection; 194 samples were collected for this purpose.

The supply of reagents to Peru to be used in the studies of the hydatidosis control program in the Sierra Central was also continued.

1.3 Rabies

The Center participated actively as advisor to the National Commission for the Study and Control of Rabies, of Argentina, and cooperated in defining the strategy to be followed in this field. As a result of the Commission's

meetings, standards and criteria were established for application at the national level for controlling this zoonosis. Collaboration was also provided in laboratory problems to seven countries of the Region: Argentina, Ecuador, Guatemala, Mexico, Trinidad and Tobago, Uruguay, and Venezuela.

1.4 Parasitology

In Argentina, collaboration was continued with the authorities of the national government and the Province of Neuquen, where a program for the control of echinococcosis is in progress. Cooperation was likewise provided to the authorities of the Department of Zoonoses of the Secretariat of Public Health of the Province of Buenos Aires, located at Azul, where a program for the control of echinococcosis in an experimental area is under way.

Advisory services were given to the program for the control of hydatidosis in Peru. Cooperation was also continued with the authorities of Uruguay, both in the hydatidosis control program and in the study of the economic effects caused by this zoonosis in sheep.

Cooperation was also provided to Honduras, where a program for the control of ticks and Dermatobia hominis is to be started.

2. Laboratory services and supply of biologics

The Center continued to act as reference laboratory and in this capacity has been receiving biologic samples for typing, as well as antigens, sera and vaccines for the control testing of their quality. It also carried on sending to

the countries of the Region upon request reference strains for the production of antigens and vaccines.

Furthermore, the Center collaborated with the countries in supplying them with biologics. This activity is in increasing demand by the countries, since biologics are a necessity for their control programs. The consequent considerable expenditure on packing and mailing not provided for has obliged the Center to charge the countries for these services at cost, because the funds required for this purpose would have to be subtracted from those allotted to other activities, also of great importance for the countries.

3. Training

The Center continued to provide upon request individual training to professionals from the countries of the Region. During 1977, courses were held for groups of fellows on techniques for the immunodiagnosis of hydatidosis, immunofluorescence, production and control of rabies vaccines, and food microbiology and hygiene. Likewise, during the VII Course on Planning in Animal Health, a group of veterinarians received training in this discipline. It should be pointed out that the majority of the participants in previous courses are presently working in the units of animal health planning of their countries. The VII Course was attended by 13 fellows from Argentina, Brazil, Chile, Nicaragua, Paraguay, and Venezuela. For field training, the fellows were distributed in three groups; two of them worked in Argentina and one in Vene-

zuela. It is hoped that the countries will increase their cooperation in this field by furthering training in this discipline and making the best possible use of the fellows' services.

In addition to the training offered on its premises, the Center participated in the courses, seminars and workshops held on brucellosis, tuberculosis, hydatidosis, food hygiene, and rabies in Brazil, Chile, Colombia, Guatemala, and Venezuela.

4. Technical information and library services

The Center supplied technical information concerning zoonoses. During the year, publication of the Zoonosis Bulletin and the epidemiologic surveillance reports on rabies and equine encephalitis was continued. The technical notes entitled "Guía para los proyectos de lucha contra la hidatidosis" and "Vacunación contra el carbunco: producción, control y empleo de la vacuna Sterne" were issued. Also, some of the technical notes and monographs most in demand were reprinted.

The library continued its collaboration, either direct or through distribution by mail upon request, of numerous reprints, bibliographic lists and photocopies. It should be noted that the Center's library is one of the most highly specialized of Latin America in the field of zoonoses; it has a collection of over 6000 books related to the subject and regularly receives more than 500 scientific reviews. It also has audiovisual material which is made available

to requesting agencies on loan.

5. Research

The Center continued its research activities in the field of zoonoses with the purpose of improving the diagnosis and the production and control of biologics.

Research aimed at advancing serologic diagnosis of human brucellosis was continued. Likewise, work was continued on improvement of immuno-diagnostic techniques for human hydatidosis and the application and evaluation of the techniques recommended by the Center; to this end, and as part of agreements in force, numerous sera samples from persons suspected of being hydatid cyst carriers were examined.

With regard to rabies, neutralizing antibodies in dogs' serum and spinal fluid are being investigated with a view to evaluating the possibility of using spinal fluid serology for diagnostic purposes.

Serologic studies were continued to determine different schedules of post-exposure rabies vaccination in humans with suckling mouse brain (SMB) vaccine; 200 volunteers from whom serum samples are collected every month have been included in the studies.

Research on the duration of immunity in calves vaccinated against rabies with SMB vaccine was continued.

With regard to epidemiologic research, the role of the armadillo as a wild reservoir of salmonellae and other pathogenic agents continued to be

studied.

The testing of drugs against E. granulosus and of some chemical products likely to have parasitocidal effects against this taenia was also continued.

As regards the production of biologics, the production of PPD tuberculin with in-depth sowing of cultures was investigated; it was concluded that the method was not recommendable because it duplicates production costs.

Likewise, some liquid media for producing a vaccine against anthrax were tested.

The efficacy of binary ethylenimine (BEI) as inactivant in the production of rabies vaccine was demonstrated.

Other research activities

Studies were carried out on the morphology of E. granulosus; results will be published at the beginning of next year.

III. PROGRAM OF ACTIVITIES FOR 1978

Following is a brief summary of some of the activities to be carried out in 1978 related to the different aspects of the zoonoses control programs, research, training, information, and laboratory services.

The program of work was prepared on the one hand, taking into account the results received from the countries through the Area and Country Represent-

atives of PAHO, in accordance with the new programming and evaluation system that the Organization has put into effect during this year and, on the other, on the basis of the Center's knowledge of the existing situation in the countries, as a result of the personal contacts of its officers and the written consultations submitted by the national authorities.

1. Control programs

The Center expects to receive numerous requests for advisory services during 1978, particularly from countries where control programs are being formulated or programs of action are about to be implemented; in the latter case, most of the programs have benefited from the financial assistance of international credit agencies. Likewise, cooperation will be provided to other countries where programs are under way, both in the areas of programming and infrastructure.

In this respect, the Center plans to reinforce considerably those aspects related to technical cooperation in the field and in 1978 it is hoped to increase as far as possible this type of activities, as was done in 1977, when the Center gave special emphasis to providing maximum possible field assistance within the limits of its personnel and financial resources.

Following are some examples of the actions to be carried out on specific aspects of the different zoonoses on which the Center is working at present.

1.1 Brucellosis

In addition to the planning, administration and organization of programs,

the greatest possible support will be given to laboratories of the agriculture and health agencies of the various countries that periodically request the Center's collaboration.

Emphasis will be given to the assistance to be provided to laboratories about to be established, or in the initial or developing stages in some countries, since they are the basis for the implementation of control programs on a large scale.

Thus, for example, the Center will continue to cooperate with Mexico in the activities of the National Veterinary Biologics Production Laboratory (PRONABIVE), whose significance for the countries of the area considered to be free from foot-and-mouth disease was stressed at a previous RICAZ meeting. The activities of this agency would allow the countries to maintain an adequate stock of the products required for the control programs of animal diseases and, particularly, of the main zoonoses.

Likewise, collaboration will be continued in the establishment and initiation of activities of the central and reference laboratory of the Ministry of Agriculture of Brazil, known as the National Institute of Animal Health (INASA), located in the vicinity of the City of Belo Horizonte, in the State of Minas Gerais, which plans to start the production of brucellosis antigen on a large scale.

1.2 Tuberculosis

The Center envisages intensive activities in relation to this zoonosis, not only in the field aspects of some of the programs under way or about to be

started, but also in the laboratory aspects. In this respect, reference and supporting services will continue to be provided for the production of tuberculin for both human and animal use, as well as for the production and control of BCG in various Latin American countries.

The Center will continue the experimental work begun in previous years on the eradication of tuberculosis in bovines of a rural establishment in Argentina and will study the most useful methodology for its application in cattle-raising areas of similar characteristics.

1.3 Rabies

The Center will collaborate with several countries in relation to canine rabies control programs, as well as in some aspects of bovine rabies control.

It is anticipated that the Center will receive numerous requests for cooperation in continuing to improve rabies control methods. The Center will provide the advisory services and the biologic material required to solve present problems.

1.4 Food Microbiology

With regard to this activity, the Center plans to provide technical cooperation to various countries during 1978. For example, the assistance provided to Colombia during 1977 in organizing a national network for the control of foodstuffs and, in addition, controlling the diseases that may be transmitted by such products will be continued.

The present collaboration between the Center and the Adolfo Lutz Institute of Brazil in food microbiology will also be continued.

In Argentina, close cooperation will be maintained and strengthened with the health and agriculture institutions in this field of activities, as well as with the National Institute of Industrial Technology (INTI) concerning research and criteria on standards to be applied in the quality control testing of foodstuffs.

1.5 Immunology

Assistance will continue to be provided to various countries in relation to the immunodiagnosis of hydatidosis and seroepidemiologic sample surveys to determine the prevalence of hydatidosis and other zoonoses in the human and animal populations of some provinces of Argentina, thus complying with existing agreements with the provinces of this country that have been ratified by the national authorities.

Similar cooperation will be provided to the Secretariat of Health of the State of Rio Grande do Sul of Brazil, on the basis of a work plan agreed upon with the Institute of Biologic Research of that Secretariat, located in Porto Alegre, to be implemented during 1978. Similar activities will also be carried out in Chile and Peru.

1.6 Parasitology

With regard to parasitology, special attention will continue to be devoted to aspects related to echinococcosis; technical cooperation will be provided for the control programs of this parasitic disease in progress or about to be started in several provinces of Argentina, in Uruguay, and in the Sierra Central of Peru.

The Center will collaborate with the pertinent authorities of Chile in formulating a project for the control of this disease, to be initiated in an area in the south, where infection rates are highest.

Collaboration with Uruguay in a study on the losses caused by hydatidosis in sheep will be continued. Studies of the field application of new drugs against E. granulosus and related experimental activities will be intensified.

2. Research

With regard to research activities designed to improving diagnosis and extending knowledge on the epidemiology of zoonoses with a view to advancing methods for their control, it is planned to continue those projects with a duration of over a year.

New projects will be started in all the Center's laboratories. The following are some examples of the work planned.

2.1 Brucellosis

Improvement and evaluation of passive hemagglutination techniques and/or indirect hemolytic tests. Use of Rev. 1 vaccine against epididymitis in rams.

2.2 Tuberculosis

The antigenic components of PPD tuberculin of M. bovis and M. tuberculosis will be studied by immunoelectrophoresis, as well as the protein derivative prepared from suspensions of M. leprae.

2.3 Rabies

The stability of SMB vaccine against different factors, the antigen

extinction of SMB vaccine in bovines, and cellular immunity in rabies will be studied. Research on the duration of immunity in dogs conferred by cell culture vaccine will be concluded.

2.4 Immunology

New techniques in diagnostic and seroepidemiologic situations will be evaluated. The immunodiagnostic technique will be evaluated for other parasitic diseases different from hydatidosis.

