

directing council



PAN AMERICAN
HEALTH
ORGANIZATION

XVII Meeting

regional committee

WORLD
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FINANCING OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

In 1951 the Pan American Health Organization, upon request of the Organization of American States, undertook the responsibility to organize and administer the Pan American Foot-and-Mouth Disease Center financed as a project under the Program of Technical Cooperation. The successful development of the Center and its services given to Governments throughout the Americas are well known, especially to the Ministries of Health and Agriculture.

Whereas some of the other centers financed under the Technical Cooperation Program of OAS were transferred to national governments or international agencies, this Center, because of its international character and the great economic importance of the problem, has continued to be financed under the OAS Program of Technical Cooperation far beyond its originally approved five years. In 1966 the IA-ECOSOC decided to seek a source of permanent financing for the Center and requested the Organization of American States and the Pan American Health Organization, in consultation with governments of the Americas to study permanent and stable financing.

A Joint OAS/PAHO Working Group prepared a report and made proposals to CIAP which appeared in October 1966 as Document CIAP/48. The Joint Working Group also recommended high level consultation with governments, and this was carried out successfully by his Excellency, Edgardo Seoane, Vice-President of Peru and Dr. Carlos Palacios, Director of the Center. The report of this mission, including letters of support from the respective governments was distributed to all countries in the Americas. Both the Document CIAP/48 and the Mission Report were incorporated into Document CIES/1135 in April 1967 for consideration by the 5th Annual Meeting of IA-ECOSOC. In accordance with the request of the 56th Executive Committee in Resolution XVIII, Document CIES/1135 is herewith presented to the Directing Council as Annex 4.

The Governing Bodies of PAHO have consistently recognized the importance in the economic development and the nutritional status of the Americas of the Pan American Foot-and-Mouth Disease Center. The 54th Executive Committee (April 1966) and the XVII Pan American Sanitary Conference (October 1966) both approved resolutions emphasizing the importance

of maintaining an adequate level of services to Governments, expressing concern over the immediate financial situation because of inadequate OAS allocations, and indicating their satisfaction with the action taken by the Director in collaboration with OAS to develop a stable system of financing.

The 56th Executive Committee (April 1967) reviewed the developments to date and approved Resolution XVIII which is reproduced as Annex 2. In this resolution the Executive Committee supported the Director in his efforts to obtain adequate financial support, authorized him to maintain the present level of operations of the Center by continuing to advance funds from the Working Capital Fund against reimbursement from contributions of Governments, and endorsed the recommendations concerning the program and financing arrangements contained in the Report of the Mission of His Excellency, the Vice-President of Peru and the Director of the Pan American Foot-and-Mouth Disease Center.

Voluntary contributions, totalling \$215,584 received from governments in June, July and August almost fully reimbursed the Working Capital Fund for advances made to 30 June 1967. The contributions were: Argentina \$40,000; Colombia \$3,750; Dominican Republic \$3,000; Panama \$3,750; United States \$140,000 and Venezuela \$25,084.61. Other pledges from which payments are expected in the near future are Argentina \$40,000; Ecuador \$20,000 and Peru \$5,000. It is hoped that additional voluntary contributions will be forthcoming to assure support pending establishment of a regular system of financing.

The Fifth Annual Meeting of the Inter-American Economic and Social Council (Viña del Mar - June 1967) approved a further allocation to 30 June 1968* and authorized CIAP in consultation with the Pan American Health Organization and the Secretariat of OAS, to determine at its next meeting the system of financing of the Pan American Foot-and-Mouth Disease Center. Accordingly the Secretariats of OAS and PAHO have prepared a document for consideration by CIAP, copy of which is attached as Annex 3. The recommendations are based upon information and proposals contained in the Document CIAP/48 and the Report of the Seoane and Palacios Mission, both contained in Annex 4.

It will be noted that the recommendations, after consideration by CIAP, will require study and corresponding action by the Directing Council. The principal items are discussed below:

Operation of the Center

The programs of research, training, diagnostic services, scientific information and technical advice on national control campaigns and protection

* For the first 6 months in 1968 this will provide approximately \$292,000.

of free areas have been described in detail in Annex 4 and are also presented in Official Document No. 76. The proposed budget level of \$1,202,836 will provide for filling 9 vacant posts frozen for the past year for lack of funds and a modest expansion of services to provide greater technical assistance to national campaigns against the disease as well as advice on protection of free areas.

The work of the Center and the corresponding budgetary requirements were discussed with governments by the Mission Edgardo Seoane and Carlos Palacios. The strong support for the Center at the proposal level can be judged by the report of visits and by the annexed letters of commitment.

Cooperation with Ministries of Agriculture

Since the opening of the Center PAHO has cooperated fully and successfully with Ministries of Agriculture and agencies concerned with agricultural activities. It is proposed to continue cooperation in this as well as other subjects of common interest such as zoonoses, nutrition, and rural community development.

It is proposed to convene annually a meeting of Ministries of Agriculture to review the work of the Pan American Foot-and-Mouth Disease Center, and the Pan American Zoonoses Center, and to make recommendations concerning their operation and any matters of mutual interest. Since such a meeting would be short it is believed that the cost would be about \$20,000. It is recommended that the Director be authorized to convene a meeting of the Ministries of Agriculture provided that it can be financed within the total funds available to the Center in 1968.

A Technical Advisory Committee has been established for the Zoonoses and the Foot-and-Mouth Disease Centers. This Committee is composed of world experts on these subjects and their study and recommendations are expected to assist the Centers in achieving and maintaining the highest possible standards of research, training and advisory services to governments. The work of this Committee will also promote coordination and interchange of scientific information with other centers throughout the world.

Working Capital Fund

Just as with the regular program of PAHO, funds will be needed for the operation of the Center each year pending receipt of quota contributions. Since PAHO operates on a calendar year basis and the largest contributor and many others pay their quota contributions only after 1 July when their fiscal year begins, a Working Capital Fund for the Center equal to about 40 per cent of the annual budget will be required.

It is hoped that the major portion of the Working Capital Fund can be obtained during 1968, if the quotas are paid from January as proposed

while financial support is still being allocated from the OAS. This would be accomplished by transferring any remaining balance of the appropriation to the Working Capital Fund of the Center at the end of 1968, in accordance with paragraph 4.3 of the Financial Regulations.

Pending receipt of the amount needed, it is recommended that the Directing Council authorize advances from the Working Capital Fund of PAHO, subject to reimbursement from quota contributions.

Budget and Finance - Appropriations

The budget and Working Capital Fund for the Center would be separate from the regular budget and Working Capital Fund of PAHO but they would be governed by the Financial Regulations and Financial Rules of PAHO.

There is provided as Annex I to this document a draft appropriation resolution and schedule of quota assessments. This schedule is somewhat different from the schedule shown in the report of the Mission Edgardo Seoane and Carlos Palacios, due to slight changes in the scale of percentages recently approved by the OAS Council and due to the inclusion of contributions of countries not appearing in the OAS schedule.

Annexes

PROPOSED APPROPRIATION RESOLUTION FOR THE PAN AMERICAN
FOOT-AND-MOUTH DISEASE CENTER

THE DIRECTING COUNCIL,

RESOLVES:

1. To appropriate for the financial year 1968 an amount of \$1,202,836 for the operation of the Center

2. That the appropriation shall be financed from assessments in respect to:

i) Member Governments assessed under the scale adopted by the Council of the Organization of American States	\$ 1,192,115
ii) Jamaica (minimum assessment)	3,695
iii) France (same basis as for PAHO/Regular)	1,982
iv) Kingdom of the Netherlands (same basis as for PAHO/Regular)	1,349
v) United Kingdom (same basis as for PAHO/Regular)	<u>3,695</u>
	<u>\$ 1,202,836</u>

3. That in accordance with the Financial Regulations of the Organization, amounts not exceeding the appropriations noted under Paragraph 1 shall be available for the payment of obligations, incurred during the period 1 January to 31 December 1968, inclusive. Any remaining balance shall be transferred to the Working Capital Fund for the Center.

ASSESSMENTS OF THE MEMBER GOVERNMENTS AND PARTICIPATING GOVERNMENTS
OF THE PAN AMERICAN HEALTH ORGANIZATION FOR THE PAN AMERICAN
FOOT-AND-MOUTH DISEASE CENTER

Member Governments (assessed the scale adopted by the Council of the Orga-
nization of American States)

<u>Country</u>	<u>Percentage</u> %	<u>Amount for 1968</u> \$
Argentina	7.02	83,686
Bolivia	0.31	3,696
Brazil	7.25	86,428
Chile	2.06	24,557
Colombia	1.75	20,862
Costa Rica	0.31	3,696
Cuba	1.53	18,239
Dominican Republic	0.31	3,696
Ecuador	0.38	4,530
El Salvador	0.31	3,696
Guatemala	0.31	3,696
Haiti	0.31	3,696
Honduras	0.31	3,696
Mexico	6.18	73,672
Nicaragua	0.31	3,696
Panama	0.31	3,696
Paraguay	0.31	3,696
Peru	0.68	8,105
Trinidad and Tobago	0.31	3,696
United States of America	66.00	786,795
Uruguay	0.76	9,060
Venezuela	2.98	35,525
Total	100.00	1,192,115

ASSESSMENTS OF THE MEMBER GOVERNMENTS AND PARTICIPATING GOVERNMENTS
 OF THE PAN AMERICAN HEALTH ORGANIZATION FOR THE PAN AMERICAN
 FOOT-AND-MOUTH DISEASE CENTER

<u>Country</u>	<u>Percentage</u> %	<u>Amount for 1968</u> \$
Total (from page 2)	<u>100.00</u>	<u>1,192,115</u>
<u>Other Member Governments</u> ^{a/}		
Jamaica		3,695
<u>Participating Governments</u> ^{b/}		
France		1,982
Kingdom of the Netherlands		1,349
United Kingdom		3,695
		<u>7,026</u>
Total Assessment - All countries		<u><u>1,202,836</u></u>

^{a/} Applications for membership of Barbados and Guyana will be considered by the XVII Directing Council, after which the schedule of assessments will be revised accordingly.

^{b/} Based on same relationship to total as for PAHO/Regular.

56th Meeting of the Executive Committee
RESOLUTION XVIII

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

THE EXECUTIVE COMMITTEE,

Being aware of the significance of foot-and-mouth disease with respect to both nutrition and economic development of the Americas and recognizing the valuable services of the Pan American Foot-and-Mouth Disease Center, under the direction of the Pan American Health Organization and supported by the Program of Technical Cooperation of the Organization of American States;

Having noted the declaration of CIAP, at its meeting in March 1967, which recommends that countries contribute to the stable and permanent financing of the Center;

Having further noted the Resolution 24-E/66, CIES/966, Rev. 2, 11 April 1966, with respect to future program and financing and the action taken pursuant to the instruction that the Pan American Health Organization and the Organization of American States submit a joint report to the Ninth Meeting of CIAP with respect to the status of the foot-and-mouth disease problems in the Americas, the functions and activities of the Pan American Foot-and-Mouth Disease Center and its needs to accomplish its task;

Having noted that in fulfillment of the IA-ECOSOC resolution the Secretary-General of the Organization of American States and the Director

of the Pan American Sanitary Bureau appointed as Special Representative of these Organizations His Excellency the Vice-President of Peru, Mr. Edgardo Seoane, to visit the countries of the Hemisphere accompanied by the Director of the Center, Dr. Carlos Palacios, to discuss with the Governments the foot-and-mouth disease problem, and to recommend a program of action;

Having been informed of actions already taken by both the Inter-American Development Bank and the International Bank for Reconstruction and Development to support pre-investment studies which are expected to lead to national and multinational programs, with external financial resources and requiring continuing technical services from the Center;

Having learned of the additional support of the Government of the United States of America to finance promising research on new control techniques;

Recognizing the need for and favorable possibilities of expansion of national and regional programs to cope with this problem and the necessary technical and coordinating role of the Center, in association with national programs or the international agencies, such as the Inter-American Development Bank which may be expected to provide financial support; and

Taking note of the XX Resolution of the XIII Pan American Sanitary Conference regarding the operations of the Pan American Foot-and-Mouth Disease Center,

RESOLVES:

1. To reaffirm the importance of continuing the international and national efforts to control foot-and-mouth disease in the Americas.

2. To reiterate the great value of maintaining the activities of the Pan American Foot-and-Mouth Disease Center at a sufficient level and with stable long-term financing, to enable it to provide Governments with scientific cooperation and technical advice in planning and executing international and national foot-and-mouth disease programs.

3. To support the Director in his efforts to obtain funds from all possible sources to provide adequate financial support to enable the Pan American Foot-and-Mouth Disease Center to cooperate with Governments in their national programs.

4. To request the Inter-American Social and Economic Council to make provision for financing the activities of the Pan American Foot-and-Mouth Disease Center at an effective level during the period through 30 June 1969, in order to permit operation of the current program of the Center.

5. To note with satisfaction and to endorse the recommendations concerning the program and financing arrangements contained in the report of the mission of His Excellency, the Vice-President of Peru and the Director of the Pan American Foot-and-Mouth Disease Center.

6. To request the Director to submit the report mentioned in paragraph 5 above and the Joint Report to the IV Meeting of CIAP (CIAP/48) to the XVII Meeting of the Directing Council with the recommendation that it consider the proposals therein and that it provide for the continuation of the operations of the Center under the administration of PAHO at an effective level.

7. To authorize the Director to maintain the present level of operations of the Center by continuing to advance funds from the Working Capital Fund against reimbursement from contributions from Governments for this purpose and/or additional support from the IA-ECOSOC subject to the decision of the XVII Directing Council Meeting on the operation of the Center.

8. To express its thanks to the Organization of American States for the financial assistance it has been giving the Pan American Foot-and-Mouth Disease Center, through the Program of Technical Assistance.

9. To instruct the Director to report to the XVII Meeting of the Directing Council on the progress of the program of the Pan American Foot-and-Mouth Disease Center and of the efforts to arrange both long-term and short-term financing of the Center.