2.5 Leptospirosis

Research will continue on the outer envelope antigens of leptospire; likewise, the presence of leptospiral antibodies in rural dwellers of Argentina will continue to be studied.

2.6 Food microbiology

Studies will be carried out to develop microbiologic criteria to be applied in the control of dairy products. A microbiologic study will also be made of the critical points in food processing plants.

2.7 Parasitology

The biology of E. granulosus will be studied; the ultrastructural study of E. granulosus by scanning electronic microscopy will be continued, as well as the analysis of economic effects of hydatidosis.

3. Training and information

During the year, six courses will be held on: brucellosis, rabies, parasitology, food microbiology and hygiene, tuberculosis, and the VIII Course

on Planning in Animal Health. In addition, the Center will continue with the individual training of fellows who may request it and whose instruction cannot be included in the courses planned.

As regards the distribution of information, publication of the Zoonosis Bulletin, as well as of the epidemiologic surveillance reports on rabies and equine encephalitis and the annual informative bulletins on brucellosis, tuberculosis, leptospirosis, hydatidosis, and food microbiology and hygiene will be continued.

The Center also plans to publish new technical notes and monographs and to reprint those most in demand.

4. Laboratory services

During 1978, the Center will continue its collaboration in supplying upon request biologics and reference strains, as well as antigens for diagnostic purposes. However, as mentioned previously, the Center will have to charge packing and mailing costs when the requests exceed the amounts needed for reference purposes.

BUDGET OF THE PAN AMERICAN ZOONOSES CENTER FOR 1978
AND PROPOSED ESTIMATES FOR 1979

The Government of Argentina participates with its contribution in the purposes that prompted the establishment of this project.

Under the Regional Project, the funds allocated for financing the activities of the Pan American Zoonoses Center during the period 1972-1979 will come from the following sources:

- A. An annual contribution from the Government of Argentina;
- B. Funds from the Regular Budget of the Pan American Health Organization (PAHO)--including the contributions of the Ministries of Agriculture, in accordance with Resolution II of RICAZ III, 15 April 1970;
- C. Funds from the Regular Budget of the World Health Organization (WHO).

Tables I and I-A show the budgetary projection for the years 1978 through 1979.

Table I

PAN AMERICAN ZOONOSES CENTER
BUDGETARY PROJECTIONS FOR THE YEARS 1978 THROUGH 1979
(in US dollars)

	<u>1978</u>	<u>1979</u>
Contributions from the Government of Argentina*	1,100,000	1,200,000
Funds from Regular Budget of the Pan American Health Organization**	879,300	930,600
Funds from the Regular Budget of the World Health Organization	194,500	203,400
	<u>2,173,800</u>	<u>2,334,000</u>

* The US dollar figure is subject to change since the funds are received in local currency and converted to US dollars, using the exchange rate at the time of receipt.

** In the funds of the PAHO Regular Budget, there are included the corresponding contributions of the Ministries of Agriculture and Public Health, in the amounts of \$879,300 (1978) and \$930,600 (1979). These amounts, included in the PAHO Regular Budget and approved by the Directing Council of PAHO (or the Pan American Sanitary Conference) form an integral part of the quota assessment of each Member Government.

For the information of those Member Governments who decide to allocate to the Ministries of Agriculture and Public Health a portion of the quota for support of the Pan American Zoonoses Center, there is a schedule in Table I-A, showing the amount by country.

Table I-A

PAN AMERICAN ZOONOSES CENTER

Country	%	Tentative 1979 US\$
Argentina	7.72	66,669
Barbados	0.07	604
Bolivia	0.19	1,641
Brazil	7.30	63,041
Chile	1.33	11,486
Colombia	1.52	13,126
Costa Rica	0.19	1,641
Cuba	1.04	8,981
Dominican Republic	0.19	1,641
Ecuador	0.19	1,641
El Salvador	0.19	1,641
Grenada	0.03	259
Guatemala	0.28	2,418
Haiti	0.19	1,641
Honduras	0.19	1,641
Jamaica	0.19	1,641
Mexico	8.16	70,468
Nicaragua	0.19	1,641
Panama	0.19	1,641
Paraguay	0.19	1,641
Peru	0.66	5,700
Trinidad and Tobago	0.19	1,641
United States of America	66.00	569,967
Uruguay	0.57	4,922
Venezuela	3.04	26,253
		863,586
<u>Other Member Governments</u>		
Bahamas	0.06	518
Canada	6.94	59,933
Guyana	0.19	1,641
Surinam	0.12	1,036
		63,128
<u>Participating Governments</u>		
France	0.19	1,641
Kingdom of the Netherlands	0.07	604
United Kingdom	0.19	1,641
		3,886
TOTAL		930,600

PAN AMERICAN ZONOSSES CENTER

BREAKDOWN OF THE BUDGET FOR 1978

	Office of Director	Training and Information Services	Field Services	Laboratory Services	Adminis- tration	Meet- ings	Total	% of Total
Salaries and allowances	92,600	218,300	461,300	762,000	257,900		1,792,100	82.4
Short-term consultants (m/m = 4)	-	-	6,000	6,000	-		12,000	0.6
Duty travel	13,500	2,250	11,700	16,650	900		45,000	2.1
Fellowships	-	22,500	-	-	-		22,500	1.0
Supplies and equipment	4,220	16,170	18,280	21,090	10,540		70,300	3.2
Common services	5,390	26,960	35,940	75,470	35,940		179,700	8.3
Contractual services	1,600	9,600	6,720	8,320	5,760		32,000	1.5
Meetings	-	-	-	-	-	15,000	15,000	0.7
Publications	-	5,200	-	-	-		5,200	0.2
TOTAL	117,310	300,980	539,940	889,530	311,040	15,000	2,173,800	
				1,429,470				
Percentage of total	5.4	13.8	24.8	41.0	14.3	0.7		100
				65.8				

PAN AMERICAN ZOONOSES CENTER

BUDGET

1 JANUARY THROUGH 31 DECEMBER 1978

I.	OFFICE OF THE DIRECTOR	<u>117,310</u>	<u>5.4%</u>
	a) Personnel: Salary and allowances	92,600	4.3
	Professional staff (1) Director P.5		
	Local staff (3)		
	b) Duty travel	13,500	0.6
	c) Supplies and equipment	4,220	0.2
	d) Common services	5,390	0.2
	e) Contractual services	1,600	0.1
II.	TRAINING AND TECHNICAL INFORMATION ACTIVITIES AND LIBRARY	<u>300,980</u>	<u>13.8%</u>
	a) Personnel: Salary and allowances	218,300	10.1
	Professional staff (3) Chief of Training P.4 Editor/Translator P.2 Audiovisual Specialist P.1		
	Local staff (13)		
	b) Short-term consultants	-	-
	c) Duty travel	2,250	0.1
	d) Fellowships	22,500	1.0
	e) Supplies and equipment	16,170	0.7
	f) Common services	26,960	1.3
	g) Contractual services	9,600	0.4
	h) Publications	5,200	0.2

BUDGET 1978 (cont.)

III.	FIELD SERVICES FOR ZONNOSES CONTROL	<u>539,940</u>	<u>24.8%</u>
	a) Personnel: Salary and allowances	461,300	21.2
	Professional Staff (6)		
	Chief of Technical Services P.5		
	Zoonoses Specialist (tub. and bru.) P.4		
	Control Programs Adviser P.4		
	Epidemiologist P.4		
	Biostatistician P.4		
	Parasitologist (program control spec.) P.4		
	Local staff (18)		
	b) Short-term consultants (m/m = 2)	6,000	0.3
	c) Duty travel	11,700	0.5
	d) Supplies and equipment	18,280	0.8
	e) Common services	35,940	1.7
	f) Contractual services	6,720	0.3
IV.	LABORATORY SERVICES	<u>889,530</u>	<u>41.0%</u>
	a) Personnel: Salary and allowances	762,000	35.0
	Professional staff (11)		
	Zoonoses Specialist P.4 (2)		
	Parasitologist P.4		
	Microbiologist P.4		
	Immunologist P.4		
	Virologist P.4		
	Lab. Animals Specialist P.2		
	Bacteriologist P.2		
	Research Associate P.1 (3)		
	Local staff (33)		

BUDGET 1978 (cont.)

	b) Short-term consultants (m/m = 2)	6,000	0.3
	c) Duty travel	16,650	0.8
	d) Supplies and equipment	21,090	1.0
	e) Common services	75,470	3.5
	f) Contractual services	8,320	0.4
V.	ADMINISTRATIVE SERVICES	<u>311,040</u>	<u>14.3%</u>
	a) Personnel: Salary and allowances	257,900	11.8
	Professional staff (1)		
	Administrative Officer P.3		
	Local staff (21)		
	b) Duty travel	900	-
	c) Supplies and equipment	10,540	0.5
	d) Common services	35,940	1.7
	e) Contractual services	5,760	0.3
VI.	MEETINGS	<u>15,000</u>	<u>0.7%</u>
	Scientific Advisory Committee		
	Travel 10,500		
	Per diem <u>4,500</u>		
	TOTAL	<u>2,173,800</u>	<u>100.0%</u>

PAN AMERICAN ZOONOSES CENTER
BUDGET 1978
TRAINING AND TECHNICAL INFORMATION

	National Courses(*)	International Courses and Seminars	Individual Training	Publica- tions	Total	Percentage of Total
Salaries and allowances						
International staff	5,060	28,060	8,440	52,140	93,700	31.1
Local staff	12,450	24,930	24,920	62,300	124,600	41.4
Duty travel	900	1,130	220	-	2,250	0.7
Fellowships	-	10,000	12,500	-	22,500	7.5
Supplies and equipment	2,000	3,230	2,370	8,570	16,170	5.4
Common services	1,620	5,120	6,740	13,480	26,960	9.0
Contractual services	1,000	500	-	8,100	9,600	3.2
Publications	500	500	1,500	2,700	5,200	1.7
TOTAL	23,530	73,470	56,690	147,290	300,980	
Percentage of total	7.8	24.4	18.8	49.0		100.0

(*) To be held in the countries with the assistance of the Center

PAN AMERICAN ZONOSSES CENTER
BUDGET FOR 1978
TECHNICAL COOPERATION SERVICES

	Field Services	%	Laboratory Services	%	Total
Salaries and allowances					
International staff	250,700	46.4	397,600	44.6	648,300
Local staff	210,600	39.0	364,400	41.0	575,000
Short-term consultants (m/m = 4)	6,000	1.1	6,000	0.7	12,000
Duty travel	11,700	2.2	16,650	1.9	28,350
Supplies and equipment	18,280	3.4	21,090	2.4	39,370
Common services	35,940	6.7	75,470	8.5	111,410
Contractual services	6,720	1.2	8,320	0.9	15,040
TOTAL	539,940	100.0	889,530	100.0	1,429,470
Percentage of total	37.8		62.2		100.0

BREAKDOWN OF THE BUDGET FOR 1979

	Office of Director	Training and Information Services	Field Services	Laboratory Services	Adminis- tration	Meet- ings	Total	% of Total
Salaries and allowances	99,560	235,070	495,060	821,300	280,610		1,931,600	82.8
Short-term consultants (m/m = 4)	-	-	6,760	6,640	-		13,400	0.6
Duty travel	14,160	2,360	12,270	17,470	940		47,200	2.0
Fellowships	-	24,000	-	-	-		24,000	1.0
Supplies and equipment	5,230	20,030	22,640	26,140	13,060		87,100	3.7
Common services	5,800	28,980	38,650	81,140	38,630		193,200	8.3
Contractual services	1,600	9,600	6,720	8,320	5,760		32,000	1.4
Meetings	-	-	-	-	-	-	-	-
Publications	-	5,500	-	-	-		5,500	0.2
TOTAL	126,350	325,540	582,100	961,010	339,000	-	2,334,000	
			1,543,110					
Percentage of total	5.4	13.9	24.9	41.3	14.5			100.0
			66.2					

PAN AMERICAN ZOONOSES CENTER

BUDGET

1 JANUARY THROUGH 31 DECEMBER 1979

I.	OFFICE OF THE DIRECTOR	<u>126,350</u>	<u>5.4%</u>
	a) Personnel: Salary and allowances	99,560	4.3
	Professional staff (1) Director P.5		
	Local Staff (3)		
	b) Duty travel	14,160	0.6
	c) Supplies and equipment	5,230	0.2
	d) Common services	5,800	0.2
	e) Contractual services	1,600	0.1
II.	TRAINING AND TECHNICAL INFORMATION ACTIVITIES AND LIBRARY	<u>325,540</u>	<u>13.9%</u>
	a) Personnel: Salary and allowances	235,070	10.1
	Professional staff (3) Chief of Training P.4 Editor/Translator P.2 Audiovisual Specialist P.1		
	Local staff (13)		
	b) Short-term consultants	-	-
	c) Duty travel	2,360	0.1
	d) Fellowships	24,000	1.0
	e) Supplies and equipment	20,030	0.9
	f) Common services	28,980	1.2
	g) Contractual services	9,600	0.4
	h) Publications	5,500	0.2

BUDGET 1979 (cont.)

III.	FIELD SERVICES FOR ZOO NOSES CONTROL	<u>582,100</u>	<u>24.9%</u>
	a) Personnel: Salary and allowances	495,060	21.1
	Professional staff (6)		
	Chief of Technical Services P.5		
	Zoonoses Specialist (tub. and bru.) P.4		
	Control Programs Adviser P.4		
	Epidemiologist P.4		
	Biostatistician P.4		
	Parasitologist (program control spec.) P.4		
	Local staff (18)		
	b) Short-term consultants (m/m = 2)	6,760	0.3
	c) Duty travel	12,270	0.5
	d) Supplies and equipment	22,640	1.0
	e) Common services	38,650	1.7
	f) Contractual services	6,720	0.3
IV.	LABORATORY SERVICES	<u>961,010</u>	<u>41.3%</u>
	a) Personnel: Salary and allowances	821,300	35.3
	Professional staff (11)		
	Zoonoses Specialist P.4 (2)		
	Parasitologist P.4		
	Microbiologist P.4		
	Immunologist P.4		
	Virologist P.4		
	Lab. Animals Specialist P.2		
	Bacteriologist P.2		
	Research Associate P.1 (3)		
	Local staff (33)		

BUDGET 1979 (cont.)

b) Short-term consultants (m/m = 2)	6,640	0.3
c) Duty travel	17,470	0.7
d) Supplies and equipment	26,140	1.1
e) Common services	81,140	3.5
f) Contractual services	8,320	0.4
V. ADMINISTRATIVE SERVICES	<u>339,000</u>	<u>14.5%</u>
a) Personnel: Salary and allowances	280,610	12.0
Professional staff (1)		
Administrative Officer P.3		
Local staff (21)		
b) Duty travel	940	-
c) Supplies and equipment	13,060	0.6
d) Common services	38,630	1.7
e) Contractual services	<u>5,760</u>	<u>0.2</u>
TOTAL	<u>2,334,000</u>	<u>100.0%</u>

PAN AMERICAN ZONOSSES CENTER
BUDGET 1979
TRAINING AND TECHNICAL INFORMATION

	National Courses(*)	Interna- tional Courses and Seminars	Individual Training	Publica- tions	Total	Percentage of Total
Salaries and allowances						
International staff	5,380	29,780	8,960	55,280	99,400	30.5
Local staff	13,560	27,150	27,130	67,830	135,670	41.7
Duty travel	940	1,180	240	-	2,360	0.7
Fellowships	-	12,000	12,000	-	24,000	7.4
Supplies and equipment	2,400	4,010	3,000	10,620	20,030	6.2
Common services	1,740	5,510	7,240	14,490	28,980	8.9
Contractual services	1,000	500	-	8,100	9,600	2.9
Publications	550	550	1,590	2,810	5,500	1.7
TOTAL	25,570	80,680	60,160	159,130	325,540	
Percentage of total	7.9	24.8	18.4	48.9		100.0

(*) To be held in the countries with the assistance of the Center

PAN AMERICAN ZOONOSES CENTER

BUDGET FOR 1979

TECHNICAL COOPERATION SERVICES

	Field Services	%	Laboratory Services	%	Total
Salaries and allowances					
International staff	266,100	45.7	424,900	44.3	691,000
Local staff	228,960	39.3	396,400	41.2	625,360
Short-term consultants (m/m = 4)	6,760	1.2	6,640	0.7	13,400
Duty travel	12,270	2.1	17,470	1.8	29,740
Supplies and equipment	22,640	3.9	26,140	2.7	48,780
Common services	38,650	6.6	81,140	8.4	119,790
Contractual services	6,720	1.2	8,320	0.9	15,040
TOTAL	582,100	100.0	961,010	100.0	1,543,110
Percentage of total	37.7		62.3		100.0



PAN AMERICAN HEALTH ORGANIZATION

CE80/10 (Eng.)
ANNEX IV



WORLD HEALTH ORGANIZATION

XI INTER-AMERICAN MEETING, AT THE MINISTERIAL LEVEL, ON FOOT-AND-MOUTH DISEASE AND ZOONOSSES CONTROL

Washington, D.C., U.S.A., 11-14 April 1978

RICAZ11/FR (Eng.)
14 April 1978
ORIGINAL: ENGLISH-SPANISH

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FINAL REPORT

The XI Inter-American Meeting, at the Ministerial Level, on Foot-and-Mouth Disease and Zoonoses Control was held at the Headquarters of the Pan American Health Organization in Washington, D.C., from 11 to 14 April 1978, in accordance with the convocation issued by the Director of the Pan American Sanitary Bureau pursuant to Resolution XIX approved by the Director Council of the Pan American Health Organization at its XVII Meeting.

OFFICERS

On 11 April the Heads of Delegations met to elect the officers of the Meeting, with the following results:

President:	Eng. Gustavo Pinto Cohen Minister of Agriculture and Stockraising of Venezuela
Vice-Presidents:	General Mario Mac-Kay Jaraquemada Minister of Agriculture of Chile Mr. Gavin B. Kennard Minister of Agriculture of Guyana
Rapporteur:	Dr. Elmer Escobar Chief of the Division of Food and Zoonoses Ministry of Health of Colombia

Dr. Héctor R. Acuña, Director of the Pan American Sanitary Bureau, served as Secretary ex officio.

PARTICIPANTS

The following Governments were represented at the Meeting: Argentina, Bahamas, Barbados, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, France, Grenada, Guatemala, Guyana, Haiti, Honduras, Kingdom of the Netherlands, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Surinam, Trinidad and Tobago, United States of America, Uruguay, and Venezuela. Also present were observers for Australia and for the following international organizations: Canadian International Development Agency, Food and Agriculture Organization of the United Nations, Inter-American Cattlemen's Association, Inter-American Development Bank, Inter-American Institute of Agricultural Sciences, International Bank for Reconstruction and Development, International Group for Agricultural Development in Latin America, International Office of Epizootics, Organization of American States, and Regional International Organization for Plant and Animal Health.

PLENARY SESSIONS

The speakers at the inaugural session were the President of the Meeting, Eng. Gustavo Pinto Cohen, Minister of Agriculture and Stockraising of Venezuela; Dr. Héctor R. Acuña, Director of the Pan American Sanitary Bureau; and Mr. P. R. Smith, Assistant Secretary for Marketing Services, United States Department of Agriculture.

Referring to the abundance of resources for livestock production in the Western Hemisphere, Eng. Pinto drew attention to the paradoxical situation existing in the Latin American countries where despite the fact that the total livestock resources were almost twice those of North America, their production was barely half of that of the United States of America, Canada, Europe, Australia and New Zealand. That situation was attributable, on the one hand, to the problem of foot-and-mouth disease and other zoonoses and, on the other, to inadequate use of modern technology in livestock production, coupled with insufficient development of the other sectors of the economy.

Latin America's potential for improving livestock productivity was excellent. Nevertheless, despite the progress made in the ten-year period 1968-1978, much remained to be done. The most important epizootic diseases in the Region--foot-and-mouth disease, bovine leukosis, contagious pleuropneumonia, pyroplasmosis, brucellosis, tuberculosis, hog cholera, leptospirosis, vibriosis and parasitic diseases as well as Newcastle disease and fowl pest--caused livestock owners enormous losses and hampered economic development. And although vaccines were available for some of them, they are costly for countries with limited resources.

It was therefore necessary to make a major effort and to unify the approach of the Governments of all the countries in the Americas in undertaking a unified program of veterinary health to overcome a common enemy. At the same time the economic development of the countries of the Hemisphere must be urgently accelerated in accordance with the principle that agriculture and stockraising are the basis of human existence.

Consequently, the Governments should provide the necessary resources for establishing a single approach, facilitating the operation of veterinary services, and ensuring that the unification of health legislation goes hand in hand with the establishment of fair compensation to livestock owners who are required to slaughter their animals.

Dr. Acuña, who was the next speaker, stated that the Meeting would establish the guidelines to be followed in conducting the veterinary public health and animal health programs the Organization carries out jointly with the Member Governments. In addition, it would afford an opportunity of

reviewing the collaborative activities of the Pan American Foot-and-Mouth Disease and Zoonoses Centers and of exchanging scientific knowledge about the problems affecting the countries of the Americas, the solution of which would increase the well-being of the population.

He emphasized that the livestock industry was vital for the Region since it was an important source of the proteins essential for human nutrition and also represented an enormous potential for generating employment opportunities and for obtaining, through the marketing of livestock products, the necessary foreign exchange for the integrated development of the countries. Accordingly, it was essential to make all possible efforts to control animal diseases. In that regard, international cooperation played an extremely important role, since in many cases the countries could not by themselves undertake such a large-scale task.

The topics the Meeting would deal with, such as those relating to hemispheric surpluses and deficits of meat and products of animal origin and their implications for human nutrition and industrial development, were very topical. The papers to be presented on those topics would also serve as reference documents for the Hemispheric Meeting on Foot-and-Mouth Disease and International Trade in Animals and Animal Products to be held in Buenos Aires in November 1978.