(Approved at the twelfth plenary session,
3 May 1967)

FINANCING OF THE PAN AMERICAN FOOT AND MOUTH DISEASE CENTER, PROJECT 77
OF THE OAS TECHNICAL COOPERATION PROGRAM - SPECIAL DEVELOPMENT ASSISTANCE
FUND*

In conformity with the recommendations of the IA-ECOSOC at its Fourth Annual Meetings at the expert and ministerial level, held in Buenos Aires, Argentina, in March 1966, to the effect that "the Secretariat should prepare a report on the present status of the foot-and-mouth disease problem, the status of national foot-and-mouth disease campaigns in the Americas, and the participation of the Pan American Foot-and-Mouth Disease Center in the aforementioned national campaigns" and that "the Organization of American States and the Pan American Health Organization, in consultation with the Governments of the Hemisphere, and in the light of the aforementioned report of the Secretariat, should prepare a report on the permanent and stable financing of the Pan American Foot-and-Mouth Disease Center based on contributions by the countries and without prejudice to other contributions from public and private organizations for specific purposes", the OAS Secretariat and the Pan American Sanitary Bureau submitted its joint report to the Inter-American Committee on the Alliance for Progress (CIAP) in October and to the Fifth Annual Meeting of IA-ECOSOC held in Viña del Mar, Chile, in June 1967. At its meeting IA-ECOSOC adopted a recommendation to the effect that Project 77 should continue to be financed by the Special Fund up to June 1968 and that the Center should be provided with stable and permanent financing with funds other than those in the Special Fund (CIAP/110, 3 February 1967, p. 16).

At its 56th Meeting held in April/May 1967 the Executive Committee of the Pan American Health Organization approved Resolution XVIII which requested the Director to submit the recommendation concerning the program and financing arrangements contained in the Report of the Seoane-Palacios mission and the Joint Report made to the IV Meeting of CIAP (CIAP/48) to the XVII Meeting of the Directing Council with a recommendation that it consider the proposals therein and that it provide for the continuation of the operations of the Center under the administration of PASB at an effective level (CE56/22).

By Resolution 14-M/67 (CIES/1306, Add. 3) of its Fifth Annual Meeting at Viña del Mar, Chile, the IA-ECOSOC decided to request the Pan American Sanitary Bureau to continue to be responsible for the technical and administrative operation of the Pan American Foot-and-Mouth Disease Center, in accordance with the instructions of the IA-ECOSOC and that the Pan American Health Organization should submit to IA-ECOSOC each year through the normal channels a report on the activities of the Center and its program and budget.

* This document has been published by the OAS as CIAP/144, dated 28 August 1967.

It further decided to authorize CIAP, in agreement with the Pan American Sanitary Bureau and the Secretariat of the OAS and in the light of replies from Governments, to take a decision at its next meeting on the system of quota payments for financing the Pan American Foot-and-Mouth Disease Center and the procedure for putting it into effect before 1 July 1968.

In view of what has been said above, it is recommended that the following plan for financing the Pan American Foot-and-Mouth Disease Center be adopted.

1. The financing of the Foot-and-Mouth Disease Center must be based on fixed quota contributions by the Governments of the Americas.
2. The quotas should be in accordance with the Pan American Union scale.
3. The budgetary estimates for the Pan American Foot-and-Mouth Disease Center are those indicated in the Report of the Seoane-Palacios Mission (CIES/1135, 18 April 1967, Annex 1-1A).
4. In conformity with the IA-ECOSOC Resolution, the Pan American Sanitary Bureau will continue to be responsible for the technical and administrative operation of the Pan American Foot-and-Mouth Disease Center, in accordance with the instructions of IA-ECOSOC.
5. The Directing Council of the Pan American Health Organization, as the Governing Body of the Center, will fix the quota contributions of the countries on a calendar year basis.
6. The budgetary estimates of the Center and the corresponding quotas will be separate from the regular budget of the Pan American Health Organization.
7. The Center will continue to receive appropriate assistance from the Special Development Assistance Fund until such time as the new arrangements are instituted, which, in accordance with the IA-ECOSOC Resolution, will be on 1 July 1968.
8. So that the costs of financing activities may be absorbed, the quota contributions of the Governments will begin on 1 January 1968.
9. To request those Governments who have not yet reconfirmed their support of these financing arrangements to do so as soon as possible.

10. The Pan American Health Organization will submit to the Inter-American Committee for the Alliance for Progress and the Inter-American Economic and Social Council, through the normal channels, an annual report on the activities of the Center as well as its program and budget; and the Inter-American Committee on the Alliance for Progress reserves its right to make any observations it may wish on the activities of the Pan American Foot-and-Mouth Disease Center.

11. To express its thanks to the Organization of American States for the financial assistance which it has been giving to the Pan American Foot-and-Mouth Disease Center through its Technical Cooperation Program.



Ia-ecosoc

INTER-AMERICAN ECONOMIC AND SOCIAL COUNCIL

OEA/Ser.H/X.11

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FIFTH ANNUAL MEETINGS OF THE IA-ECOSOC
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Document Prepared by the OAS Secretariat
and the Pan American Health Organization

REPORT ON THE PERMANENT AND STABLE FINANCING
OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

(Project 77 of the OAS Technical Cooperation Program)

(Translated by the Pan American Sanitary Bureau)

CONTENTS

INTRODUCTION

- A. Report on the Permanent and Stable Financing of the Pan American Foot-and-Mouth Disease Center and the Present Status of the Foot-and-Mouth Disease Problem. (Project 77 of the OAS Technical Cooperation Program).
- B. Report on Foot-and-Mouth Disease: a present and future problem of the American Continent and the importance of the Pan American Foot-and-Mouth Disease Center. (Seoane-Palacios Mission).
- C. Declaration of CIAP on the Foot-and-Mouth Disease Problem, based on the two reports mentioned above.

INTRODUCTION

In conformity with the following recommendations of the IA-ECOSOC at its Fourth Annual Meetings at the expert and ministerial level held in Buenos Aires, Argentina, in March 1966 to the effect that "the Secretariat should prepare a report on the present status of the foot-and-mouth disease problem, the status of national foot-and-mouth disease campaigns in the Americas, and the participation of the Pan American Foot-and-Mouth Disease Center in the aforementioned national campaigns" and that "the Organization of American States and the Pan American Health Organization, in consultation with the governments of the hemisphere, and in the light of the aforementioned report of the Secretariat, should prepare a study on the permanent and stable financing of the Pan American Foot-and-Mouth Disease Center based on contributions made by the countries and without prejudice to other contributions from public and private organizations for specific activities"; and that "this financing study should be presented to CIAP for due consideration." (Resolution 34-M/66, Final Report of the Fourth Annual Meetings of CIES at the Expert and Ministerial Levels, Buenos Aires, 1966, p.74).

The OAS Secretariat and the Pan American Sanitary Bureau submitted its report to the IX Meeting of CIAP in October 1966 and, in view of the action taken by CIAP in this regard, this Report is submitted to CIES for consideration.

This document was prepared in cooperation with the Pan American Health Organization and the OAS Secretariat, and contains the following parts:

- A. "Report on the Permanent and Stable Financing of the Pan American Foot-and-Mouth Disease Center and the Present Status of the Foot-and-Mouth Disease Problem."

It comprises a description of Project 77 (Pan American Foot-and-Mouth Disease Center) of the OAS Technical Cooperation Program, the conclusions of the OAS/PASB Study Group on the financing of the Center, OAS scale of quotas, budgetary estimates, governing body of the Center, and information about the present status of the foot-and-mouth disease problem in the Americas.

- B. "Report on Foot-and-Mouth Disease; a present and future problem of the American continent and the importance of the Pan American Foot-and-Mouth Disease Center."

This report was prepared by Mr. Edgardo Seoane, Vice-president of Peru, as a result of the mission he undertook with Dr. Carlos Palacios, Director of the Pan American Foot-and-Mouth Disease Center. He was entrusted with that task by the Director of the Pan American Sanitary Bureau in agreement with the Secretary General of the Organization of American States.

This report describes the visit which Mr. Seoane made to Latin American countries and to the United States with a view to discussing, with the governments' consent, the foot-and-mouth disease problem in the Americas and ways and means of coordinating a continental campaign to gradually reduce the incidence of the disease, and to explaining why it was necessary to maintain and expand the activities of the Center and to stabilize the financing of the center through the multilateral support of the countries of the American continent, and the results of those visits.

As regards the proposed scale of quotas, which is based on the OAS scale, and also the budget for Project 77 (Pan American Foot-and-Mouth Disease Center), which is described in the Seoane-Palacios report, it should be noted that the original budgetary estimates and scale of quotas contained in CIAP document/48 of 26 September 1966, have been revised in the light of the appraisal made by the Pan American Health Organization.

There is an interval of some six months between the appearance of the CIAP document and the Seoane-Palacios report, which takes into account the increase in the cost of living which has taken place in Latin American countries, in particular in Brazil, and the expansion of technical assistant services to national programs for the eradication and control of foot-and-mouth disease in the Americas.

- C. "Declaration of CIAP on the Foot-and-Mouth Disease Problem, based on the two above-mentioned reports."

Document Prepared by the OAS Secretariat

REPORT ON THE PERMANENT AND STABLE FINANCING OF THE PAN AMERICAN
FOOT-AND-MOUTH DISEASE CENTER AND THE PRESENT STATUS
OF THE FOOT-AND-MOUTH DISEASE PROBLEM

(Project 77 of the OAS Technical Cooperation Program)

Published originally as Document CIAP/48
of the ninth meeting of CIAP, October 1966.

CONTENTS

	<u>Page</u>
INTRODUCTION	
I. BACKGROUND TO PROJECT 77 OF THE OAS TECHNICAL COOPERATION PROGRAM -- OAS SPECIAL DEVELOPMENT ASSISTANCE FUND	1
II. STUDY ON THE PERMANENT AND STABLE FINANCING OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER	7
III. QUOTA DISTRIBUTION OF THE BUDGET OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER ACCORDING TO THE OAS SCALE	9
IV. MINIMUM STRUCTURE AND BUDGET OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER	10
V. GOVERNING BODY FOR THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER	14
VI. PRESENT STATUS OF THE FOOT-AND-MOUTH DISEASE PROBLEM IN THE AMERICAS	17
1. Argentina	30
2. Bolivia	34
3. Brazil	36
4. Colombia	39
5. Chile	42
6. Ecuador	44
7. Paraguay	47
8. Peru	49
9. Uruguay	52
10. Venezuela	55
VII. ACTIVITIES OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER IN THE HEMISPHERE	59
VIII. IMMEDIATE ACTION PROGRAMS OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER IN DEVELOPING AND COORDINATING CAMPAIGNS FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE IN SOUTH AMERICA AND ITS PREVENTION IN THE DISEASE-FREE COUNTRIES	60

CONTENTS - cont.

	<u>Page</u>
IX. RESEARCH ACTIVITIES OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER, THEIR IMPORTANCE AND THEIR BENEFITS	62
REFERENCES	66

INTRODUCTION

The Inter-American Economic and Social Council at its Fourth Annual Meetings at the expert and ministerial level, held in Buenos Aires, Argentina, in March 1966, approved a recommendation of the Inter-American Committee on the Alliance for Progress (CIAP) to the effect that "the Secretariat should prepare a report on the present status of the foot-and-mouth disease problem, the status of national foot-and-mouth disease campaigns in the Americas, and the participation of the Pan American Foot-and-Mouth Disease Center in the aforementioned campaigns." Another recommendation it made was to the effect that "the Organization of American States and the Pan American Health Organization, in consultation with the governments of the hemisphere, and in the light of the aforementioned report of the Secretariat, should prepare a study on the permanent and stable financing of the Pan American Foot-and-Mouth Disease Center, based on contributions made by the countries and without prejudice to other contributions from public and private organizations for specific activities" and that "this financing study should be presented to CIAP for due consideration" (CIES/966 Rev. 2, 11 April 1966, p.48 Draft Resolution 24-E/66).

In conformity with the CIES resolution, the Secretariat has the honor to submit to CIAP for consideration this report which was prepared jointly by the Pan American Health Organization and the Secretariat of the Organization of American States. The report is divided into two parts: the first deals with the permanent and stable financing of the Center and the second with the present status of the foot-and-mouth disease problem in the Americas.

I. BACKGROUND TO PROJECT 77 OF THE OAS TECHNICAL COOPERATION PROGRAM - OAS SPECIAL DEVELOPMENT ASSISTANCE FUND

1. Origin

Early in 1951 the Pan American Sanitary Bureau, in collaboration with the Inter-American Institute of Agricultural Sciences, prepared a project for the establishment of the Pan American Foot-and-Mouth Disease Center. This project was included in the Program and Budget of the OAS Program of Technical Cooperation and presented for approval.

The project was approved by the Inter-American Economic and Social Council, and the Pan American Sanitary Bureau was designated as collaborating agency.

The Center was established in São Bento, Brazil, about 15 miles north of Rio de Janeiro in buildings that formerly housed the National Plant Pathology Laboratory. On 27 August 1951 the host-country agreement was signed between PASB and the Government of Brazil.

In 1950 the project was approved for a period of five years and later extended for another five years. It was proposed to continue its activities as a Special Project starting in 1963, to be financed from special contributions for this purpose. Owing to lack of such contributions IA-ECOSOC decided at its 1962 meeting, to continue the activities of the Center under the Technical Cooperation Program on a year to year basis.

During the IV Meeting of the Inter-American Committee of the Alliance for Progress (CIAP), which took place from 2 to 18 April 1965, it was decided that funds for the permanent financing for the Pan American Foot-and-Mouth Disease Center be obtained within a period of three years and that, in the meantime, the Center should continue to be supported by the resources of the Special Fund (CIAP/219, 15 April 1965).

2. Objectives

The principal objective of the project is to help the disease-free countries to remain free of foot-and-mouth disease and to assist the affected countries with the control and eradication of the disease.

To achieve this objective the Center carries out the following activities:

1. Granting of fellowships to veterinarians a) to attend training courses on prevention, diagnosis, control and eradication of the foot-and-mouth disease and on laboratory techniques used in diagnosis, vaccine production, etc., and b) to receive individual specialized training.
2. Providing diagnosis and virus identification services.

3. Providing advisory services, especially in relation to the collaboration between countries belonging to well defined geographic zones.
4. Carrying out field studies to acquire data relating to the incidence of foot-and-mouth disease and other vesicular diseases and thus to determine the most effective measures for the prevention, control, and eradication of the disease.
5. Conducting a program of research which serves as the basis for the aforementioned activities and gives special attention to problems of the greatest practical interest. This program covers: a) identification and study of the characteristics of virus strains which cause outbreaks of the disease in the field; b) preparation of vaccines giving the best and most lasting immunity; c) simplification of vaccine potency; and d) solution of international trade problems caused by the disease.
6. Determination, by means of field studies, of the most effective measures of preventing, controlling, and eradicating the disease and evaluating the effectiveness of national campaigns.
7. Compilation and diffusion, through bulletins, of data concerning research at the Center and other institutions and concerning other aspects of virology and immunology.
8. Publication, through bulletins or cables in case of emergency, of information relating to the appearance of new outbreaks of foot-and-mouth disease or the existence of virus strains with different or dangerous characteristics.

3. Activities from 1951 to 1966

In general terms the activities of the Pan American Foot-and-Mouth Disease Center fall into three groups: those for training of laboratory technicians in the Center or in inter-American courses which have been held in several Latin American countries; those of preparatory research, production of vaccines, diagnosis, applied research and field experimentation; and those for consultation with national animal health authorities, and evaluation of country programs for the prevention and control of vesicular diseases.

In all aspects the services of the Center from 1951 to the present have played an active and varied role. The most salient tasks accomplished will be cited below:

a) Training

The training program at the Center is carried out through short and long term courses, seminars and individual training.

The short term courses are organized for groups of 10 or more persons with a duration of about 3 months. Some courses carried out at the Center lasted from 2 to 8 weeks. The purpose was to give instruction on the principal problems of vesicular disease and adequate techniques for studying them.

Also, two week seminars designed to bring together the directors of various national institutes of animal health have been held. At these meetings ideas have been exchanged, problems discussed, and national programs and achievements explained. Seminars have been held in the Center in Brazil and in other countries.

Between 1951 and 1966 the Center organized 22 courses in which approximately 490 fellows have been trained.

b. Research Program

The research program has established the following methods of virus cultivation as routine procedures:

- a. The Frenkel method
- b. Tissue cultures
- c. Monolayer cultures

Vaccines produced by these methods have been utilized by the Center with good results in the field tests and in pilot demonstrations of systematic application of vaccine.

Modified Live Virus Vaccine

The Center to date has experimented with young rabbits, young and adult mice, day-old chicks, and chicken embryos. Because the differences in subtypes in virus strains of a single type are of equal importance in live virus vaccines as in inactive virus vaccines, the program for the development of virus strains for live vaccines has not been limited to experimentation with a single representative strain of the three viruses, O, A, and C which are prevalent in the Americas. Modified virus strains, suitable for vaccines, have been produced in the Center in rabbits for virus type O, in chicken embryos for virus type A, and in mice and rabbits for virus type C.

In 1963 a modified strain of live type C virus, suitable for vaccine was developed. The testing of this strain has continued, as has the preparation of vaccines from materials obtained from rabbits, mice, and BHK cells.

In collaboration with the Institute of Veterinary Research of the State of Rio Grande do Sul, Brazil, a study has been made of the use of modified live virus strains for the immunization of sheep and hogs.

Use of Modified Live Virus Vaccines in South America

In the light of the experience acquired with live vaccines in Venezuela and Brazil, the Center has extended their use to other countries with different geographical and climatic conditions. Other methods of administration have been tried with cattle and other livestock. In mid 1963 an agreement was signed by the Governments of Colombia, Ecuador, and Chile and PASB under which the Center was authorized to begin field tests.

c. Services of Diagnosis and Classification of Field Viruses

Each year between 1952 and 1966 an increasing number of viruses has been examined. Immunizing sera for virus types O, A, and C have been distributed to various countries, among which were Brazil, Argentina and Costa Rica. In the virus materials received by the Center for diagnosis and classification, New Jersey and Indiana types of vesicular stomatitis were discovered. These materials came from countries free of foot-and-mouth disease and it is therefore very important to provide these countries with virus identification services.

d. Technical Assistance Services

The Center's technical assistance services have been of considerable help to the member countries of the OAS, in the solution of many problems faced by the countries in their national campaigns for the control and eradication of foot-and-mouth disease.

Since 1951 the technical staff of the Center have collaborated with local authorities in many Latin American countries in their foot-and-mouth campaigns. Ecuador was the first country to receive technical advice in the organization of control measures.

The Center has continued this assistance by providing services for the identification and classification of vesicular samples received from the various countries. The services have been extraordinarily important for countries free of foot-and-mouth disease but affected by Vesicular stomatitis.

There has been a considerable increase not only in the number of samples received but also in the capacity of the Center to define subtypes which may appear in the Americas.

Through the years, especially in 1963, the Center has sought to have FMD programs included in development plans receiving financial assistance from the Alliance for Progress. Economic considerations limit the capacity of almost all countries to undertake national campaigns, but regional campaigns have been initiated with emphasis on border zones. In order to do this it has been necessary to coordinate the plans of each country in the regional plan.

Special Commission II of the Inter-American Economic and Social Council which met in San Jose, Costa Rica, in July 1963 agreed to recommend to the IA-ECOSOC that immediate priority be given to foot-and-mouth disease control on both the national and the international level. The Center was represented in this meeting by one of its regional consultants and later prepared a document dealing with the repercussions of the disease in the countries affected and the significance of introduction of the disease in countries currently free of it. This document was considered in the Second Annual Meeting of IA-ECOSOC in October/November 1963 in São Paulo, Brazil. Aware of the importance of the problem, IA-ECOSOC recommended a strengthening of the program against the disease in the countries affected and preventive programs in areas free of it. It also recommended that the regional and national projects studied by the South American Conference against foot-and-mouth disease be submitted to international credit agencies in order to obtain additional financial aid.

e. Scientific Information and Publications

The Center has an information and publications service which, through bulletins and periodical literature, provides health authorities and teaching and research institutions with information about its work and reports on matters of scientific and professional interest.

Since January 1963 the publications prepared by the information service appear in a monthly publication entitled "Cuadernos del Centro Panamericano de Fiebre Aftosa", which is distributed to approximately 380 institutions and persons in 54 countries and territories. These papers include classified bibliographies, and extracts from articles on foot-and-mouth disease are presented. In addition, quarterly publications containing world epizootiological information; news bulletins; catalogues of publications received by the Center; and Spanish translations of original writings edited by technicians of the Center are published.

4. Impact of Project 77

One of the principal results of the work of the Center has been the awakening of interest and concern in the Americas in the problems created by foot-and-mouth disease and of a desire to find a solution to these problems.

In countries now free of the disease, defenses against the disease have been strengthened by the adoption and enforcement of regulations designed to prevent the introduction of foot-and-mouth disease and by the acceptance of a plan of action prepared by the Center for use in the event of an outbreak of the disease. All the disease-free countries, including the islands of the Caribbean, have at least one or more veterinarians trained by the Center in the prevention and control of foot-and-mouth disease.

In the South American countries now affected by the disease the Center is recognized as the principal source of information, consultation, advice, and coordination in all matters related to the disease.

II. STUDY ON THE PERMANENT AND STABLE FINANCING OF THE FOOT-AND-MOUTH DISEASE CENTER

The Inter-American Economic and Social Council, at its Fourth Annual Meeting approved a resolution which included the following recommendation: "That the Organization of American States and the Pan American Health Organization, in consultation with the Governments of the Hemisphere, and in the light of the report of the Secretariat (on the problem of aftosa and the role of the Center), prepare a study on the permanent and stable financing of the Foot-and-Mouth Disease Center, based on contributions from the countries, and without prejudice to other public and private contributions for specific activities."

After considering a report outlining the problem of foot-and-mouth disease and the role of the Center in research and training as well as in relation to country and inter-country programs for prevention and control, the Joint OAS-PASB Study Group reached the following conclusions:

1. The basic structure or nucleus of the Center requires the permanent and stable financing mentioned in the IA-ECOSOC Resolution in the approximate annual amount of the budget presented in this document.
2. Special programs such as those programs related to national or regional campaigns or special research projects will be financed with funds from other sources.
3. Stable financing must be based on a system of quota payments by the Governments of the Americas.
4. The quotas must be assessed according to the OAS scale.
5. In reaching the conclusion stated in item 4, the Group recognized that countries having a large livestock population infected with the disease derived greater benefit from the Center. Nevertheless, all countries benefit since disease-free countries are in constant danger of infection and a specific part of the program of the Center is devoted to the protection of those countries.

The foregoing presentation clearly shows that the value of the benefits each country derives from the Center far exceed the value of the quotas to be paid under the proposed OAS scale.

Taking into account the great difficulty in determining benefits to individual countries, which in any case would be constantly changing, the Group decided that this factor did not represent a practical basis for establishing quotas. The OAS scale is proposed because it is the system the Governments of the Americas are accustomed to use in giving financial support to international activities.

6. For information purposes, the annex shows the proposed quota distribution according to the OAS scale. These amounts may be slightly reduced if non-OAS countries such as Jamaica and Trinidad join in making contributions. It will be noted that the smaller countries, such as those in Central America, would pay less than \$3,000. This is a modest amount even for the smallest country to contribute annually toward the protection of its livestock industry.

7. The Group recognizes that a Working Capital Fund should be established to finance operations each year pending receipt of quotas. Recommendations on means of building such a fund are made in the section of this report devoted to the Governing Body.

III. QUOTA DISTRIBUTION OF THE BUDGET
OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE
CENTER ACCORDING TO THE OAS SCALE

<u>Country</u>	<u>Percentage</u>	<u>Contribution in U.S. \$</u>
Argentina	7.11	67,723
Bolivia	.31	2,953
Brazil	7.34	69,914
Colombia	1.78	16,955
Costa Rica	.31	2,953
Cuba	1.54	14,668
Chile	2.09	19,907
Ecuador	.39	3,715
El Salvador	.31	2,953
United States of America	66.00	628,656
Guatemala	.31	2,953
Haiti	.31	2,953
Honduras	.31	2,953
Mexico	6.26	59,627
Nicaragua	.31	2,953
Panama	.31	2,953
Paraguay	.31	2,953
Peru	.69	6,572
Dominican Republic	.31	2,953
Uruguay	.77	7,334
Venezuela	2.93	27,908
	<u>100.00</u>	<u>952,509</u>

IV. MINIMUM STRUCTURE AND BUDGET OF THE PAN AMERICAN
FOOT-AND-MOUTH DISEASE CENTER

The personnel and funds required to undertake the activities mentioned above and to continue the research program of the Center are described below.

The Center has three sections:

- a. Direction and Administrative Section
- b. Technical Assistance Services and Training
- c. Department of Laboratories

a. The Direction and Administrative Section as indicated by its name, is responsible for the operation and technical supervision, and administration of the Center's research activities and assistance to the countries. The administrative section consists of two sub-sections: accounting and general services.

b. The Section of Technical Assistance is responsible for direct collaboration with the member countries and the execution of their campaigns, the field application of laboratory experience, the organization and development of courses of training in practical methods of combating foot-and-mouth disease, and research and epidemiological studies. The Section consists of a Chief of Services and five field veterinarians, three of whom are stationed in key places in South America and provide rapid and effective service to the various countries.

c. The Department of Laboratories constitutes the most developed unit of the Center. It needs more personnel installations, equipment, and supplies because of the extent of the research which it must perform. In addition it must act as a Reference Center for the countries. It should consist of eight scientists and sufficient technical and auxiliary personnel, as indicated in the budget estimates. The Department consists of the following units:

- 1) Headquarters and Special Research Unit
- 2) Reference and Diagnostic Unit
- 3) Virology Unit
- 4) Immunization Unit
- 5) Control and Vaccines Unit
- 6) General Research Unit
- 7) Application Unit

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

Budget Estimates

			<u>1969</u>
10	<u>Personnel</u>		
11.1	Professional Staff		200,611
	Director	P5	0623
	Chief of Laboratories	P5	0624
	Chief of Field Services	P5	0625
	Virologist	P4	0626
	Veterinarian	P4	0627
	Veterinarian	P4	0628
	Country Consultant	P4	0630
	Country Consultant	P4	0631
	Country Consultant	P4	(New in 1968-9)
	Serologist	P4	0632
	Research Officer	P3	0633
	Research Officer	P4	0634
	Research Officer	P3	2049
	Administrative Officer	P3	0636
	Technical Officer	P3	2050
	Assistant Serologist	P2	0638
	Sr. Research Associate	RL10	0639
	Research Associate	RL9	0640
	Research Assistant	RL8	0641
11.2	Administrative Staff - 114		258,031
11.3	Temporary and Overtime		12,000
12	Duty Travel		6,500
13	Allowances		106,991
14	Insurances		20,000
15	Taxes and Contributions		75,000
16	Recruitment and Replacement		<u>10,000</u>
	Total Code 10		<u>689,133</u>

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER (Cont.)

Budget Estimates

	<u>1969</u>
20 <u>Training Activities</u>	
21.1 Fellowships	
XXIII Training Courses, AFTOSA CENTER Fellowships (36 fellowship months)	12,000
21.2 Travel - International	
XXIII Training Course, AFTOSA CENTER Travel - Fellowships	10,000
21.4 Supplies	300
23 Contract Lectures	<u>3,500</u>
Total Code 20	<u>25,800</u>
30 <u>Research</u>	
31 Permanent Personnel (Travel & Subsistence)	5,000
32 Contract Personnel	2,000
33 Supplies	80,000
34 Equipment	20,000
35 Contractual Services	<u>2,500</u>
Total Code 30	<u>109,500</u>
40 <u>Advisory Services</u>	
41 Permanent Personnel (Travel & Subsistence)	<u>18,500</u>
Total Code 40	<u>18,500</u>

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER (Cont.)
Budget Estimates

		<u>1969</u>
50	<u>Information & Publication</u>	
51	Information Services	4,000
52	Technical Publications	3,000
53	Library	<u>3,000</u>
	Total Code 50	<u>10,000</u>
70	<u>General Costs</u>	
71	Communications	12,000
72	Transportation of Articles	10,000
73	Supplies	25,000
74	Equipment	25,000
75	Maintenance of Facilities	6,000
76	Contractual Services	<u>7,500</u>
	Total Code 70	<u>85,500</u>
	Subtotal	938,433
80	Contingencies (1.5%)	<u>14,076</u>
	Total Code 80	<u>14,076</u>
	TOTAL BUDGET	<u>952,509</u>

V. GOVERNING BODY FOR THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

During the life of the Center from its beginning in 1951 to the present, the Center has been financed as Project 77 of the Program of Technical Cooperation of the OAS. With the creation of the Special Assistance Fund of the OAS, the Program of Technical Cooperation, including the Foot-and-Mouth Disease Center has been financed by the Special Fund for Development since January 1965. In view of the resolution of IA-ECOSOC on the permanent and stable financing of the Center outside TCP/OAS, the OAS-PAHO Joint Group has recommended a system of quota assessments in accordance with the OAS scale. There remains, however, the designation of the Governing Body to perform in the future the normal functions of such a Body, namely to establish policies and regulations, approve program and budget, assess and receive quota contributions and approve financial and activity reports.