The results of the animal health and veterinary public health programs being carried out by the Governments of the Hemisphere with the technical support of PAHO had been very satisfactory. In that regard, mention should be made of the large-scale financial assistance provided by the Inter-American Development Bank, the United Nations Development Program, the Canadian International Development Agency, and other international and bilateral institutions, which had made it possible to strengthen the programs in most of the countries of the Americas.

The Pan American Health Organization, through the Ministries of Agriculture, was assisting in the search for solutions to the problems of malnutrition and the marketing of livestock products and was fully prepared to coordinate the activities of the countries in this field through educational, agricultural and financial projects that would raise the level of health of the inhabitants of the Region.

Finally, Mr. Smith welcomed the participants on behalf of the Government of the United States of America and expressed his satisfaction at being able to take part in the Meeting. He stated that his country was fortunate to have one of the healthiest livestock and poultry industries in the world but that cattle were a prime target for a series of diseases that existed in other locations of the world, not the least of which was foot-and-mouth disease.

At the same time as it was protecting itself against the entry of exotic diseases, the United States was collaborating with other countries in controlling various animal diseases. For example, it had signed agreements with Mexico, the countries of Central America and Panama, to cooperate in the prevention, control and eradication of foot-and-mouth disease, rinderpest, and other diseases. It was also participating in a foot-and-mouth disease control program in northwestern Colombia for the purpose of preventing the spread of the disease as a result of the construction of the unfinished portion of the Pan American Highway between Colombia and Panama.

He emphasized that it was important to reduce the threat represented by those diseases in the Hemisphere.

He mentioned the quarantine station recently established in Fleming Key, Florida, and the new facilities at Stewart Airport, Newburgh, New York, which would soon replace the present quarantine facility at Clifton, New Jersey.

As for the measures that would be adopted if an exotic disease were to gain entry into the United States, he reported that his country had established special teams of veterinarians, animal health technicians, and other experts, specifically trained for the purpose, and that the Division of Emergency Programs within the Veterinary Services was responsible for emergency field operations, international operations, and technical support in such cases. In addition, five regional emergency animal disease eradication organizations had been set up and made it possible to immediately mobilize specifically designated personnel for dealing with those situations. In addition, the Departments of the Army, Navy and Air Force and the Director of the Defense Supply Agency were committed to provide whatever resources were needed.

He outlined the new agricultural policies of the United States and emphasized that we should look upon the livestock of the Western Hemisphere as one national herd and do all we could to work together to control the scourge of pests, disease and other factors that were currently taking an enormous toll of food that was badly needed in the world.

At the opening of the first plenary session, Dr. Mário V. Fernandes, Chief of Human and Animal Health of the Pan American Sanitary Bureau, announced that the complete collection of the documents of the Meeting was available to the Representatives and made certain secretarial announcements.

Next the President presented the provisional agenda, which was unanimously approved.

Item 8 of the Agenda: "Panel on hemispheric surpluses and deficits of meat and products of animal origin. Their implications for human nutrition and industrial development," was then taken up. Papers by Dr. Ricardo Bressani, Eng. Alberto de las Carreras, Eng. Alvaro Lizano Volio and Eng. Mario Capurro were presented (Documents RICAZ11/10, 21, 19 and 9), the last mentioned being read by Mr. Jorge Soto Cherro.

During the second plenary session, on the afternoon of 11 April, at which the Minister of Agriculture of Guyana, Mr. Gavin B. Kennard, took the Chair, additional papers on Item 8 were presented by Mr. Marcos Solodkin and Dr. David E. Bartlett (Documents RICAZ11/20 and 5).

Upon completion of the presentations, the President thanked the speakers for the papers read. The Representative of Trinidad and Tobago expressed his satisfaction with the information provided by the panel. The Representatives of Haiti, Kingdom of the Netherlands, and Peru asked a number of pertinent questions, which were answered by Eng. de las Carreras and by Drs. Bartlett and Bressani.

Referring to a comment made by Eng. de las Carreras, the Observer for Australia explained that there were two reports published concerning blue tongue in his country in 1977 but that no clinical cases of the disease had occurred. Those reports referred exclusively to serological surveys and isolations of the virus in insects.

The Representative of the United States of America states that his country was changing its approach, in accordance with the needs, to the importation of live animals from European countries in which foot-and-mouth disease existed. It was also possible that the importation of animals from Latin American countries would be permitted. Any changes in present import restrictions must be based on facts and thus stressed the need for more research by the Pan American Foot-and-Mouth Disease Center and the infected countries.

The Representative of Brazil expressed satisfaction with the presentations and stated that it was urgently necessary to integrate disease control activities with other activities for the development of the countries. For example, the programs should take into account all the needs of the inhabitants of rural areas, not only their health needs but also their educational, social and other needs. In addition, the control of animal diseases should not be confined within the frontiers of the countries but should be pursued at the hemispheric level, since the problems affected the entire Region. Furthermore, the structures required for achieving prompt control of the diseases of major importance on the basis of an appropriate information system should be established. It was also necessary to make every effort to modify the health situation in the countries that had livestock problems and thus to make good the deficit in food for the population and to provide supplies at the regional level. The matter should be carefully studied so as to ensure that the measures adopted would produce the desired changes.

The Representative of Peru expressed his concern about the introduction into a South American country of cattle from Africa where the foot-and-mouth disease virus types were different from those present in South America. He reported that the countries of the Andean Group had recommended that the importation of animals and animal products from that country be prohibited. In his opinion all the countries of the Americas should unify their approaches in order to prevent the repetition of a situation like that described, which endangered the livestock industry of the Region.

The Representative of France expressed interest in the statement of the Representative of Brazil. As for the possibility of the transmission of diseases through frozen bull semen, he reported that in France all cattle were vaccinated against foot-and-mouth disease, with the exception of those in the Department of Finistere, where the quarantine facility was situated. Eighty-five per cent of the cows are inseminated with semen from bulls vaccinated against foot-and-mouth disease and no cases of the transmission of the disease had been reported.

During the second part of the session, which was chaired by Eng. Pinto, Dr. Kenneth Wells, Consultant, Agriculture Industry of Canada, dealt with the work of the Canadian International Development Agency (CIDA) since its creation in 1968. He stated that CIDA was providing assistance to more than 70 countries throughout the world, through bilateral, multi-lateral, and special assistance activities. For the fiscal year 1977-1978, Canada, through CIDA, would allocate more than \$1.1 billion to international development programs. Among the areas of major interest to the Agency were agriculture, education, and health, including nutrition. Recently approval had been given to a project for collaboration with PAHO in training sub-professional health personnel in rural areas in several countries of Central and South America.

He emphasized that CIDA was devoted to collaborating with the countries to promote the well-being of their inhabitants through the provision of goods, services and technical assistance directly to the Governments or through international or private institutions.

Then Eng. Leon Tenenbaum, speaking on behalf of Eng. Julián Rodríguez Adame, General Coordinator of the International Group for Agricultural Development in Latin America (GIDA/AL), presented a report on the Inter-American Program on Foot-and-Mouth Disease and Meat Technology of Argentina. He stated that, with the collaboration of PAHO, IDB, OAS and the Animal Disease Center of Plum Island, USA, cooperation had been given to the authorities and experts of the National Institute of Agricultural Technology (INTA) of Argentina in defining the financial magnitude of the program. The program had been unanimously approved by the participating agencies, especially PAHO, and the IDB had offered additional financial assistance. A special group composed of representatives of Argentina, IDB, OAS and the World Bank had been established and was responsible for the follow-up of the project. The INTA authorities had already started to prepare a definite version of the project.

The next speaker, Eng. César Cainelli, Observer for the Inter-American Development Bank, gave a detailed account of the participation of the Bank in the financing of the agricultural sector and summarized the specialized activities IDB had carried out in the livestock field in 1977. He emphasized the changes that had taken place in the past ten years in the systems of animal production and prevention of diseases in the countries in which intensive projects had been organized to achieve objectives in pre-established periods. Those projects were making it possible to bring about improvements in the institutional, administrative, financial, legal and economic aspects.

Furthermore, production, which was subject to limitations and deficiencies, had increased only slowly, and a large part of the efforts in this regard had been lost in the process of marketing, an aspect to which the Bank assigned great importance. It had financed projects designed to expand and complete existing facilities; develop new markets; construct facilities for the storage and preservation of products; and especially to strengthen institutions providing marketing services.

Finally, he made special mention of the advisory services and collaboration PAHO was offering to the countries and the Bank through its Pan American Foot-and-Mouth Disease and Zoonoses Centers, its regional consultants, and its own technical personnel; those activities had made it possible to strengthen the technical aspects of project programming and execution.

The third plenary session, which was held on the morning of 12 April, was devoted to a discussion of Item 4: "Status of the implementation of the recommendations and achievement of the goals for animal health and veterinary public health established in the Ten-Year Health Plan for the Americas." The advisers in veterinary public health stationed in the several PAHO Areas presented the consolidated reports of the countries included in each Area, in the following order:

- Report on the countries of Area I (Bahamas, Barbados, France, Grenada, Guyana, Jamaica, Kingdom of the Netherlands, Surinam, Trinidad and Tobago, United Kingdom, and Venezuela) presented by Dr. Eugene Papp, Area Adviser.
- Report on the countries of Area II (Cuba, Dominican Republic, Haiti, and Mexico) presented by Dr. Enrique Mora, Area Adviser.
- Report on the countries of Area III (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama) presented by Dr. Jorge Escalante, Area Adviser.
- Report on the countries of Area IV (Bolivia, Colombia, Ecuador and Peru) presented by Dr. Héctor Campos López, Area Adviser.

- Report on Area V (Brasil) presented by Dr. Juan Zapatel, Area Adviser.

- Report on the countries of Area VI (Argentina, Chile, Paraguay, and Uruguay) presented by Dr. Rubén Lombardo, Chief, Technical Assistance, Pan American Zoonoses Center.

The second part of the session was chaired by the Minister of Agriculture of Chile, General Mario Mac-Kay.

The Representatives were asked whether they wished to make any comments on the topics discussed at earlier sessions. The Representative of Haiti, commenting on the report on the support being provided by the Canadian International Development Agency to a number of countries, stated that Haiti was carrying out a comprehensive development program which was receiving support in the amount of US\$20 million from the Government of Canada through CIDA. He presented a draft resolution expressing appreciation of the support provided by CIDA.

The Representative of Costa Rica mentioned the financial support his country, like other countries in the Region, was receiving from the Inter-American Development Bank for animal health projects and presented a draft resolution thanking the IDB for its support.

Then the Representative of Jamaica submitted a draft resolution expressing appreciation of the collaboration being provided by the United Nations Development Program to programs for the control of animal diseases.

The Rapporteur read out the draft resolutions, all of which were unanimously approved.