So far, IA-ECOSOC and PAHO have both acted in some degree as Governing Bodies of the Center. IA-ECOSOC has established general policies governing the Program of Technical Cooperation and has approved the budget of the Center as part of that program. The OAS has collected voluntary contributions, of which a portion have been allocated each year to the Center. PAHO, on the other hand, has established the program, financial and personnel policies and regulations of the Center. The budget of the Center has been included in the budget document of PAHO and has received program approval. PAHO, through the Center and through its Zone and Country Offices, has promoted and maintained an effective cooperative relationship with the Ministries of Agriculture on this program.

The OAS-PAHO Joint Group has taken into consideration all the possible organizations which might serve as Governing Body for the Center. It has also considered the desirability and convenience of having the Center operation and the Governing Body function combined in the same agency.

Taking this factor into account as well as the 15 years of successful operation under PAHO during which time the Center has become recognized as one of the world's leading institutions for research and training as well as promotion of practical field progress in countries in foot-and-mouth disease, the Group recommends:

1. That PAHO be designated as the Governing Body as well as the operating agency, it being understood that the budget and corresponding quota assessments related to the Center would be separate from the regular PAHO budget.
2. That PAHO should assure cooperation with ministries and agencies in the field of agriculture through the following means:

- a. Continuation of the well established and effective operational cooperation by PAHO through the Center, as well as Zone and Country Offices with Ministries of Agriculture and with cooperating institutions and agencies;
- b. Consultation with Governments concerning the conveniences of having agricultural experts included in the country's delegation to meetings of the PAHO Governing Bodies;
- c. Convening meetings of Ministries of Agriculture as appropriate to maintain an effective cooperative relationship on this problem, as well as other health matters related to agriculture;
- d. Establishment of a technical advisory committee and other committees as appropriate to assure the fullest involvement and cooperation of national officials and voluntary agencies as well as international agencies, such as IIASI, FAO, etc., having concern with this problem.

Having considered ways to accomplish the foregoing objectives, the Group recommends the following steps:

1. That a sub-committee of the OAS-PAHO Joint Group be designated by the Secretary General of the OAS and the Director of PASB to consult with the Ambassadors in Washington and arrange visits to the principal countries affected by the problem, especially Argentina, Brazil, Mexico, United States and Venezuela to exchange views and prepare the way for approval of the plan, with such modifications as may rise from the consultations with Foreign Offices and Ministries of Agriculture and Health. Other countries may be added for consultation, depending upon their interest, such as Uruguay, Paraguay, Peru and Colombia.
2. That a document be presented to CIAP in November 1966 and its recommendations to CIES in March 1967, with a view to having that body request PAHO to undertake responsibility as Governing Body as well as operating agency for the Center.
3. That the request of CIES, if forthcoming, be presented to the PAHO Directing Council in September 1967 for acceptance. Upon acceptance, the PAHO Directing Council should consider the establishment of quotas for the year 1968 with the objective of establishing the Working Capital Fund.
4. That the schedule of transition be as follows:
 - a. The objective would be for PAHO to assume complete responsibility as of 1 July 1969.

- b. CIES would request Governments to commence contributions in 1968 to PAHO to build a Working Capital Fund for the Center to finance operations pending receipt of quotas. These contributions would be on a voluntary basis pending the establishment of quotas as proposed in paragraph 3.
- c. The PAHO Directing Council at its meeting in September 1968 would assume its functions as the Governing Body for the Center by approving the program and budget for 1969 and assess the corresponding quota contributions (PAHO operates on a calendar year basis).
- d. The Technical Cooperation Program would continue to finance the Center through the OAS fiscal year ending 30 June 1969.

VI. PRESENT STATUS OF THE FOOT-AND-MOUTH DISEASE PROBLEM IN THE AMERICAS

1. General Picture

From the standpoint of the epizootiology of the disease, the hemisphere can be divided into two major zones: one free of the disease and the other infected, the dividing line being the border region between Colombia and Panama (see map No. 1.).

The disease-free zone comprises the central and northern part of the hemisphere, including the West Indies, where, up to the present time, the outbreaks that have occurred have been controlled and eradicated. The last outbreaks of foot-and-mouth disease in this zone have been in the United States of America, in 1929; Canada, in 1952; Mexico, in 1953; Martinique, in 1953; Curacao (Dutch West Indies), in 1961; and Guadaloupe (France), in 1964.

Eradication has been accomplished primarily by slaughtering affected and suspect animals, and applying the most stringent animal health inspection measures. The exception to this rule was Mexico where, in 1948-1950, a vaccination campaign, using an inactivated virus vaccine (Waldmann type) was supplemented by the other measures already described. These measures succeeded in eradicating the disease. In the remaining part of Central America and the West Indies cases of the disease have not been confirmed; only vesicular stomatitis (New Jersey and Indiana sub-type 1 (classical)) is known to exist.

The second zone comprises all of South America and can be sub-divided according to whether or not there is foot-and-mouth disease and the types of the causative virus as follows:

Zone A - zones apparently free or with sporadic outbreaks of the disease -- Surinam and the southern part of South America (Argentina and Chile), British Guiana, and French Guiana.

An outbreak of virus type "A" was verified in the Rupununi Savanna in British Guiana, in 1961. Since vaccination, using modified live-virus vaccine produced at the Pan American Foot-and-Mouth Disease Center, the disease has not reappeared.

An outbreak occurred in French Guiana in 1960, but no cases of foot-and-mouth disease have ever been observed in Surinam.

The conclusion reached, as a result of a serological investigation carried out by the Pan American Foot-and-Mouth Disease Center in Tierra del Fuego, in cooperation with the Joint Argentine-United States Commission for the Study of Foot-and-Mouth Disease, which was based on the examination of 9,633 specimens, was that there was no evidence of foot-and-mouth disease. That finding confirmed the field observations made during the collection of serum specimens (25,000)

where no evidence of any kind was found justifying a suspicion of foot-and-mouth disease or of any vesicular disease.

Zone B - this zone comprises the countries where only the two virus types, "A" and "O", have been identified: Venezuela, Colombia, and Ecuador. Within these countries there are some areas where the disease has not been verified, such as the State of Bolivar in Venezuela, the northwestern region of the Choco, in Colombia, and the greater part of the Sierra in Ecuador.

Zone C - this zone comprises the countries affected by the three classic types of foot-and-mouth disease virus ("A", "O" and "C"): Argentina, Bolivia, Brazil, Chile, Paraguay, Peru and Uruguay.

This third zone may be sub-divided into the following geographical and epizootic regions: (See map No. 2)

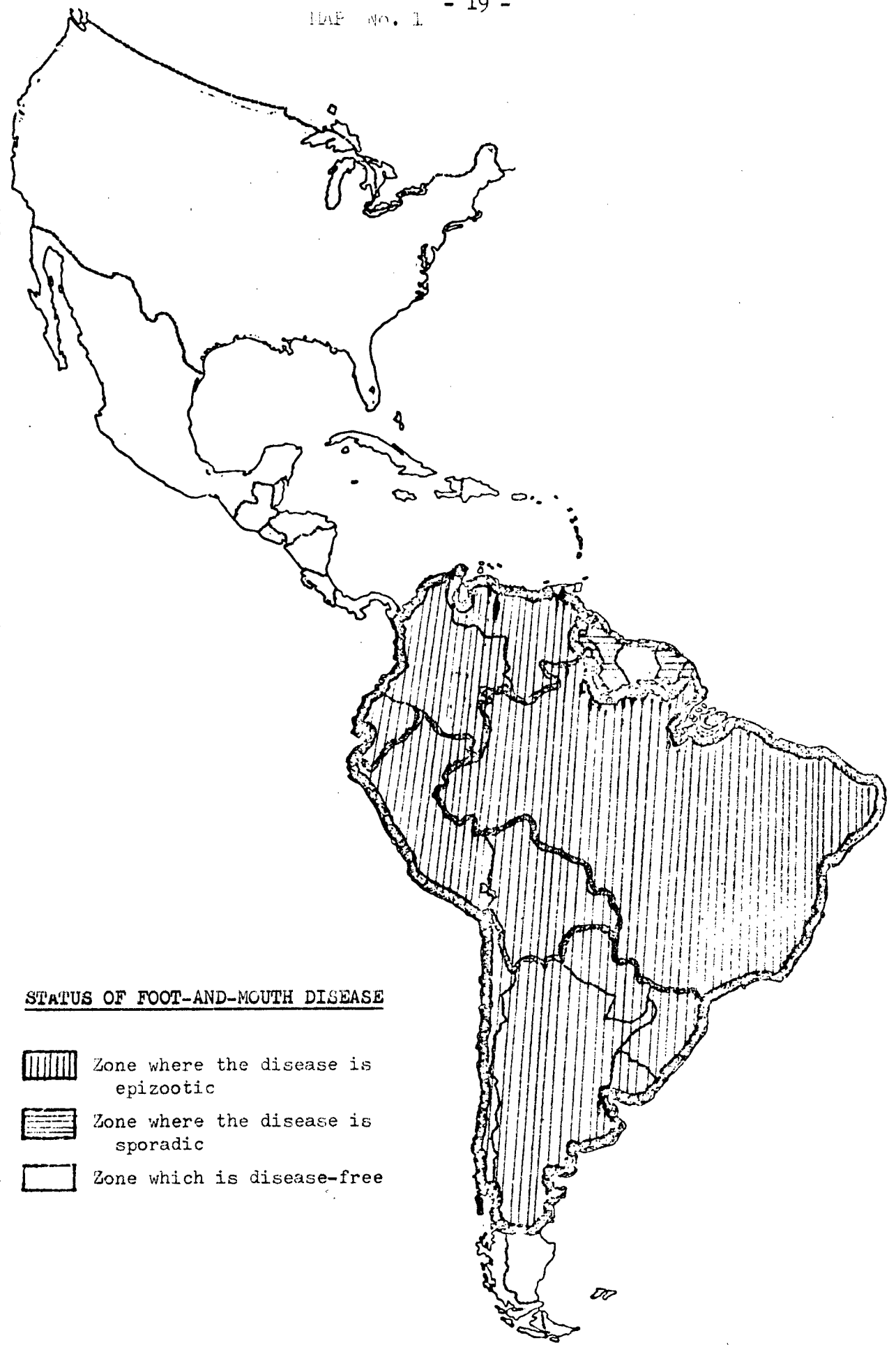
C.1 Bolivia and Peru

C.2 Argentina, Chile, Paraguay, Uruguay and the southern states of Brazil




C.3 Brazil, with the exception of the southern states

In addition to the three classic types of foot-and-mouth disease virus that are found in South America, the Pan American Foot-and-Mouth Disease Center has identified various sub-types of foot-and-mouth disease virus; these are shown in Table No. 1. Six of these have been accepted by the World Reference Laboratory and the other four will be sent shortly for the purpose of classification.

As regards vesicular dermatitis, "New Jersey" and "Indiana" sub-type 1 (classic) viruses have been found in Colombia, Ecuador, Peru and Venezuela, and as may be seen in Table No. 1, two new sub-types of Indiana virus have been identified in Argentina, Brazil, and Trinidad; this is the first verification of sub-types of vesicular stomatitis virus. The importance of this verification by the Pan American Foot-and-Mouth Disease Center is not to be under-estimated, since it will enable us to improve our knowledge of the epizootiology of the disease and to direct research towards the preparation of a more effective vaccine.



STATUS OF FOOT-AND-MOUTH DISEASE

-  Zone where the disease is epizootic
-  Zone where the disease is sporadic
-  Zone which is disease-free

Map N° 2

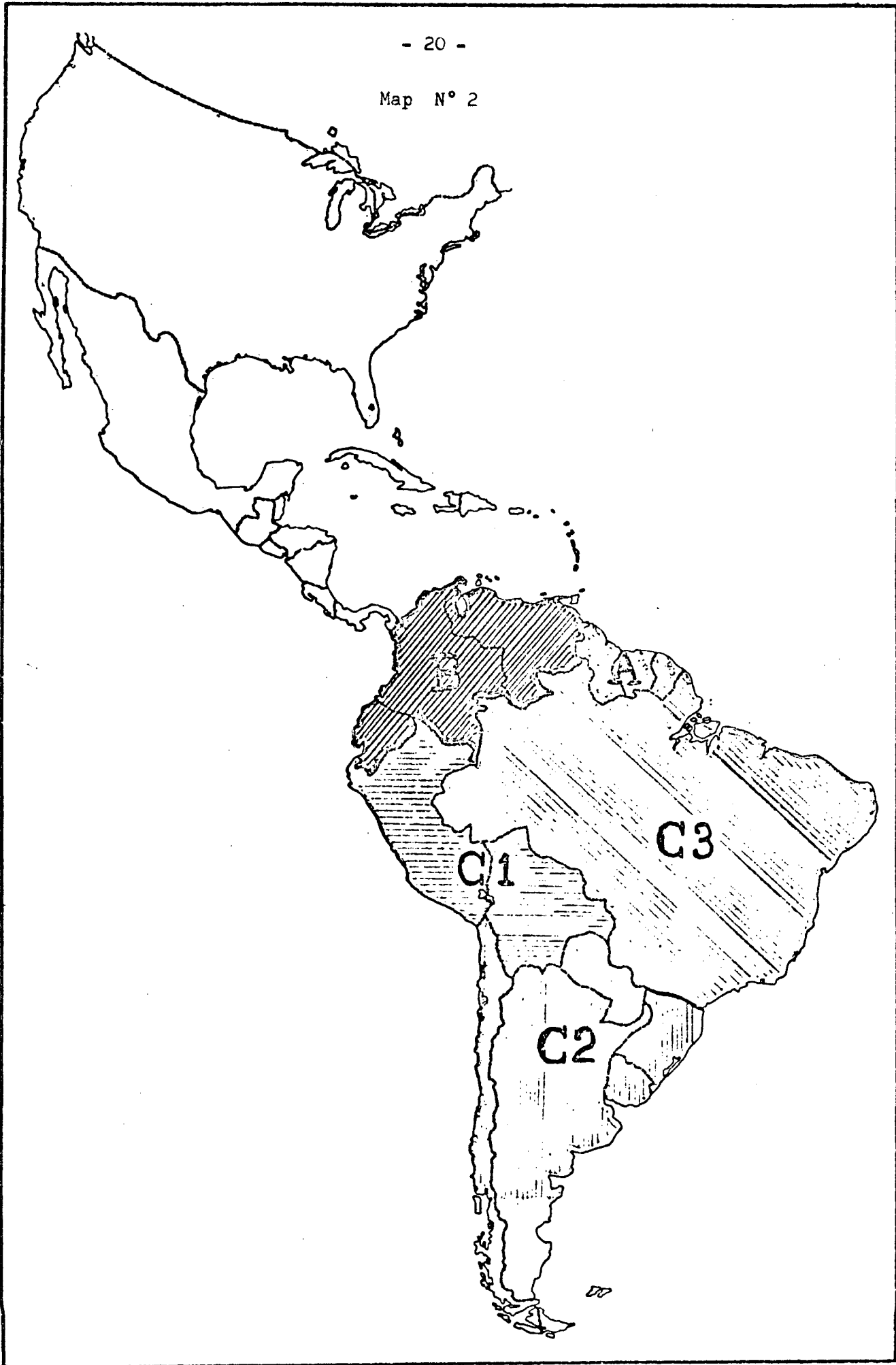


TABLE NO. 1

TYPES AND SUB-TYPES OF THE VIRUSES OF FOOT-AND-MOUTH DISEASE AND VESICULAR STOMATITIS

Countries	FOOT-AND-MOUTH DISEASE									VESICULAR STOMATITIS			
	O	A	C	A 13 Santos	A 16 Belem	A 17 Guarulhos	A 18 Zulia	A 19 Suipacha	O 8 Bahia	Indiana			New Jersey
										I	II	III	
Argentina	*	*	*	-	-	1961	-	1962	1962	-	1963	-	-
Brazil	*	*	*	1958 ⁽¹⁾	1959	1959	-	1964	1959	-	1966	1964	-
Bolivia	*	*	*	-	-	-	-	-	-	-?	-	-	**
Chile	*	*	*	-	-	-	-	-	-	-	-	-	-
Colombia	1950	1951	-	-	-	-	-	-	-	**	-	-	**
Ecuador	1962	1956	-	-	-	-	-	-	-	**	-	-	1939?
Paraguay	*	*	*	-	-	-	-	-	-	-	-	-	-
Peru	*	*	*	-	-	-	-	-	-	**	-	-	**
Uruguay	*	*	*	1960	-	-	-	1964	1962	-	-	-	-
Venezuela	1950	1951	-	-	-	-	1962	-	-	**	-	-	**
Trinidad	-	-	-	-	-	-	-	-	-	-	1961	-	-

The classification of four new sub-types from Brazil and Argentina is pending

* Although the exact date of its appearance is not known, it is believed to have been introduced towards the end of the last century.