At the opening of the fourth plenary session, in the afternoon of 12 April, Dr. Mário V. Fernandes announced on behalf of the Secretariat that the book entitled "Zoonoses and Communicable Diseases Common to Man and Animals," of which Dr. Pedro N. Acha, Chief of the Division of Disease Control, PASB, and Dr. Boris Szyfres, formerly Director of the Pan American Zoonoses Center, were the authors, was being distributed to all participants. As stated in the foreword, which bore the signature of the Director of the Pan American Sanitary Bureau, the Organization had decided to publish this valuable work as part of its activities for the commemoration of its 75th Anniversary, in the conviction that it would be very useful to all those interested in human and animal health. It was deemed advisable to distribute it on that occasion in order to bring it to the knowledge of the Representatives.

Continuing the discussion of Item 4, Dr. Manuel Moro, Regional Advisor in Veterinary Public Health, PASB, submitted the report on Canada and the United States of America.

The next speaker was Dr. Robert Goic, of the Pan American Foot-and-Mouth Disease Center, who presented a report on the surveillance of foot-and-mouth disease and other vesicular diseases. His presentation was based on reports received from the countries. He also described the evolution of foot-and-mouth disease in recent years, and the operation of the information system. He gave an account of the status of foot-and-mouth disease control and of the conduct of the programs. He pointed out that in 1977 most of the countries assigned priority to the epidemiological study of the disease, including the concept of moving beyond political boundaries, and that the services for the control of foot-and-mouth disease and other diseases, in particular rabies, tuberculosis and brucellosis, was being expanded and intensified and in this way progress was being made towards the integration of animal health programs.

Dr. Rubén Lombardo of the Pan American Zoonoses Center presented a report on the epidemiological surveillance of equine encephalitis and rabies in the Americas in 1977 and stated that the trends noted in earlier years were persisting. He stated that rabies epidemics had occurred in Ecuador, on the United States/Mexico border, and in Buenos Aires and its environs, which had subsequently spread to Mar del Plata and, to a lesser extent, to the desert area of northern Chile. In all cases the necessary measures to contain the situation had been adopted. With respect to the encephalitides, he stated that information on the existence of foci in several countries had been received, but the data received were incomplete and notification was delayed. He emphasized the need for diagnostic system to be strengthened through the establishment of appropriate laboratories, and mentioned the possibility that the creation of a regional center for equine encephalitis might be considered.

Dr. Gustavo Reta, Regional Adviser in Veterinary Medicine, PASB, presented the findings of a study on the status of animal health in the Americas which, pursuant to a resolution of the X Inter-American Meeting, had been made by PAHO in cooperation with the Member Countries. The study covered geographical aspects, data on the human and livestock populations, animal health manpower, the activities of the private sector in animal health, and stockmen's organizations and livestock legislation. In accordance with the request of the Director of the Pan American Sanitary Bureau, a number of countries had already designated liaison officers to ensure appropriate coordination with the health authorities. Questionnaires have been sent out for the purpose of collecting data from the Spanish-speaking countries, some of which had already sent in their replies, and a version was being prepared for the English-speaking countries.

Then Dr. Mário V. Fernandes presented a report on the implementation of the resolutions of RICAZ X and reviewed the activities carried out by the Bureau and the countries since that Meeting.

Next, the Representative of Haiti commended the Area Advisers of PASB on the consolidated reports they had presented on the countries in their work areas. He stated that, at earlier meetings, efforts had been made to

standardize the presentation of those reports and that the format used at the present meeting had been very satisfactory. However, it was to be hoped that the reports to be presented in the future would also include explanations of factors limiting or restricting the accomplishment of the objectives established.

Dr. Pedro N. Acha, Chief of the Division of Disease Control, PASB, then submitted a report on the Special Fund for Animal Health Research, the establishment of which had been approved by the X Inter-American Meeting. He stated that PAHO had prepared draft regulations for the Fund (to be found in Document RICA211/25) and that they had been submitted to the countries for consideration. The Fund would be directed by a Council composed of one representative designated by the Government of each contributing country, and would be financed out of voluntary contributions of the Governments, nongovernmental agencies, and organizations interested in activities connected with animal health. The operations of the Fund would be conducted under the technical and administrative responsibility of PAHO.

He reported that the following countries had indicated that they would contribute to the Fund: Bolivia, Chile, Dominican Republic, Ecuador, Honduras, and Mexico; for its part, Venezuela had already made its contribution. It was very important that contributions should be made to the Fund since they would be used to conduct the studies the countries themselves considered essential for the execution of priority animal health programs. It was to be hoped that private enterprises would also participate in the endeavor, since they would benefit from the research undertaken. Very shortly a meeting of the countries that had contributed to the Fund would be held.

The Representative of Venezuela expressed concern that additional contributions to the Fund had not been received. He believed that there were many aspects of animal health activities that needed to be investigated and such investigations would only be possible if the required resources became available.

The Representative of Brazil stated that it was also important to assign funds for the development of systems for the epidemiological surveillance of various animal diseases, and the training of manpower for the programs.

Then Dr. Acha thanked the Representative of Venezuela for his interest in the Fund and the contribution his Government had made to it. He believed that the Fund could accommodate whatever personnel training and epidemiological surveillance activities the countries deemed appropriate.

The Representative of Mexico expressed his agreement with Dr. Acha that, with the support of the Fund, such personnel training and epidemiological surveillance activities as were deemed priorities could be carried out.

The President said that, if there were no objections to the draft regulations of the Fund presented in Document RICAZ11/25, he would request the Rapporteur to prepare the pertinent resolution.

The Representative of Venezuela pointed out that all the participants appeared to agree that it was important to establish the Fund as soon as possible. Therefore, a meeting of the countries that wished to participate in it should be convened.

Next, the Representative of Panama invited the XII Inter-American Meeting to meet in 1979 in the City of Panama, since it had not been possible to hold the X Meeting there.

The Representative of the Kingdom of the Netherlands stated that he also wished to invite the XII Meeting to meet in Curaçao.

The President stated that the matter would be taken up at the session to be held on Friday, 14 April.

After a short recess, a ceremony was held at which the Agreement between the Government of Argentina, the General Secretariat of the Organization of American States, and the Pan American Health Organization for the holding in Buenos Aires in November 1978 of the Hemispheric Meeting on Foot-and-Mouth Disease and International Trade in Animals and Products of Animal Origin was signed by Dr. Julio C. Carasales, Ambassador of Argentina to the OAS, Mr. Alejandro Orfila, Secretary-General of the OAS, and Dr. Héctor R. Acuña, Director of the Pan American Sanitary Bureau.

Addresses were delivered by Dr. Acuña, Mr. Orfila and Dr. Carasales, all of whom emphasized the importance of the Meeting for socioeconomic development and the resolution of problems such as the uncertainty and instability of international trade in beef, and that of nutritional needs whose serious consequences for the population of the Hemisphere are well-known.

Dr. Carlos Ruiz Martínez, Observer for the International Office of Epizootics, expressed his satisfaction with the signature of the Agreement and stated that he would submit a report on it to the XLVI General Session of the IOE, to be held in Paris from 23 to 29 May.

At the beginning of the fifth plenary session, which was held on the morning of 13 April, the Observer for the IOE outlined the progress made in research on foot-and-mouth disease in recent years and reaffirmed the great interest of his Organization in the control activities PAHO was carrying out in collaboration with the countries. He invited all the Governments to participate in the forthcoming meeting of the IOE.

Next, Item 9 of the Agenda: "Panel on policy for marketing of animals and products of animal origin in relation to foot-and-mouth disease" was taken up. Papers were read by Dr. Roberto Goic, Dr. Kenneth Wells, and Dr. Gustavo Reta.

During the second part of the session, the Representative of the Kingdom of the Netherlands reaffirmed his wish that the XII Inter-American Meeting meet in Curaçao. He stated that the island had all the necessary facilities for ensuring the success of the meeting. He pointed out that it would serve as an incentive to the development of the agricultural sector. Furthermore, the Netherlands Antilles (Aruba, Bonaire, Curaçao, Saba, St. Eustatius and St. Martin) were endeavoring to obtain their independence, which was linked to economic development. The holding of the meeting in Curaçao would undoubtedly contribute to the achievement of that objective.

The Representative of Panama stated that, in view of what the Representative of the Kingdom of the Netherlands had said, he would withdraw his invitation for the meeting to meet in Panama.

The Representative of Guyana presented a draft resolution in support of the holding of the meeting in Curaçao. It was seconded by the Representative of Grenada, who commended the Representative of Panama for his decision to withdraw his invitation.

The proposal was then submitted by the President for consideration and was approved by acclamation. He stated that the draft resolution would be distributed to all the Representatives for subsequent examination.

The Representative of the Kingdom of the Netherlands expressed his thanks, especially to the Representative of Panama for his kindness in withdrawing the invitation of his Government.

Discussion of Item 9 was then resumed and papers were read by Dr. Jerry J. Callis and Mr. Nicolas Rivero (Documents RICAZ11/7 and 22).

In the ensuing discussion, the Representatives of Trinidad and Tobago, Mexico, Uruguay, Honduras, Kingdom of the Netherlands, Venezuela and Nicaragua commented on the papers presented and asked a number of technical questions, in particular on trade in products of animal origin between countries free of and those affected by foot-and-mouth disease and the spread of foot-and-mouth disease virus by those products, as well as on the quarantine stations in the Americas. Drs. Wells, Reta and Callis answered the questions and provided additional information to that contained in the papers submitted.

The Observer for the Inter-American Cattlemen's Federation (CIAGA), commenting on the subject discussed, stated it was very important for the countries to review their legislation on the importation and exportation of animals and animal products and especially on that relating to the importation of semen.

The Representative of the United States of America expressed interest in the statement of the Observer for CIAGA, and emphasized that all possible steps should be taken to prevent the smuggling of semen.

The President requested the Representatives to submit specific proposals in that regard for consideration at a later session.

The sixth plenary session was held on the afternoon of 13 April, with Dr. Gavin B. Kennard in the chair. When the session opened, Dr. Manuel M. Moscoso, Executive Director of the Animal Health Program of Ecuador, stated that the Government of his country regretted that it had been forced to withdraw its invitation to hold the present meeting in Quito. He then presented the report of the Fifth Regular Meeting of the South American Commission for the Control of Foot-and-Mouth Disease (COSALFA), which had been held in Rio de Janeiro, Brazil, on 30 and 31 March 1978. At that meeting all the delegates had given a short report on the status of foot-and-mouth disease in their countries. A number of resolutions had been adopted, including those relating to the inclusion in the monthly reports of the identification of the virus subtypes active during the month; the holding of a seminar on regional strategies for foot-and-mouth disease control; research on vesicular stomatitis; the problem of the importation of cattle from Africa; and the standardization of methods for the control of foot-and-mouth disease vaccines.

The Representative of Paraguay reported that, in accordance with the recommendations of PAHO, his country had prohibited the importation of domestic and wild animals and by-products of animal origin from continents or geographical areas in which diseases exotic to Paraguay existed.