** Date of appearance not known

- Disease not verified

(1) Year in which typed

? Disease suspected to exist

2. Countries Free of the Disease

The countries of North and Central America and those in the Caribbean area, are at present considered to be free of the disease. They are therefore, in a privileged position in comparison with most of the other countries of the world, except for those that are separated from the continental land masses and situated in the Pacific Area.

Nevertheless foot-and-mouth disease constitutes a continuing threat to the disease-free countries of the Americas and, on various occasions, the disease has made an appearance in a number of them; for example, in the United States of America, there were nine such outbreaks between 1880 and 1929; in Mexico the disease appeared in 1946 and was only eliminated after a five-year campaign; a new outbreak which occurred in 1953 was eliminated in five months; there was an outbreak in Canada in 1952, although it was eventually eradicated; in Aruba and Curacao (Dutch West Indies) the last outbreaks occurred in 1953 and in 1961, respectively; in French Guiana in 1958 and 1960, and in British Guiana in 1961; finally, there was an outbreak in Guadeloupe in 1964.

Fortunately, the disease has so far been eliminated thanks to effective action in each of the outbreaks cited. However, these outbreaks exemplify the continuing threat to which disease-free countries are exposed, a risk that is steadily increasing with the expansion of transportation facilities and intensified trade.

In addition to the enormous direct losses it would cause, the appearance of the disease in the Central American countries would paralyze the export of meat and products of animal origin, and would prejudice human nutrition in that region, which, at the present time, is marked one of the most conspicuous deficits in animal protein in the whole of America.

The International Regional Animal Health Agency (OIRSA), representing Mexico, the Central American countries and Panama, is coordinating all the animal health activities of those countries, in particular, those aimed at preventing foot-and-mouth disease and other exotic diseases. The Center collaborates closely with the countries and with OIRSA and makes its laboratory services available for the diagnosis of material from vesicular outbreaks. It also conducts training courses for technical personnel in the region and provides advisory services on sanitary regulations for the import of animal products. Through a consultant stationed in Panama, it gives direct assistance in various matters of concern to the disease-free countries. It has drawn up an action plan and a manual of the procedures to be followed in the event of an outbreak of foot-and-mouth disease. It contains the standards and specifications in force that are accepted by the countries and by OIRSA.

3. Economic Consequences of Foot-and-Mouth Disease in the Hemisphere

Foot-and-mouth disease is primarily an economic and social problem.

At the present time, no other disease has so harmful an effect, on a continental scale, on trade in animal products between the American countries, or on livestock production as does foot-and-mouth disease. It is one of the most serious drawbacks to the production and marketing of meat and causes enormous and permanent losses, both direct and indirect, in the countries of the Americas affected by the disease.

In countries whose economies are basically agricultural and in which capital is in short supply such as are the Latin American countries, the animal population intended for the production of meat, milk, and wool, or as draft animals is possibly the most important investment apart from the value of the land. Low productivity is a general problem in Latin America, and foot-and-mouth disease has helped to keep production at a low level. It slows down the production cycle and delays the time for beginning productive or reproductive life. It also results in low utilization of forages and pastures and, consequently, reduced production of meat and milk per land unit and increases the cost of production. As a result, fewer products are available for food and exportable surpluses cannot be placed on certain important markets where higher prices would be paid, because of animal health regulations relating to foot-and-mouth disease. It is because of foot-and-mouth disease that frozen, chilled, or cured meats cannot be exported from South America to North America or the Caribbean.

Trade in meat, hides, wool, and animals on the hoof between the member countries of the Latin American Free-trade Association is difficult primarily for those countries that need to import cattle for their agricultural and livestock development. The stringent restrictions on the choice of the country from which to import not only curtails the possibilities of acquiring the most appropriate types of breeds or strains of cattle, but also creates higher per unit costs.

In Argentina, Paraguay, and Uruguay exports of products of animal origin represent 45.5, 34.5 and 87.8%, respectively of their total exports, but they are severely restricted in their search for other markets because of problems connected with foot-and-mouth disease. The countries affected by this disease suffer direct losses estimated at \$400 million. This figure alone is enough to show the magnitude of the problem and the desirability of establishing efficient control of the disease in South America.

Foot-and-mouth disease, therefore, hampers the commercial integration of the countries of the Latin American Free-trade Association and affects the conditions they have attempted to establish for setting up the Latin American common market. It is also impeding the integration of the ALALC with the Central American Common Market; taken together these factors constitute a social and economic problem regional in scope.

For the countries in the disease-free area, in particular Central America, one might well ask what would happen to their meat industry if they were faced with a ban on their exports due to an outbreak of foot-and-mouth disease in the region.

In Costa Rica and Nicaragua meat exports occupy third place among all exports and are acquiring similar importance in Honduras and Guatemala. Dr. Carlos Meyer A., of OIRSA, has shown, in a recent study, that losses from a possible spread of foot-and-mouth disease into Central America could be estimated at about \$55 million. Occurrence of the disease in even one country in Central America would affect the economic integration of Central America, in view of the restrictions which would have to be placed on any in-transit or inter-area movement of meat in order to prevent foot-and-mouth disease from spreading.

As far as nutrition is concerned, it is urgently necessary to make good the deficiencies in the diet of the Latin American population, in particular, the shortage of proteins. Foot-and-mouth disease aggravates this problem, since, as was said above, it lowers the production of meat and milk, which are of vital importance for the health of the individual, in particular, of infants and young persons.

Table No. 2 shows the number of animals susceptible to the disease in the hemisphere.

TABLE NO. 2

AREA, POPULATION, ANIMAL SPECIES--NUMBER, TOTAL EXPOSED TO FOOT-AND-MOUTH DISEASE

North America

Country	Area Km. ²	Population 1965 (thousands)	Animal Species (millions)					Total animals exposed to Foot- and-Mouth Disease
			Cattle	Sheep	Goats	Hogs	Llamas, etc.	
U.S.A.	9,346,751	193,818	96,236	33,170	3,339	59,026	-	191,771
Canada	9,974,375	19,604	10,497	1,206	0,018	5,483	-	17,204
Mexico	1,969,367	40,913	21,561	5,788	10,620	9,423	-	47,392
<u>Central America and Panama</u>								
Panama	74,470	1,244	0,773	-	0,003	0,236	-	1,012
Costa Rica	50,900	1,443	0,954	0,001	0,001	0,115	-	1,071
Nicaragua	148,000	1,653	1,331	0,001	0,007	0,521	-	1,860
Honduras	112,088	2,163	1,291	0,011	0,046	0,615	-	1,963
El Salvador	21,146	2,928	0,827	0,003	0,010	0,221	-	1,061
Guatemala	108,829	4,435	1,134	0,676	0,088	0,409	-	2,307
	515,433	13,866	6,310	0,692	0,155	2,117	-	9,274

4. National Campaign

We believe it will be of interest to examine what the countries have done in the way of national campaigns in the last fifteen years. In 1950, only Venezuela had a campaign under way; in Argentina, Brazil, Colombia, Chile, and Uruguay vaccines were being produced, but they were not being used under an organized campaign. In Ecuador and Peru diagnostic activities were starting in conjunction with the preparation of experimental batches of vaccine. Nothing was being done about vesicular diseases in either Bolivia or Paraguay.

In 1966 the picture is entirely different. Several countries, including Argentina, Ecuador, Peru, and Brazil, have campaigns in full operation. Other countries, such as Chile and Uruguay, have already made their plans and the campaigns may possibly be begun before the end of this year (see map No. 3).

In Colombia vaccination of part of the livestock has continued and vaccine production has been increased. Paraguay is preparing a campaign plan and Bolivia has begun to operate its official laboratory for diagnosis and vaccine production (about 25,000 doses between the end of last year and the beginning of this). The last two countries have been using imported vaccines on the reduced scale (see Table No. 3).

The countries that were represented at the South American conference on foot-and-mouth disease held in Rio de Janeiro, Brazil, in 1964, submitted their estimates of the additional funds they would need from international agencies for financing their national campaigns. These figures are included in map No. 4.




STATUS OF FOOT-AND-MOUTH DISEASE CAMPAIGNS IN SOUTH AMERICA

1960



1966

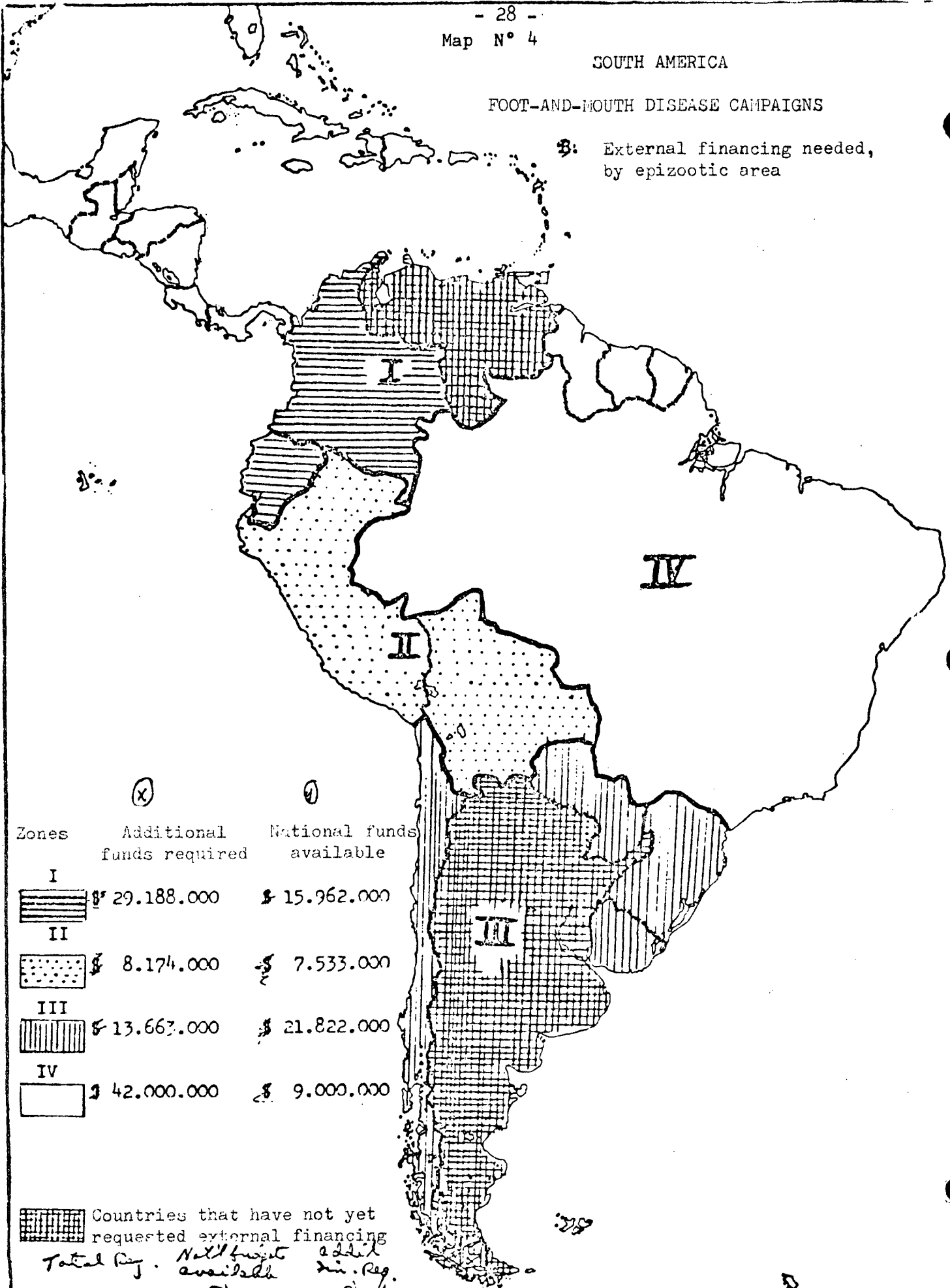


-  In progress
-  In preparation
-  Under study

SOUTH AMERICA

FOOT-AND-MOUTH DISEASE CAMPAIGNS

⊗: External financing needed, by epizootic area



Zones	Additional funds required	National funds available
I	\$ 29.188.000	\$ 15.962.000
II	\$ 8.174.000	\$ 7.533.000
III	\$ 13.663.000	\$ 21.822.000
IV	\$ 42.000.000	\$ 9.000.000

⊗ Countries that have not yet requested external financing

Total Req. $x + y$ National funds available y additional funds req. x

TABLE NO. 3

VACCINE PRODUCTION

	<u>1962</u> (Dosis)	<u>1965</u> (Dosis)
Argentina	60,000,000	155,000,000
Bolivia	-	25,000
Brazil	15,000,000	25,000,000
Colombia	5,000,000	8,000,000
Chile	1,500,000	4,000,000
Ecuador	-	420,000
Paraguay	-	-
Peru	250,000	3,400,000
Uruguay	13,000,000	13,000,000
Venezuela	6,600,000	9,400,000
	<hr/> <u>101,350,000</u> <hr/>	<hr/> <u>218,245,000</u> <hr/>

1. ARGENTINA

Susceptible animal population:

Cattle:	40,009,000	Hogs:	3,417,000
Sheep:	46.158,000	Goats:	12,397,000

Foot-and-mouth disease was diagnosed in 1965.

Argentina began production of vaccines by the Waldmann method. Although they were administered on a voluntary basis, too few animals were immunized and with no system or synchronization in the same area. These flaws, together with lack of supervision over the distribution, application, and quality of the vaccine, led to loss of control over the disease.

In 1960 difficulties arising from the presence of foot-and-mouth disease in Argentina, particularly in meat exports, compelled the country to take more effective steps to control the disease. This led to the establishment of the National Advisory Commission for the Eradication of Foot-and-Mouth Disease (CANEFA) which, endowed with the necessary funds, conducted a national campaign based on the use of inactivated virus vaccines and in which the stock raisers themselves participated. Later on, in 1963, CANEFA was reorganized with the establishment of SELSA (Servicio de Luchas Sanitarias), an agency responsible for the control of foot-and-mouth and other diseases.

Because of the large numbers of cattle in Argentina, the intensive movement of herds and the vast territory involved, the campaign against foot-and-mouth disease has meant an effort unprecedented in South America. In 1962 and 1963, 300,213,464 doses of trivalent vaccine were approved, 17,738,495 were rejected, and 200,033,993 were administered to cattle over 4 months of age. During 1965, a total of 174 million doses of vaccine were tested of which 155 million were approved and 19 million rejected.

Vaccination control is in the hands of about 250 local committees composed of stock raisers and SELSA veterinarians.

Epizootiologically speaking, Argentina is divided into two areas: one extending from Patagonia to Tierra del Fuego, is regarded as free of foot-and-mouth disease; the other comprises the rest of the country, where the disease occurs enzootically, alternating with epizootic waves.

The vaccination area extends today from the border of Patagonia in the south to the Paraguayan border. Vaccination was begun in the first area radiating progressively out from Buenos Aires Province to the rest of the country as the supply of vaccine allowed. The area in which vaccination is in progress today contains 90% of the country's cattle.

TABLE No. 4

ESTIMATED VACCINE REQUIREMENTS - 1965-1970

(In millions of head and doses)

	Current Stock	Cattle Vaccinated 1964	CATTLE TO BE VACCINATED					
			1965	1966	1967	1968	1969	1970
Cattle	40,00*	37,40	38,50	46,20***	50,05	50,05	50,05	50,05
Require doses		107,04	115,50	138,60	150,15	150,15	150,15	150,15
Sheep	38,00**	1,50	10,00	20,00	38,00	38,00	38,00	38,00
Required doses		3,00	20,00	40,00	76,00	76,00	76,00	76,00
Total doses		110,04	135,50	178,60	226,15	226,15	226,15	226,15
<u>Exportation: Estimated export demand****</u>					30,45	50,76	76,14	76,14
Total doses		110,04	135,50	178,60	256,60	276,91	302,29	302,29

* More than four months old, included in area of compulsory vaccination.

** Excluding animals in areas free of foot-and-mouth disease.

*** Counting the estimated increase in cattle and including bull calves under four months old in compulsory vaccination.

**** Source: "La importancia de la Fiebre Aftosa en las Américas". Pan American Foot-and-Mouth Disease Center, 1963.

TABLE No. 5
 TESTING LABORATORY - ESTIMATE OF DEMAND FOR ITS SERVICES
 1965 - 1970

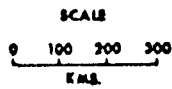
	Performed in 1964	1965	1966	1967	1968	1969	1970
Batches tested: Total	405	457	* 428	564	611	667	667
In Cattle	158	250	250	250	250	250	250
In guinea pigs		15	50	300	500	500	500
Doses tested: Total	155,329,000	175,500,000	214,320,000	282,266,000	305,836,000	333,754,000	333,754,000
In cattle	68,635,000	95,700,000	125,000,000	125,000,000	125,000,000	125,000,000	125,000,000
In guinea pigs		5,745,000	25,000,000	150,000,000	250,000,000	250,000,000	250,000,000
Cattle used	1,830	2,700	2,700	2,700	2,700	2,700	2,700
Mice used	207,221	270,000	** 200,000	150,000	100,000	100,000	100,000
Rabbits and guinea pigs used	1,614	3,200	10,000	60,000	60,000	60,000	60,000
Specimens typed	1,493	2,500	2,500	2,500	2,500	2,500	2,500
Virus supplied: Nat. (grs.)	630	1,000	500	500	500	500	500
Frenkel (cc.)	1,744	2,500	5,000	10,000	10,000	10,000	10,000
Hyperimmune, hemolytic and other sera(cc.)	1,567	2,000	2,500	3,000	3,000	3,000	3,000

* The number of doses per batch will need to be increased to a minimum of 500,000.

** The reduction was due to the replacement of mice by tissue culture.



ARGENTINA
POLITICAL



Susceptible animal population:

Cattle:	2,739,000	Hogs:	596,000
Sheep:	7,400,000	Goats:	1,940,000

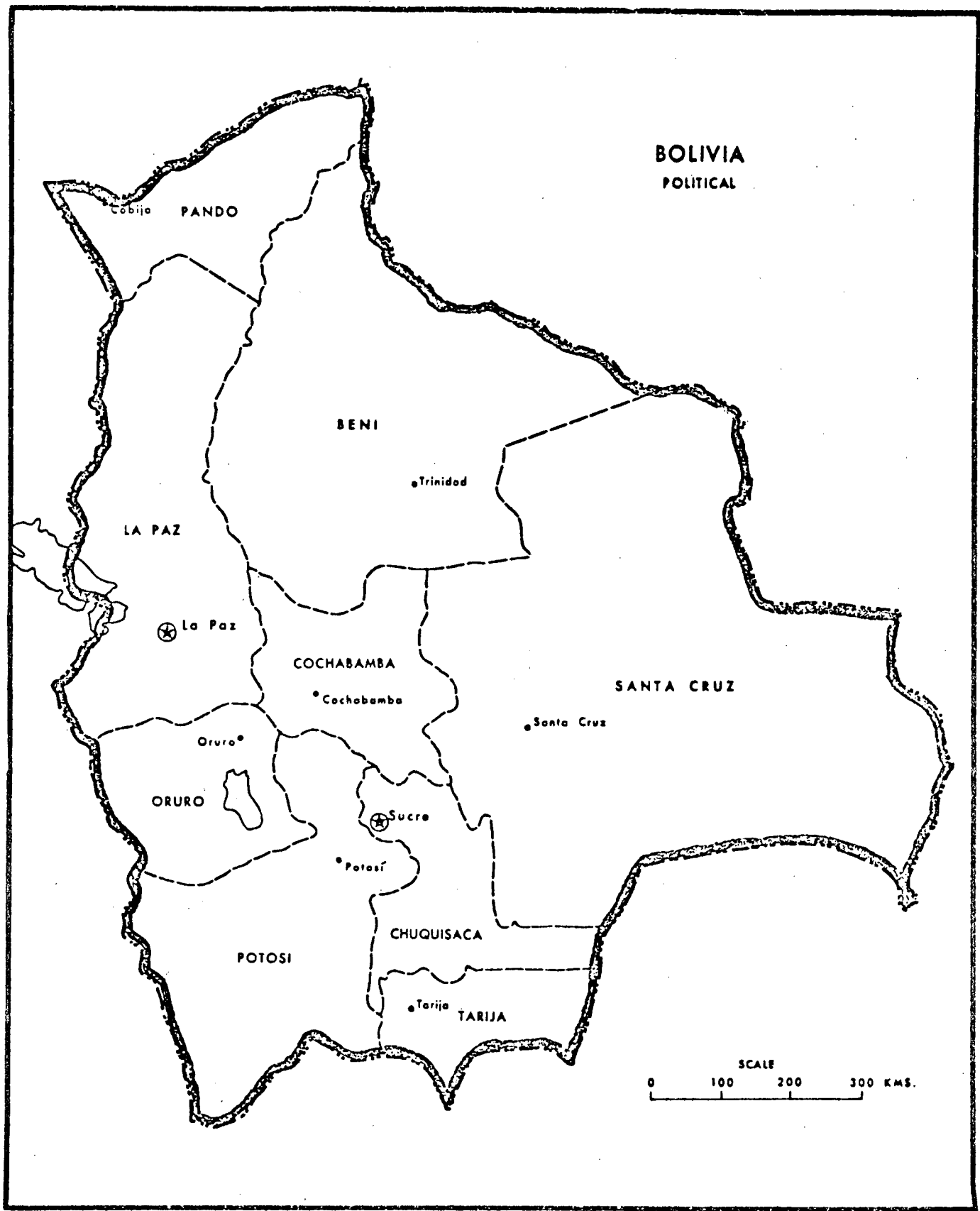
Foot-and-mouth disease was first described in 1912 in the department of Cochabamba, and similar cases were known to have occurred in earlier years. Today the disease is believed to exist all over the country, the frequency of cases varying with the concentration and movement of the livestock population. Serious outbreaks occurred in various parts of the country in 1942, 1946, 1948, 1951 and 1955.

The first identifications made by the Pan American Foot-and-Mouth Disease Center were of the Waldmann type C virus; it later identified the Vallée types O and A. The Center's consultant, working out of Lima, has been periodically assisting the National Institute of Animal Biology of the Ministry of Agriculture and Livestock in the typing of viruses and the production of vaccine by the Frenkel method. Since last year the Institute has done its own typing and has identified the three types of foot-and-mouth disease virus, in addition to vesicular stomatitis viruses of the New Jersey, and possibly the Indiana, type in Santa Cruz.

Production of trivalent OAC vaccine began late last year on a small scale and has been increasing gradually. It will thus be possible to program a few regional plans for systematic vaccination, particularly in the stock farms in Santa Cruz and Beni, similar to the pilot plan being carried on since 1964 in Cochabamba by the Ministry of Agriculture under a cooperative agreement with the Pan American Foot-and-Mouth Disease Center.

The Cochabamba pilot plan covers a cattle population of about 20,000 head, which in two years has suffered only two small outbreaks of foot-and-mouth disease both of which were controlled without difficulty. The results of this campaign awakened the interest of the stock raisers in the Santa Cruz region, and they have asked the Government and the Center to launch a similar campaign in their area. The Livestock Department of the Ministry of Agriculture proposes to start the campaign this year, following the general guidelines laid down in the Plan for Control of Foot-and-Mouth Disease in Bolivia prepared in 1964 with the aid of the Center.

As in the case of the other countries dealt with above, the personnel in charge of the diagnostic work and vaccine production, and some of the field staff, were trained by the Pan American Foot-and-Mouth Disease Center.



3. BRAZIL

Susceptible animal population

Cattle:	79,076,000	Hogs:	52,941,000
Sheep:	19,718,000	Goats:	12,397,000

Although it is not known exactly when foot-and-mouth disease first appeared in Brazil, there is a record of an epizootic at the end of the last century. The disease is enzootic, and there are periodic epizootics in the different regions of the country.

The disease has seriously affected Brazilian cattle production, having, as noted in earlier chapters, diminished the output of meat and milk in the country. At the same time, meat exports have fallen off owing to the danger of contamination in countries free of the disease.

The geographical vastness and diversity of the country require a complex and protracted effort if the disease is to be brought under control. The problem is worst in the southern region, where most of the cattle (85%), sheep (78%) and hogs (80%) are raised. This region includes the borders with Argentina, Paraguay and Uruguay and the two states which export animal products (Rio Grande do Sul and São Paulo). The region also supplies the major population centers in the country.

The southern region of Brazil is part of the so-called Southern Cone, which also includes Argentina, Uruguay, Paraguay and Chile, and contains one of the largest concentrations of cattle, sheep and hogs in the world and is thus an enormous potential source of food. Consequently multinational coordination of the campaigns in this region is of the greatest importance in combatting the losses and trade barriers caused by foot-and-mouth disease.

Brazil has been striving energetically to get the campaign against foot-and-mouth disease under way, but it will have to be confined to the gradual coverage of the major economic and population centers until conditions are favorable to its extension to other regions of the country.

In 1942 Silvio Torres and Ewald Trapp, of Brazil, devised a modification in the method of preparing Waldmann vaccine, in particular the concentration of the virus and reduction of the dose. This method was used in private and official laboratories of the country for the preparation of vaccine against the three classical types of virus that occur within Brazil.

The campaign of systematic and compulsory vaccination was launched in late 1965 in the municipalities of the state of Rio Grande do Sul that lie on the border with Uruguay and Argentina. Efforts were made to coordinate the work with the campaign of the neighboring countries, by vaccinating in the area where the virus was most prevalent.

In 1965 official and private laboratories produced 25 million doses of inactivated trivalent vaccine. The Ministry of Agriculture has a laboratory in Rio Grande do Sul and another nearing completion in Minas Gerais for testing the quality of the vaccine.

The quantity of vaccine being produced at present is insufficient to cover all the region where it is proposed to institute programs of systematic vaccination. A considerable rise in output is expected in the near future, however, and will allow the planned program to be gradually implanted.

Brazil is drafting an application, to be presented to international agencies for a loan to help it to carry out its program.

All the technicians in charge of the diagnosis, vaccine preparation and vaccine control sections of Brazilian laboratories have been fellows of the Center. Brazil has had more technicians trained in the Pan American Foot-and-Mouth Disease Center than any other country.

Large numbers of field and laboratory specimens have been examined by the Center in collaboration with the technicians of the Ministry of Agriculture and the Secretariat of Agriculture of São Paulo. They investigated the first two outbreaks of vesicular stomatitis in the country: one in the state of Alagoas in 1964 and the other in the state of São Paulo in 1966.

The Center is closely collaborating in the study and programming of the campaign, especially for Rio Grande do Sul, and is rendering technical advisory services to official and private laboratories.

The Center will probably have to increase its aid to the current campaign.