Next, Dr. Jerry J. Callis, Director of the Plum Island Animal Disease Center of the United States Department of Agriculture and Member of the Scientific Advisory Committee of the Pan American Foot-and-Mouth Disease Center, presented the report of the Committee in which it examined the work of the Center and made recommendations on the activities that should be undertaken. He also referred to the disappointment of the Committee that it had not been possible to implement the project for the transfer of the Center to new facilities.

Then the Representative of Venezuela submitted a draft resolution on quarantine controls to prevent the introduction of diseases exotic to the Hemisphere and another on the Special Fund for Animal Health Research.

The President proposed that all the draft resolutions be considered together, and the Representative of Haiti seconded the proposal.

Dr. Raúl Casas, Director of the Pan American Foot-and-Mouth Disease Center, then presented the program and budget of the Center for 1978 and the preliminary draft for 1979. He stated that, in accordance with the Hemispheric strategy, all the countries infected by foot-and-mouth disease were carrying out control and eradication programs and that substantial progress had been made in Chile, Peru, Paraguay and Uruguay. In addition, the countries free of the disease were continuing their preventive activities and

pursuing a common health policy. He stressed that the financial assistance of the IDB was an important factor in strengthening Hemispheric control of the disease. He detailed the technical cooperation with which the countries had been provided and other activities carried out in 1977, some of which, like the research projects, had to be curtailed because of shortage of funds and personnel. Despite these limitations, diagnostic activities had been considerably increased. He mentioned the vaccine studies of the Center and emphasized its interest in oral adjuvant vaccines. Training activities had been continued and an appropriate infrastructure for them created. Finally, he made special mention of the Hemispheric system of epidemiological surveillance of vesicular diseases which was being successfully applied in a number of countries.

The Representative of the United States of America expressed the appreciation of his country for the important work being carried out by the personnel of the Center. He stated that it was necessary to support these activities by additional resources. There was a need to continue the research under way and to improve the facilities. The Government of the United States was supporting the Center but more contributions were necessary, and efforts should be made to obtain assistance from such agencies as IDB and UNDP. He expressed full support for the program and budget presented and was prepared to back any measure PAHO might take to obtain the funds required. He announced that he would submit a draft resolution on the item.

The Representative of Paraguay also expressed support for the Center from whose technical cooperation his country benefited. He thanked the IDB and the Government of Brazil for the assistance they were giving to the Center.

Dr. Acha expressed his satisfaction with the statements of support for the work of the Center and emphasized that the increase in the budget barely covered the increase in operating costs. He explained that certain international agencies provided funds directly to the countries and not to the Organization and, because of that, the countries should take steps to obtain them. In those cases, PAHO served solely as an executing agency.

The President stated that all the countries appeared to be familiar with the work being carried out by the Center and its need for the necessary resources to continue it.

The Representative of Brazil stated that it was necessary to use new strategies for the control of foot-and-mouth disease and that, in his opinion, all the countries that were in a position to do so should provide the Center with the resources it required to continue its research on oil adjuvant vaccines; an application should be submitted to the IDB for assistance in that regard. The Government of his country was providing the Center with all possible aid, despite financial difficulties.

The Representatives of Chile, Canada and Ecuador submitted draft resolutions on COSALFA, the Scientific Advisory Committee of the Center and on training in epidemiological surveillance, respectively.

The Representative of Uruguay expressed his support for the Center and the Representative of Argentina agreed that the UNDP should be requested to provide assistance.

Subsequently, Dr. Luis V. Meléndez, Director of the Pan American Zoonoses Center, presented the program and budget of the Center for 1978 and the preliminary draft for 1979. He described the work carried out in 1977 and the activities planned for 1978. The program of work for the current year had been prepared in the light of the requests of the countries and the Center's knowledge of the current situation. In view of the growing demand for technical cooperation, the Center would have to increase both its human and its material resources. However, despite the efforts being made, it had been necessary to curtail its work because of financial and physical limitations.

He also mentioned the personnel training activities carried out in recent years which had enabled a number of countries to expand their zoonoses control programs.

Finally, he expressed the hope that, in response to the requests made by the IX and X Inter-American Meetings, the Government of Argentina would find a solution to the problem of expanding the facilities of the Center.

The Representative of Brazil then presented a draft resolution on the program and budget of the Pan American Zoonoses Center.

The Representative of Argentina expressed concern over the budgetary increases during the past three years. He stated that despite the inflationary situation in his country, his Government would continue to firmly support the Center. He suggested that a committee composed of representatives of several countries be established to make a feasibility study on the possibilities of obtaining more funds for the Center.

The Representative of the United States of America paid tribute to the important collaborative activities undertaken by the Center and expressed his support for the program and budget presented. He suggested that future reports on the work of CEPANZO should include specific details of the work done.

The Representative of Paraguay expressed his thanks to the Center for the assistance his country had received.

Dr. Acha gave additional information to that presented in the document submitted by Dr. Meléndez, which, he stated, had been sent to the

countries well ahead of time. He agreed that in the future further details could be given of the enormous amount of work done by the Center with the limited resources at its disposal. He explained that the funds being requested were not for the purpose of expanding the programs but for continuing technical cooperation activities in accordance with the requests of the countries.

The Representative of Uruguay also expressed his satisfaction with the activities of the Center. Following the discussion on CEPANZO, the Representative of Brazil presented a draft resolution on support for animal disease epidemiological surveillance activities.

The Rapporteur then read out a draft resolution on the Special Fund for Animal Health Research, which gave rise to a discussion in which the Representatives of Brazil, Venezuela, Haiti and Peru took part. In the light of the explanation given by Dr. Acha, the President postponed consideration of the matter to the next session.

The Rapporteur read out the draft resolutions on training in the epidemiological surveillance of animal diseases, COSALFA, the program and budget of the Pan American Foot-and-Mouth Disease Center, the Scientific Advisory Committee of the Center, the place of the XII Inter-American Meeting, safe methods for the importation of semen, and quarantine controls, all of which were unanimously approved.

After the draft resolution on the program and budget of the Pan American Zoonoses Center had been read out, the Representative of Argentina stated that he wished to add a paragraph to it. He was supported by the Representative of Brazil. The Representative of Venezuela proposed that the discussion of the matter be postponed to the following day, and this proposal was agreed to.

The Representative of Guatemala presented a draft resolution on social communication and health education, which was unanimously approved.

The seventh plenary session was held on the morning of 14 April, with Eng. Pinto Cohen in the Chair. It began with a presentation by Dr. Gustavo Reta, Regional Adviser in Veterinary Medicine, PASB, on the item "Project for the establishment of the Inter-American System of Animal Diseases Diagnostic Laboratories." After detailing the background and objectives of the project he dealt with the possibilities of increasing the number of participating laboratories, establishing a headquarters and regional coordinating offices, and setting up a technical advisory committee of experts in the subject which would determine the minimum requirements of the international reference centers. He also stated that it would be desirable to bring into the System a unit that would serve as the National Headquarters Laboratory and would supervise the Regional Laboratories.

The Representative of Canada commended Dr. Reta on his statement and stressed the importance of the matter for all the countries. He invited PAHO to send a representative to the forthcoming meeting of the American Association of Veterinary Diagnostic Laboratory Specialists.

The Representative of Colombia also expressed his satisfaction with the report, which, he said, was in accordance with the PAHO proposal for the establishment of an inter-American system of animal diagnostic laboratories. He therefore submitted a draft resolution on the item.

The Representative of Uruguay, referring to the study on the animal health situation in the Americas, emphasized its importance for the establishment of an animal health plan in the Americas, and accordingly submitted a draft resolution on the item.

The Representative of Brazil presented a draft resolution on the application of laboratory animal sciences in animal health programs. Upon being put to the vote by the President, the three draft resolutions were unanimously approved.

Mr. Robert Bergland, Secretary of Agriculture of the United States of America, mentioned the advances in agricultural technology which had resulted in an agricultural surplus of such proportions that control had become necessary. Food aid programs costing millions of dollars had been conducted. The problem called for a policy change that would ensure better use being made of the surplus. Recognizing the importance of nutrition for health and the development of the population, it had been decided to make an inventory of available knowledge in this regard and to determine what should be studied, and to establish a policy and program geared to needs. The policy the United States would follow was that of associating itself with the world food strategy and helping the countries to feed themselves with their own resources, while at the same time continuing its food aid as long as the poor countries were unable to pay for it.

Finally, he reaffirmed the interest of his country in international agreements designed to stabilize prices and such other measures as the control of animal diseases and environmental pollution. These were common problems. The intention was not to erect political or economic barriers but to eliminate them and to increase cooperation and international understanding.

On behalf of all the Representatives the President thanked Mr. Bergland for his statement, which clearly expressed the intention of the Government of the United States of America to adopt a food policy based on nutritional needs. He agreed that, if the agricultural situation was to be improved, the countries would have to assist one another since all shared the desire to eradicate hunger and poverty from the world.

Then, in accordance with the order of the day, the Rapporteur read out the draft resolution on the Special Fund for Animal Health, which was unanimously approved as amended by the Representative of Costa Rica.

He also read out a draft resolution on the establishment of an epidemiological surveillance service, submitted by the Representative of Brazil, which was also unanimously approved.

Next, the Rapporteur read out the draft resolution on the program and budget of the Pan American Zoonoses Center, which was also unanimously approved.

The Representative of Argentina submitted a draft resolution on obtaining special contributions for supporting the activities of the Center, which was unanimously approved.

Unanimous approval was also given to draft resolutions commending Chile for having succeeded in establishing a foot-and-mouth disease-free area, the organization of animal quarantine stations, and the application of laboratory animal sciences in animal health programs.

Then Dr. Acha paid tribute to Dr. Carlos Ruiz Martínez, Observer for the IOE, for his prolific work in the field of animal health during his sixty years of professional life, and proposed that a pertinent draft resolution be approved.

Dr. Ruiz Martínez expressed his sincere thanks for the tribute which had been paid him.

At the close of the session, the Representative of Haiti expressed his full satisfaction with the way in which the meeting had been conducted and emphasized the value of the papers read and the topics discussed. He commended the staff of PASB on their work and expressed the thanks of his country for the technical cooperation provided by the Organization. He urged all the countries to continue to actively collaborate in solving common animal health problems.

On behalf of the Director of PASB, Dr. Acha thanked the Representatives of all the Governments for their participation in the Meeting and congratulated them on the fruitfulness of its proceedings. He reiterated that the Organization would go on providing the technical cooperation that the countries requested to support programs for the control and eradication of animal diseases, which did so much harm to human health.

Mr. Pinto then thanked the Pan American Health Organization for holding the Meeting, which was of such great interest to all the countries in the Americas. He expressed the conviction that the deliberations would give rise to major decisions by the Governments that would lead to the improvement of animal health activities and greater well-being for the peoples of the Region.

Following a coffee break the closing session was held. The Rapporteur read out the Final Report and submitted it to the Representatives, who approved it unanimously.