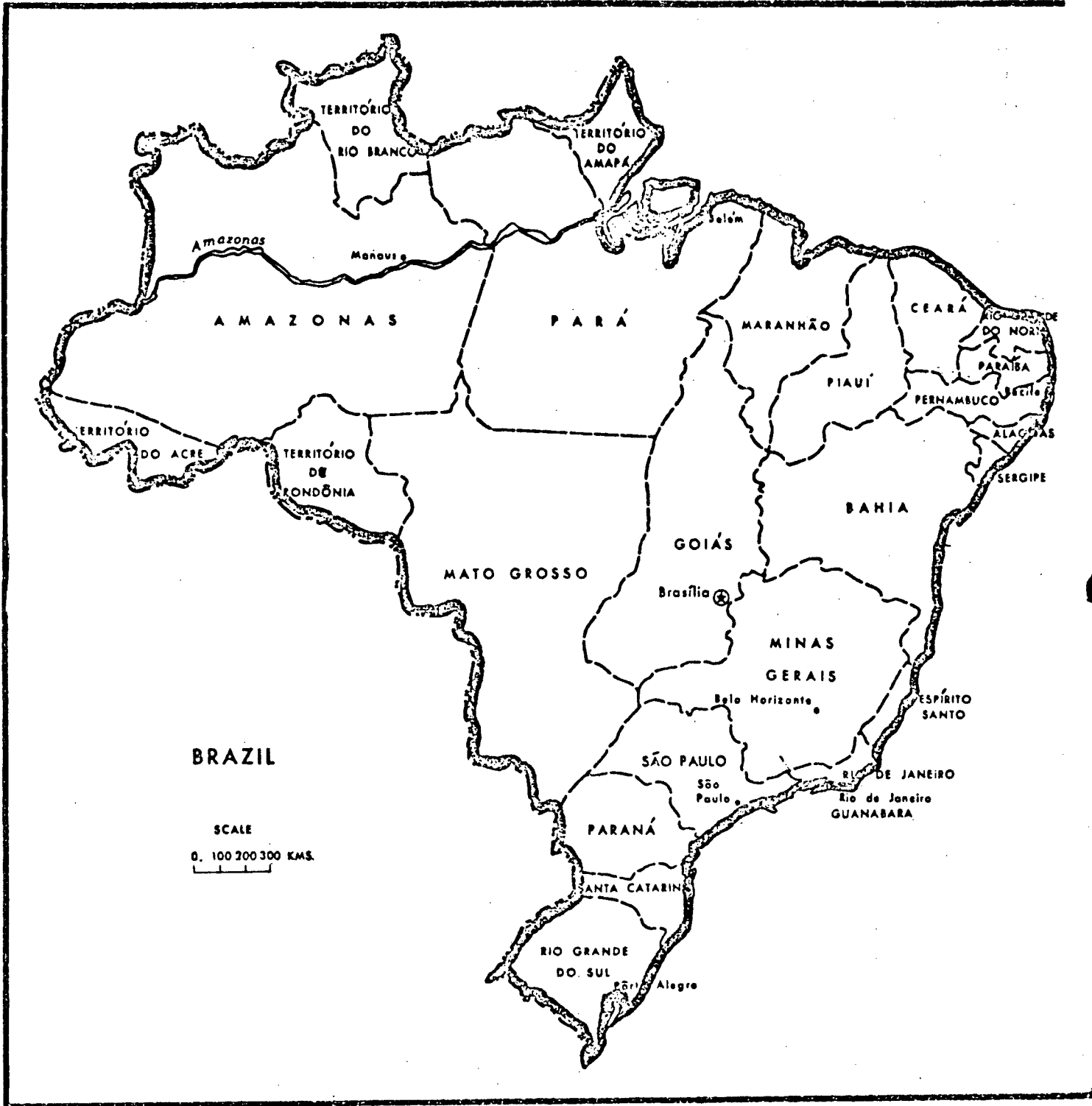


Fig. 1.1

4. COLOMBIA

Susceptible animal population

Cattle:	15,600,000	Hogs:	1,483,000
Sheep:	1,126,000	Goats:	215,000

Foot-and-mouth disease made its first appearance in Colombia in 1950, when the epizootic of Vallée O virus infecting cattle in Venezuela moved from the plains of Apure to those of Arauca, whence it rapidly spread to the rest of the country.

From 1951 to 1955 vaccination was carried out with Waldmann vaccine imported from Europe. Vaccine production by the Frenkel method began when the Zooprohylactic Institute was established in 1955. The vaccine is bivalent and has only been administered compulsorily in the program being carried out in Nariño pursuant to an agreement between Colombia/Ecuador and the PASB for the region of the border with Ecuador.

Vaccine production has been rising in recent years and reached an estimated 8 million doses in 1965, but that amount is sufficient for only 25% of the total requirements for a nation-wide campaign.

Up to 1963 Colombia had spent about 12 million dollars to fight the disease and had suffered losses estimated at 20 million dollars per year.

Foot-and-mouth disease is enzootic in Colombia, and epizootic waves may spread over extensive areas, as occurred in 1963 with the Vallée A virus which attacked the departments of Valle, Tolima, Cundinamarca, Boyacá and Antioquia.

The geographical situation of Colombia gives the country special importance as the route for possible invasions of other countries by the disease; Panama and, by extension, Central and North America are particularly exposed, as any outbreak of foot-and-mouth disease, if not quickly controlled and eradicated, could spread northward and inflict direct losses estimated at 55 million dollars for Central America alone.

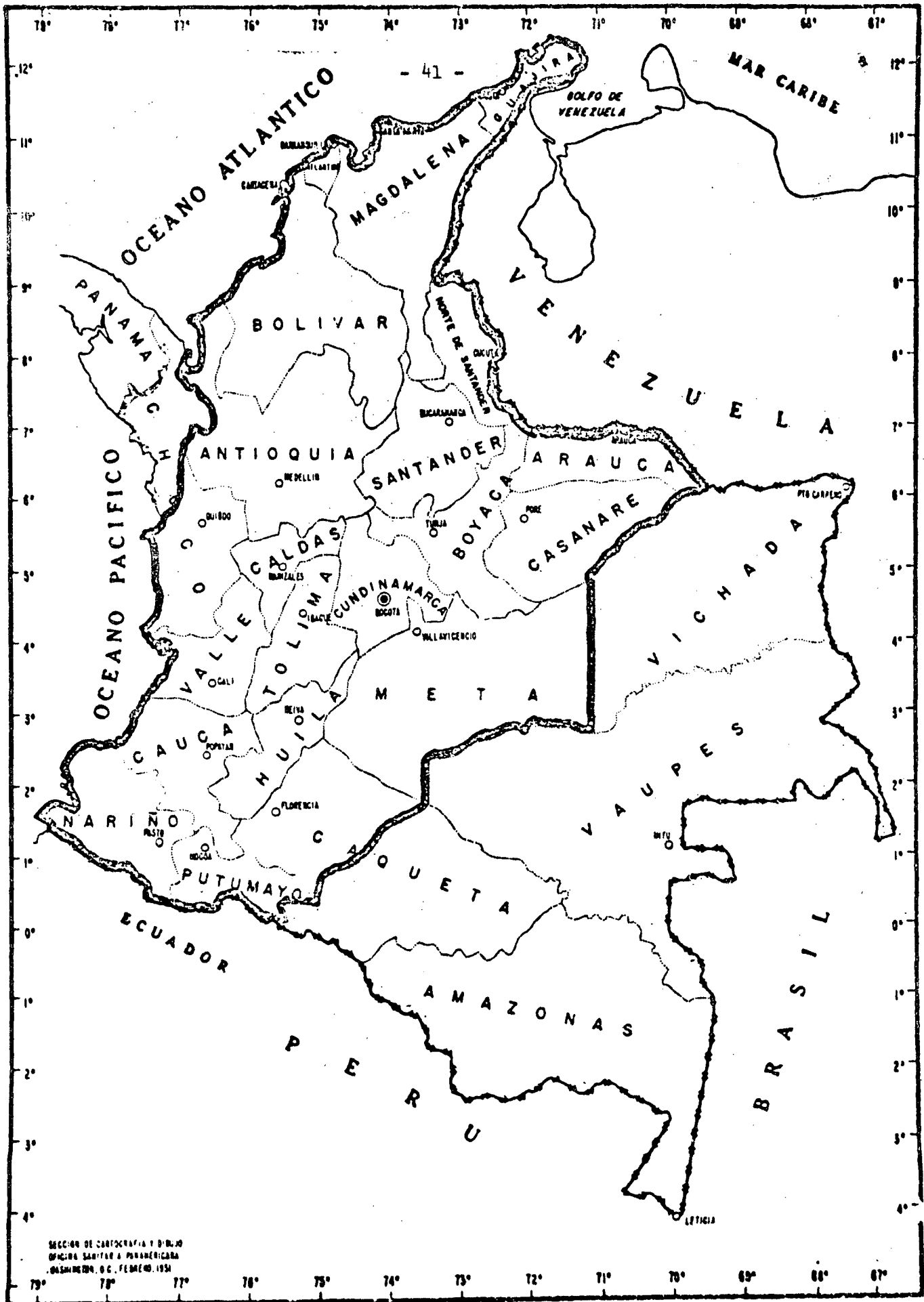
For this reason the Pan American Foot-and-Mouth Disease Center has sought by every possible means to promote regional agreements between Colombia and her neighbors. This aim was first discussed at the two Regional Foot-and-Mouth Disease Conferences held at Bogota in 1959 and at Maracay in 1960. An agreement with Panama-OIRSA-Colombia and PASB was secured in an attempt to keep the Choco region free of the disease; unfortunately, for reasons of livestock economy, Colombia was unable to import cattle from countries free of the disease with which to repopulate the Choco, and this failure has posed an insurmountable obstacle to continuance of the Agreement.

Attempts are being made to arrange a new agreement whereby the health situation in that area could be kept under review so that, if the disease were to appear, the health authorities of Panama could be alerted immediately. A plan has been instituted with Ecuador and Colombia for a joint campaign in the border region, where Vallée O and A outbreaks occurred in 1961 and in 1965. The whole of Colombia may be said to be infected by foot-and-mouth disease, except in the northwestern region of the Choco.

In regard to vesicular stomatitis, Colombia is infected with the New Jersey and the Indiana virus, subtype I (classical).

COLOMBIA

Escala
0 50 100 200 300 400 Km



5. CHILE

Susceptible animal population:

Cattle:	3,016,000	Hogs:	950,000
Sheep:	6,422,000	Goats:	1,300,000

Foot-and-mouth disease has been known in Chile since the end of the last century. It is today enzootic in the Central Valley and there are sporadic outbreaks in the northern part of the country. The southern part of the country is free of the disease (see map page 43). The affected regions were attacked by severe epizootics in 1945, 1950, 1956, 1960, 1962, 1964 and 1965.

The Bacteriological Institute of Chile identified the Waldmann C virus in 1942 and the Vallée O and A in 1944.

Vaccine production by the Waldmann method was begun by the same Institute in 1944 and taken up in 1963 by two private laboratories. The three laboratories have a combined production capacity of 10 million doses, and produced about 4 million in 1965.

From 1953 to 1959 the Ministry of Agriculture conducted a pilot plan for systematic cattle vaccination in 3 central provinces. On the basis of this experiment a National Plan for Control of Foot-and-Mouth Disease was drafted with the aid of the Pan American Foot-and-Mouth Disease Center. The plan estimates direct losses from foot-and-mouth disease in Chile at about 3 million dollars in enzootic years and at three times as much in periods of epizootics. Preparation of the plan was completed late last year and all that remains to be done before setting it in motion is to complete certain administrative procedures, reorganize the official vaccine production laboratory and, on the part of the government, to establish the controls. However, international financing is needed for the program, and is being requested.

Since 1964 the Center has had an agreement with the Ministry of Agriculture of Chile covering the experimental use of modified live virus vaccine.

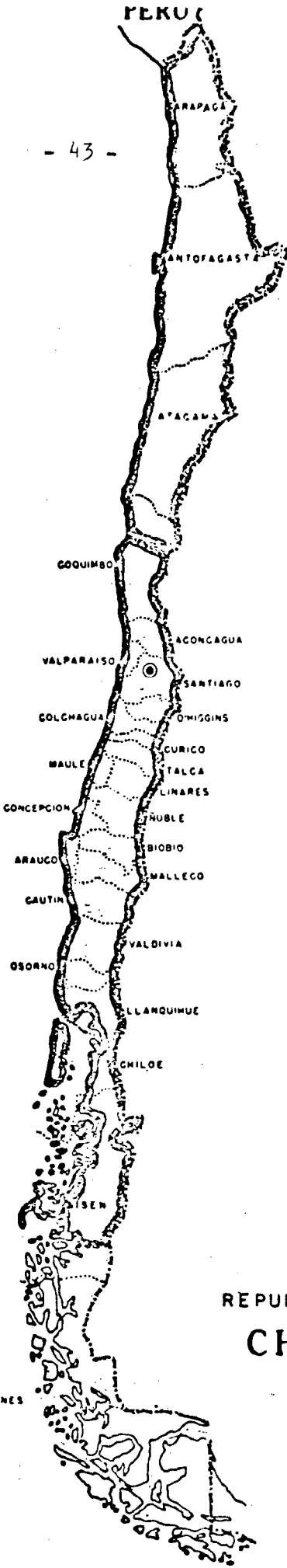
Large numbers of Chilean technicians have been trained by the Center in diagnostic and field work.

O C E A N O P A C I F I C O

- 43 -

PERU

BOLIVIA



A R G E N T I N A

REPUBLICA DE CHILE

6. ECUADOR

Susceptible animal population:

Cattle:	1,909,000	Hogs:	1,081,000
Sheep:	1,795,000	Goats:	137,000

Foot-and-mouth disease was first diagnosed in 1956, when Vallée A virus was identified from specimens sent to the Pan American Foot-and-Mouth Disease Center from the coastal region. Type O virus entered the province of Carchi, in the north, in 1962, owing to outbreaks on the Colombian side of the border, but a campaign in that province prevented them from further spreading. No further cases have been recorded to date. The bivalent vaccine used in that campaign was the inactivated Waldmann type, developed from virus cultivated by the Frenkel method and imported from Colombia. Modified live virus vaccine prepared from strains provided by the Pan American Foot-and-Mouth Disease Center (A Cruzeiro and O-Campos) was used for the campaign in the coastal region in 1964 and 1965 and for the control of O-type outbreaks in the south of the country in mid-1965. By means of this vaccine the disease was brought under control in the areas where it originally appeared.

A total of 420,000 doses of modified live virus vaccine were produced last year. The country is now in a position to supply its own needs for the areas currently infected, but still has to import inactivated vaccine in emergencies.

Current situation

The disease may be said to be enzootic in the coastal region. Three outbreaks have occurred: two in the north (type O virus in 1962 and Type A in 1965) and another in the south (type O, in 1965). The rest of the Sierra region remained free of the disease and no vaccination campaign was carried out.