RESOLUTION I

EXPRESSION OF THANKS TO THE CANADIAN INTERNATIONAL
DEVELOPMENT AGENCY

THE XI INTER-AMERICAN MEETING,

Having received with satisfaction the report on the activities carried out by the Canadian International Development Agency and on its assistance projects in the Americas; and

Recognizing that these activities are contributing to progress, collaboration, understanding and harmony between the peoples of this Hemisphere,

RESOLVES:

To express its very sincere thanks to the Government of Canada for the activities undertaken by the Canadian International Development Agency and to express the wish that its activities be continued and expanded for the benefit of the animal health programs of the Hemisphere and consequently for the economic and social progress of the countries of the Americas.

(Approved at the third plenary session,
12 April 1978)

RESOLUTION II

CONTRIBUTION OF THE INTER-AMERICAN DEVELOPMENT BANK
TO ANIMAL HEALTH PROGRAMS IN THE AMERICAS

THE XI INTER-AMERICAN MEETING,

Recognizing the importance of the financial assistance being provided by the IDB for the planning, execution and evaluation of animal health programs in the countries of the Americas;

Bearing in mind that that participation has become a very important factor in generating and maintaining those programs, including the strengthening of the infrastructure of the official veterinary services of the countries; and

Considering that that assistance is extended to the corresponding PAHO units that provide international advisory services,

RESOLVES:

1. To express its thanks to the IDB for the valuable financial assistance it is giving to the countries and to PAHO for the conduct of animal health programs in the Americas.

2. To request the Bank to continue to provide its support and to assign special importance to the control of animal diseases of major socio-economic importance.

3. To request the Bank to give favorable consideration to the financing of those projects presented by PAHO that are intended to strengthen its technical cooperation with the countries, in particular the project for training and technological transfer for the production and use of oil adjuvant vaccine for the prevention and control of foot-and-mouth disease.

(Approved at the third plenary session,
12 April 1978)

RESOLUTION III

COLLABORATION OF THE UNITED NATIONS DEVELOPMENT PROGRAM
FOR ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH PROJECTS

THE XI INTER-AMERICAN MEETING,

Recognizing that the United Nations Development Program is providing large-scale financial support to many programs for the control of animal diseases affecting the food production and health of the peoples;

Noting the beneficial results obtained by the animal health projects executed by the Pan American Health Organization with UNDP funds; and

Considering that it is desirable for that valuable collaboration for national and multinational projects to be maintained and expanded,

RESOLVES:

To thank the United Nations Development Program for the financial support it is giving to animal health and veterinary public health projects and to request it to consider the expansion of that support to the countries.

(Approved at the third plenary session,
12 April 1978)

RESOLUTION IV

TRAINING IN THE EPIDEMIOLOGICAL SURVEILLANCE OF
ANIMAL DISEASES

THE XI INTER-AMERICAN MEETING,

Considering the obvious interest of the Governments of the countries of the Americas in the development of services for the epidemiological surveillance of animal diseases;

Bearing in mind that this development requires the intensive training of human resources in statistics, information and epidemiology; and

Noting the good results obtained during 1976-1977 by the initiative of PAHO, through the Pan American Foot-and-Mouth Disease Center, in collaboration with the Government of Brazil, and currently proposed to be carried out with the Federal University of Minas Gerais,

RESOLVES:

1. To urge PAHO to intensify its promotional and advisory efforts for the development of national animal health information and epidemiology services.
2. To recommend to the Governments of the countries that they give priority to the training of human resources in the disciplines of statistics, information systems and epidemiology as a joint effort of the Ministries of Agriculture and Public Health with the universities, and guided by the experience of PAHO.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION V

SOUTH AMERICAN COMMISSION FOR THE CONTROL OF
FOOT-AND-MOUTH DISEASE

THE XI INTER-AMERICAN MEETING,

Having heard the report of the Fifth Regular Meeting of the South American Commission for the Control of Foot-and-Mouth Disease (COSALFA), which was held in Rio de Janeiro, Brazil, on 30 and 31 March 1978;

Bearing in mind the importance of the work of COSALFA for the evaluation and coordination of national programs for the control and eradication of foot-and-mouth disease; and

Recognizing that the development of modern methods for the administration of those programs is a priority,

RESOLVES:

1. To endorse the resolutions of the Fifth Regular Meeting of the South American Commission for the Control of Foot-and-Mouth Disease.
2. To request PAHO, in collaboration with the countries and with international agencies providing technical and financial assistance, to foster a program for the training of human resources in the area of animal health administration.
3. To recommend to the Commission that it include an item on a regional strategy for the control of foot-and-mouth disease in the agenda of its Sixth Regular Meeting.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION VI

PROGRAM AND BUDGET OF THE PAN AMERICAN FOOT-AND-MOUTH
DISEASE CENTER FOR 1979

THE XI INTER-AMERICAN MEETING,

Bearing in mind Resolution II of the X Inter-American Meeting on Foot-and-Mouth Disease and Zoonoses Control concerning the program and budget of the Pan American Foot-and-Mouth Disease Center for 1978;

Having carefully studied the proposed program and budget for 1979 (Document RICAZ11/6);

Mindful that it is essential to maintain the activities of the Center at the present level in order to strengthen programs for the prevention and control of foot-and-mouth disease in the countries;

Considering that the activities conducted by the Center are of vital importance for the programs for the prevention, control and eradication of foot-and-mouth disease in the Americas; and

Considering that the XI Meeting directed its attention to the need for modifications of the traditional approaches to the prevention, control and eradication of the disease, and that, if such modifications are to occur, it is essential that they be based on sound technical rationale which is supported by research finding, and that the Pan American Foot-and-Mouth Disease Center is the major research center on foot-and-mouth disease for South America and the Carribean,

RESOLVES:

1. To reaffirm its full support for the Pan American Foot-and-Mouth Disease Center, the work it has been undertaking, and its proposed program and budget for 1979.
2. To recommend to the XX Pan American Sanitary Conference that it give favorable consideration to approving the program and budget of the Center for 1979 (Document RICAZ11/6).

3. To once again thank the countries and the international agencies that support the Center, and especially the Governments of Argentina, Brazil, Uruguay and Venezuela, for their special contributions.
4. To reaffirm the recommendation to the Ministers of Agriculture that they provide additional human, physical and financial resources for the technical cooperation program, 1978-1979.
5. To recommend to the Pan American Health Organization that the priority of the Pan American Foot-and-Mouth Disease Center is such that all efforts should be exercised to secure additional funds for its operations from the United Nations Development Program.
6. That PAHO request the Inter-American Development Bank to provide grants to this Center to improve the facilities and expand its operations.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION VII

VOTE OF THANKS TO THE SCIENTIFIC ADVISORY COMMITTEE OF THE
PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

THE XI INTER-AMERICAN MEETING,

Having considered the report for 1976 and 1977 of the PAHO Scientific Advisory Committee for the Pan American Foot-and-Mouth Disease Center (Document RICAZ11/4);

Mindful of the value of its recommendations for the orientation and effectiveness of the activities of the Center, in support of national programs for the prevention, control and eradication of foot-and-mouth disease in the Americas; and

Recognizing the importance of the work of the scientists who are Members of the Committee,

RESOLVES:

1. To express its thanks to the Scientific Advisory Committee for its evaluation of the program of the Center for the years 1976 and 1977.
2. To urge the countries and PAHO to pool and increase their efforts to achieve the objective of the recommendations of the Scientific Advisory Committee.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION VIII

PLACE OF THE NEXT MEETING

THE XI INTER-AMERICAN MEETING,

Recognizing the growing importance of animal health for the production of food for the people of the Americas and for the economic development of the countries;

Bearing in mind that Resolution XIX of the XVII Meeting of the Directing Council of the Pan American Health Organization authorized the Director of the Pan American Sanitary Bureau to convene annually a meeting of Ministers of Agriculture or their representatives to review the programs of the Pan American Foot-and-Mouth Disease and Zoonoses Centers and to discuss matters of mutual interest; and

Considering the request of the Representative of the Kingdom of the Netherlands at the X Inter-American Meeting that the Director convene the XII Meeting at Willemstad, Curaçao, in 1979,

RESOLVES:

1. To express its satisfaction with the interest shown by the Governments in the present meeting and with the valuable information presented on this occasion.
2. To again thank the Representative of the Kingdom of the Netherlands and the Government of the Netherlands Antilles for the offer to host the next meeting and to recommend once again to the Director of the Pan American Sanitary Bureau that he convene the XII Inter-American Meeting, at the Ministerial Level, on Foot-and-Mouth Disease and Zoonoses Control at Willemstad, Curaçao, in 1979.
3. To thank the Director of the Bureau and his staff for their assistance in the organization and conduct of the present meeting.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION IX

SAFE METHODS OF IMPORTING SEMEN

THE XI INTER-AMERICAN MEETING,

Considering:

It is necessary to renew and exchange the superior genetic qualities of sires in the American Hemisphere;

That artificial insemination is an expeditious procedure;

That there is evidence that semen can carry the virus of foot-and-mouth disease and thus constitute a serious threat to the livestock of the Hemisphere; and

That, as a result of careful studies, procedures have been developed that permit semen to be safely imported from countries in which foot-and-mouth disease exists,

RESOLVES:

1. To recommend to the countries of the Region that they develop safe methods of importing semen.
2. To recommend to the Governments of the countries of the Region to enact, if they do not already have them, the necessary laws to prevent trade in semen from taking place without the recommended health safeguards.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION X

QUARANTINE CONTROLS TO PREVENT THE ENTRY OF
DISEASES EXOTIC TO THE HEMISPHERE

THE XI INTER-AMERICAN MEETING,

Considering that, as part of the process of improving national herds, the exchange between countries of animals of superior genetic merit is an appropriate measure for strengthening national livestock resources;

Bearing in mind that this exchange must take place under technical conditions that guarantee the animal health of national livestock enterprises; and

Considering that such preventive health measures as quarantine activities have proven to be an effective means of preventing the entry of diseases exotic to the countries,

RESOLVES:

1. That health protection measures should be taken on the basis of a strict policy for the control of the importation of animals through an increase in maximum security quarantine stations.
2. That sufficient personnel should be appropriately trained to guarantee the proper operation of the above-mentioned stations.
3. That all the countries of the Americas should undertake to enforce the necessary health standards for preventing the introduction of diseases exotic to the American Hemisphere.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION XI

SOCIAL COMMUNICATION PROGRAM IN
CENTRAL AMERICA AND PANAMA

THE XI INTER-AMERICAN MEETING,

Recognizing the valuable assistance of the Inter-American Development Bank and the Pan American Health Organization to the Social Communication Program going forward in the countries of Central America and Panama;

Considering the headway made in the training of professional staff, the participation of agencies concerned with animal health problems, and the organization of social communications units in official animal health services; and

Mindful of the need to continue this program,

RESOLVES:

To thank the IDB and PAHO again for their continued support of this program and to request that they consider financing it for another three years from July 1979 so as to consolidate and give impetus to the active participation of the communities of the Central American isthmus in animal health campaigns, and particularly in the prevention of foot-and-mouth disease.

(Approved at the sixth plenary session,
13 April 1978)

RESOLUTION XII

INTER-AMERICAN SYSTEM OF ANIMAL DISEASES
DIAGNOSTIC LABORATORIES

THE XI INTER-AMERICAN MEETING,

Bearing in mind Resolution V of the X Inter-American Meeting on Foot-and-Mouth Disease and Zoonoses Control concerning the establishment of the Inter-American System of Animal Diseases Diagnostic Laboratories;

Having carefully considered the plan for the establishment of that system, presented to this Meeting by the Pan American Health Organization; and

Mindful of the importance of its establishment for the more effective coordination of activities for the diagnosis of animal diseases in the countries of this Hemisphere,

RESOLVES:

To request PAHO to assume responsibility for the necessary coordination with the countries for organizing and installing, with the resources at present available, the Inter-American System of Animal Diseases Diagnostic Laboratories proposed at this XI Meeting and in accordance with the plan presented in that regard.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XIII

STUDY OF THE ANIMAL HEALTH SITUATION IN THE AMERICAS

THE XI INTER-AMERICAN MEETING,

Bearing in mind Resolution X of the Tenth Inter-American Meeting on Foot-and-Mouth Disease and Zoonoses Control;

Having heard the progress report on this important study that the countries are carrying out with the coordination of the Pan American Health Organization;

Considering that the information being gathered is of basic importance for the establishment of an animal health plan in the Americas for the 1980's;

Considering that it will also provide the basic information for evaluating the progress of programs for the prevention, control and eradication of animal diseases; and

Bearing in mind that it will also be highly valuable in enabling the international agencies concerned with the problem to adjust their technical and financial cooperation to the countries in the Hemisphere,

RESOLVES:

1. To thank the Organization for the work it has been doing in the coordination, compilation and analysis of the information provided by the countries for the study of the animal health situation in the Hemisphere.
2. To request that PAHO continue rendering all support so that the countries may receive the final documents containing that information in the RICAZ XII meeting, and that it convene an inter-American meeting to draw up, on the basis of that information, a Ten-Year Animal Health Plan for the Americas to begin in 1980.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XIV

APPLICATION OF LABORATORY ANIMAL SCIENCES
IN ANIMAL HEALTH PROGRAMS

THE XI INTER-AMERICAN MEETING,

Bearing in mind that the laboratory animal sciences make it possible to efficiently operate animal facilities and that without them it is impossible to effectively conduct diagnostic activities and activities for the control and preparation of biological products essential to the control of human and animal diseases;

Having noted that all the countries that have made substantial progress in the control of animal diseases are those that have established institutions devoted to the further development of laboratory animal sciences; and

Considering that it is essential to prepare human and physical resources that will enable the countries of the Region to have the necessary laboratory animal colonies for the efficient conduct of diagnostic activities and activities for the control of the diseases affecting the economy and well-being of the human and animal populations of the Americas,

RESOLVES:

1. To request PAHO to study the necessary arrangements for enabling laboratory animal sciences to be incorporated as actively as possible into programs for the control of human and animal diseases.
2. To recommend to the countries of the Americas that they give greater emphasis to the necessary studies for better breeding, reproduction and knowledge of the pathology of laboratory animals.
3. To recommend to diagnostic laboratories and laboratories for the production and control of biological products that they maintain animal facilities that as far as possible meet the standards established by the International Committee for Laboratory Animals.

4. To request PAHO, through its Pan American Foot-and-Mouth Disease and Zoonoses Centers, to provide the necessary means for enabling the countries to improve the training of experts in laboratory animal sciences that can duly approve biological products to be used to control human and animal diseases.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XV

SPECIAL FUND FOR ANIMAL HEALTH RESEARCH

THE XI INTER-AMERICAN MEETING,

Bearing in mind Resolution VIII of the X Inter-American Meeting on Foot-and-Mouth Disease and Zoonoses Control for the establishment of a Special Fund for Animal Health Research;

Having considered the draft regulations for the Fund drawn up by PAHO (Document RICAZ11/25); and

Aware of the importance and requirements of research for solving the problems created by diseases in livestock production and productivity,

RESOLVES:

1. To reiterate Resolution VIII of RICAZ X and to urge countries that have not yet done so to contribute to the establishment of the Special Fund.
2. To approve the regulations of the Fund prepared by PAHO.
3. To express its appreciation to the Governments of Bolivia, Chile, the Dominican Republic, Ecuador, Honduras, Mexico and Venezuela for their financial contributions to the Fund.
4. To request PAHO to convene this year a meeting of the contributing countries for the purpose of constituting the Governing Council of the Fund and to implement the purposes of Resolution VIII of RICAZ X.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XVI

PROGRAM AND BUDGET OF THE PAN AMERICAN ZOONOSSES CENTER FOR 1979

THE XI INTER-AMERICAN MEETING,

Mindful of the serious threat the zoonoses represent to human and animal health in the countries of the Americas as well as their harmful effects on economic growth and the development of the livestock industry,

Bearing in mind Resolution I of the X Inter-American Meeting on Foot-and-Mouth Disease and Zoonoses Control concerning the program and budget of the Pan American Zoonoses Center for 1978;

Having carefully studied the proposed program and budget of the Center for 1979 (Document RICAZ11/8);

Recognizing the concern of the Organization about, and its efforts to solve, the difficult budgetary situation of the Center; and

Considering that the services with which the Center provides the countries of the Americas in the fields of technical cooperation, manpower training, reference services and research are vital for the support of the programs for the control and eradication of zoonoses being conducted in the Americas,

RESOLVES:

1. To firmly support the work being done by the Pan American Zoonoses Center and its proposed program and budget for 1979.
2. To affirm that the work being done at the Center is essential to the promotion, conduct and coordination of the programs for the prevention, control, and eradication of zoonoses.
3. To reaffirm that the collaboration the Center gives the countries for their zoonoses programs should be continued and expanded, especially in connexion with assistance in the field sector.
4. To recommend to the XX Pan American Sanitary Conference that it give favorable consideration to approving the program and budget of the Center for 1979 (Document RICAZ11/8).
5. To express its thanks to the countries, international agencies, and especially to the Government of Argentina for its valuable financial support for the activities of the Center.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XVII

ESTABLISHMENT OF AN EPIDEMIOLOGICAL SURVEILLANCE SERVICE

THE XI INTER-AMERICAN MEETING,

Considering:

The importance of epidemiological surveillance in the identification, registration, and interpretation of diseases occurring in the national herds;

The lack of centers, institutions or schools qualified to provide veterinarians with the necessary technical training for ensuring the efficient conduct of activities in this field;

The significant results obtained from the training of professionals in the American Hemisphere through the Technical Assistance Project of the National Plan for Foot-and-Mouth Disease Control of Brazil, which received the necessary IDB financing and PAHO technical support throughout its life; and

The terms of the Resolution VIII of RICAZ X held in March 1977 on the establishment of a Special Research Fund,

RESOLVES:

1. To recommend that the establishment of an epidemiological surveillance service, capable of making to the countries appropriate recommendations on or indications of solutions to the animal health problems affecting their economies, be included as a first priority in the project for the establishment and operation of a special research fund for the study of specific animal health problems in the Americas.
2. That, given the importance of this system for the Member Countries, in terms of its capacity to determine the magnitude of episodes prejudicial to their herds, the expression "and Epidemiological Surveillance" be added to the name of the project entitled: "Special Research Fund," which will henceforward be known as the "Special Fund for Animal Health Research and Epidemiological Surveillance."
3. That, with a view to the full development of the activities of the Fund, courses for the education and training courses of the veterinarians who will be responsible for those activities be maintained and expanded.

4. That PASB be responsible for coordination with the Governments of the countries for the purpose of the immediate implementation of these proposals.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XVIII

COMMENDATION OF CHILE FOR HAVING SUCCEEDED IN ESTABLISHING
AN AREA FREE OF FOOT-AND-MOUTH DISEASE

THE XI INTER-AMERICAN MEETING,

Considering that one of the objectives and goals of the Inter-American Meeting on Foot-and-Mouth Disease and Zoonoses Control is the control and eradication of the disease in the countries affected and that the concerted efforts of the countries, the IDB, and PAHO are showing that it can be achieved,

RESOLVES:

To commend the Government of the Republic of Chile for its success in controlling foot-and-mouth disease, which has enabled it to declare an extensive area of its territory free of the disease.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XIX

GUIDE TO THE PLANNING, ORGANIZATION AND OPERATION
OF ANIMAL QUARANTINE STATIONS

THE XI INTER-AMERICAN MEETING,

Considering that at the present time a number of countries are in the process of planning, constructing and organizing quarantine stations for the importation of various animal species; and

Bearing in mind that it is difficult to obtain information on this subject and that it would be extremely useful to have pertinent guidelines for standardizing the procedures for health protection against infectious, contagious and parasitic diseases,

RESOLVES:

To request PAHO to prepare a guide to the planning, organization and operation of animal quarantine stations that takes into account the needs of the countries.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XX

PAN AMERICAN ZONOSSES CENTER

THE XI INTER-AMERICAN MEETING,

Bearing in mind the increase in operating costs of the Pan American Zoonoses Center in recent years consequent upon the increased services provided to the countries of the Americas;

Recognizing that the contributions of the American countries should be more adequate and equitable; and

Considering that this would facilitate the work and the efficient conduct of the scientific studies and technical assistance activities of the Center,

RESOLVES:

To urge the PAHO management to visit and interest the senior authorities of the Governments in making a special contribution designed to facilitate the normal operation of the Pan American Zoonoses Center.

(Approved at the seventh plenary session,
14 April 1978)

RESOLUTION XXI

EXPRESSION OF APPRECIATION TO DR. CARLOS RUIZ MARTINEZ

THE XI INTER-AMERICAN MEETING,

Considering the outstanding work of Dr. Carlos Ruiz Martínez in the field of veterinary medicine and consequently for the benefit of animal health and livestock development;

Mindful that he is now completing his sixtieth year of professional activity untiringly devoted to the search for solutions to the problems affecting animal production and consequently the welfare of man; and

Bearing in mind also his valuable contributions in the field of scientific information,

RESOLVES:

To pay heartfelt tribute to Dr. Carlos Ruiz Martínez for his unselfish and exemplary devotion to the field of animal health, for his contribution to the progress of veterinary medicine in the Americas, and the improvement of animal health relations at the national and international level.

(Approved at the seventh plenary session,
14 April 1978)

IN WITNESS WHEREOF, the President of the Meeting and the Director of the Pan American Sanitary Bureau, Secretary ex officio, sign the present Final Report in the English and the Spanish languages, both texts being equally authentic.

DONE in Washington, D.C., this fourteenth day of April, nineteen hundred and seventy eight. The Secretary shall deposit the original texts in the archives of the Pan American Sanitary Bureau and shall send copies thereof to the Governments of the Organization

Gustavo Pinto Cohen
President of the Meeting
Representative of Venezuela

Pedro N. Acha
for Dr. Héctor R. Acuña
Secretary ex officio of the Meeting
Director of the
Pan American Sanitary Bureau