The General Directorate of Veterinary Public Health is responsible for foot-and-mouth disease control in Ecuador. It is endowed with a good technical and administrative organization and maintains a laboratory in Guayaquil for the diagnosis, production and testing of modified live virus vaccine.

Aid from the Pan American Foot-and-Mouth Disease Center has consisted in the training of Ecuadorian personnel in diagnosis and vaccine preparation, advisory services in the drafting of national campaign plans, construction of the Guayaquil laboratory, direct technical assistance in bringing the aforementioned outbreaks under control and the provision of strains of modified virus.

Vesicular stomatitis is today enzootic in Ecuador; both the New Jersey and subtype I (classical) Indiana viruses have been diagnosed. Ecuador is the only South American country engaged in an experimental program of vaccination against vesicular stomatitis, based on modified live virus vaccine imported from the United States.

7. PARAGUAY

Susceptible animal population:

Cattle:	4,500,000	Hogs:	633,000
Sheep:	534,000	Goats:	86,000

Foot-and-mouth disease has been present in the country since the last century; all three classical virus types occur.

At present the country has no institutions specializing in foot-and-mouth disease and no laboratories for the production of vaccine, which is imported as needed from neighboring countries.

There has never been any campaign against the disease, mainly for financial reasons.

Foot-and-mouth disease has prevented Paraguay from exporting meat and has thus deprived the country of a source of foreign exchange. This is why the Government and stock raisers have expressed their interest in the possibility of launching a systematic campaign and of obtaining financial assistance. In consequence, a loan application will be presented to the IDB under an agreement already in force between that bank and the Paraguayan Government.

Studies are well advanced for the establishment of a national laboratory for vaccine production and control. A private firm is available for that purpose. Paraguay has also decided to take steps to coordinate its campaign with that of the Southern Cone countries.

Contributions of the Center

The Center has made a thorough study of the possibilities of vaccine production and has collaborated actively in planning and organizing the future national laboratory. Assistance has also been given in the programming of the national campaign in the form of training fellowships to increase the strength of the laboratory and specialized field personnel. The Center has also rendered diagnostic services and supplied scientific information.

From the epizootiological standpoint, Paraguay is in a highly strategic geographical position; its national campaign will help control foot-and-mouth disease in the region.

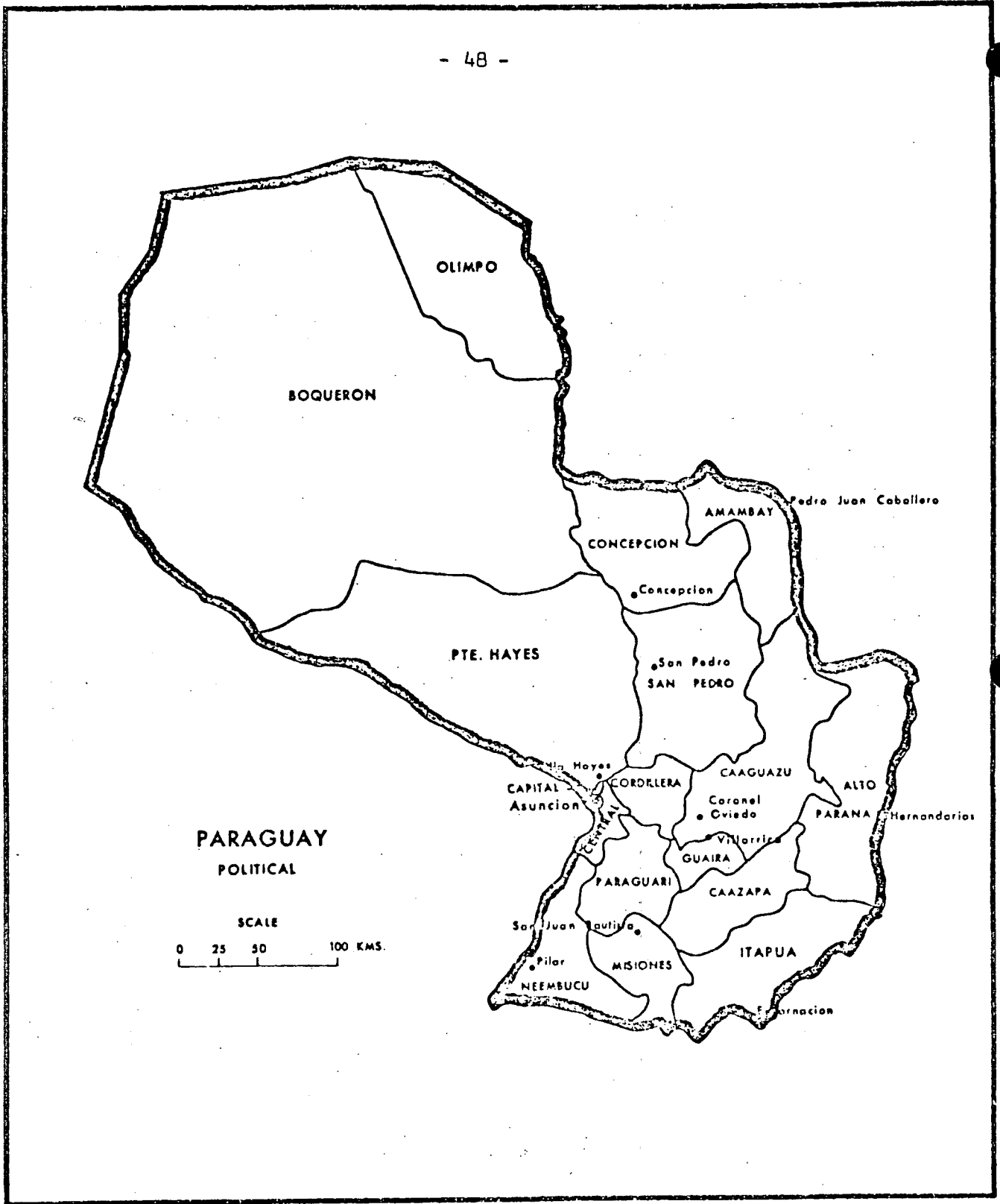


Fig. 1.1

8. PERU

Susceptible animal population:

Cattle:	3,927,000	Hogs:	1,620,000
Sheep:	16,840,000	Goats:	3,950,000

The disease was first reported clinically in 1910. The work of typing the viruses began in 1947 and the Vallée types O and A and Waldmann C were identified which appeared regularly in Lima and the southern departments of the country.

An epizootic broke out in 1962 in the south, whence it spread in 1963 and 1964 to practically the entire country. Serious economic losses were inflicted by other epizootics of considerable severity that broke out in certain southern departments in 1947-49, 1954, 1956 and 1958. The disease was also confirmed in the Amazon region in 1960 and 1964.

Between 1950 and 1960 the Ministry of Agriculture began to produce small quantities of Waldmann type foot-and-mouth vaccine. Some vaccines were imported from Argentina, but in 1961, with the direct guidance of a consultant from the Pan American Foot-and-Mouth Disease Center, national production was begun and in 1965 reached three and a half million doses of trivalent OAC, enough to supply all the requirements of the country.

Table No. 5 shows the status of foot-and-mouth vaccine production by the Department of Vesicular Diseases of the National Center of Animal Pathology of the Peruvian Ministry of Agriculture.

The Ministry of Agriculture launched its National Campaign against Foot-and-Mouth Disease in 1963 with an attack on an outbreak of Vallée O virus in the department of Cuzco, and later gradually extended it to cover the entire country.

The Pan American Foot-and-Mouth Disease Center has also collaborated closely with Peru on studies for the planning and regulation of the national campaign against foot-and-mouth disease and in the training of laboratory and field personnel.

In the early months of this year the disease was diagnosed in the departments of Callao, Lima, Huancavelica, La Libertad and Loreto, although with low morbidity and limited spread.

There are sporadic cases of Indiana and New Jersey vesicular stomatitis in the northern valleys of the country.

T A B L E No. 5

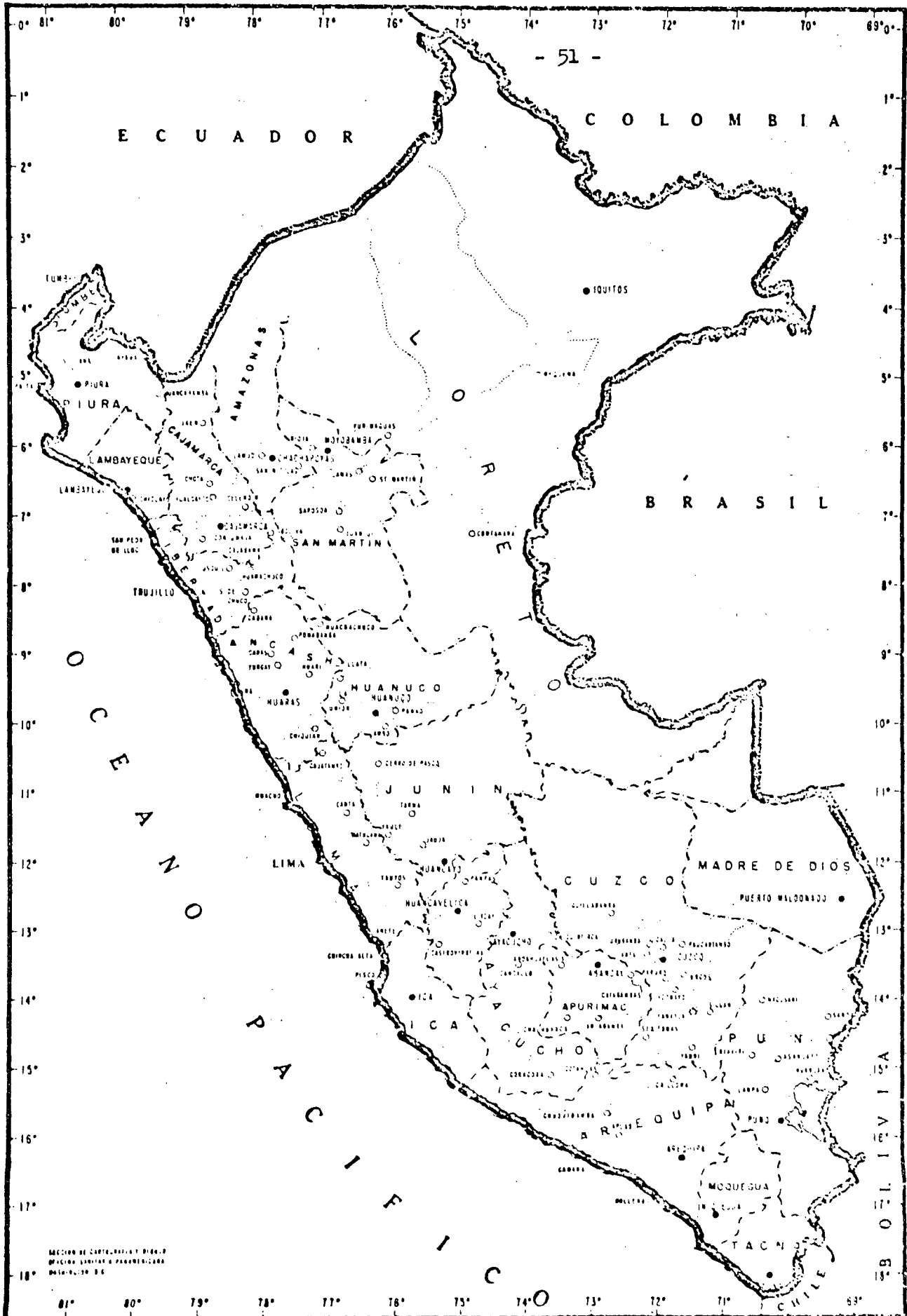
FOOT-AND-MOUTH VACCINE PRODUCTION IN PERU
FROM 1950 TO MAY 1965

<u>YEAR</u>	<u>Quantity in Doses</u>
1950	2,437
1951	20,437
1952	25,062
1953	14,625
1954	62,287
1955	36,500
1956	94,580
1957	91,100
1958	288,475
1959	64,800
1960	45,130
1961	234,780
1962	256,687
1963	908,520
1964	2,250,000
1965	3,400,000

MAPA DE LA REPUBLICA DEL PERU

Escala 1:100,000

- 51 -



SECCION DE CARTOGRAFIA Y DISEÑO
OFICINA GENERAL DE PARAGUAY
BOGOTÁ, COLOMBIA

9. URUGUAY

Susceptible animal population:

Cattle:	8,866,000	Hogs:	413,000
Sheep:	21,829,000	Goats:	17,000

Foot-and-mouth disease may well have been present in Uruguay since the last quarter of the previous century.

Epizootic waves have occurred periodically as an enzootic phenomenon, aided by the intensive movement of animals within the country in the course of the year.

An epizootic of malignant foot-and-mouth disease in 1943 took a heavy toll of herds and caused a crisis in livestock production that lasted several years.

The level of vaccination in cattle is high enough to reduce the prevalence of the disease in the country, but vaccination needs to be made systematic and extended to the entire cattle population if it is to be brought under control. Vaccine is produced in eight private laboratories and tested by an official laboratory of the Ministry of Livestock and Agriculture; 13 million doses have been produced in the last two years. The vaccine is trivalent, inactivated and prepared by the Frenkel method or in tissue cultures.

Preparation of the plan for the national campaign is in its final stage. Vaccination will be on a compulsory rather than a voluntary basis and in direct cooperation with the stock breeder.

Uruguay is addressing itself to a strenuous effort to raise livestock production, notably by controlling animal diseases, particularly foot-and-mouth disease.

For epizootiological and commercial reasons, the campaign in Uruguay must be closely coordinated with that of the other countries in the region, and so the Regional Technical Commission on Animal Health, whose members are Argentina, Brazil, Chile, Paraguay and Uruguay, is giving special attention to coordination of the national campaigns on the multinational level.

Contribution of the Center

The Center has assisted Uruguay in the planning of its national campaign and in the study of the regulations for it, by rendering advisory services, chiefly in vaccine control, training government technicians, who have been granted fellowships for individual training and

international courses. As a result of this training in 1963 and 1964 the vaccine produced could be adapted to the viruses present in the country which because of their special characteristics had about broken through immunity. The Center has also aided the Uruguayan authorities in the preparation of a request for financial assistance from international agencies for its national campaign.

In 1962 the country was host to the Technical Meeting on Foot-and-Mouth Disease attended by the Southern Cone countries. At this meeting standards were defined for the conduct and regional integration of campaigns.

URUGUAY POLITICAL

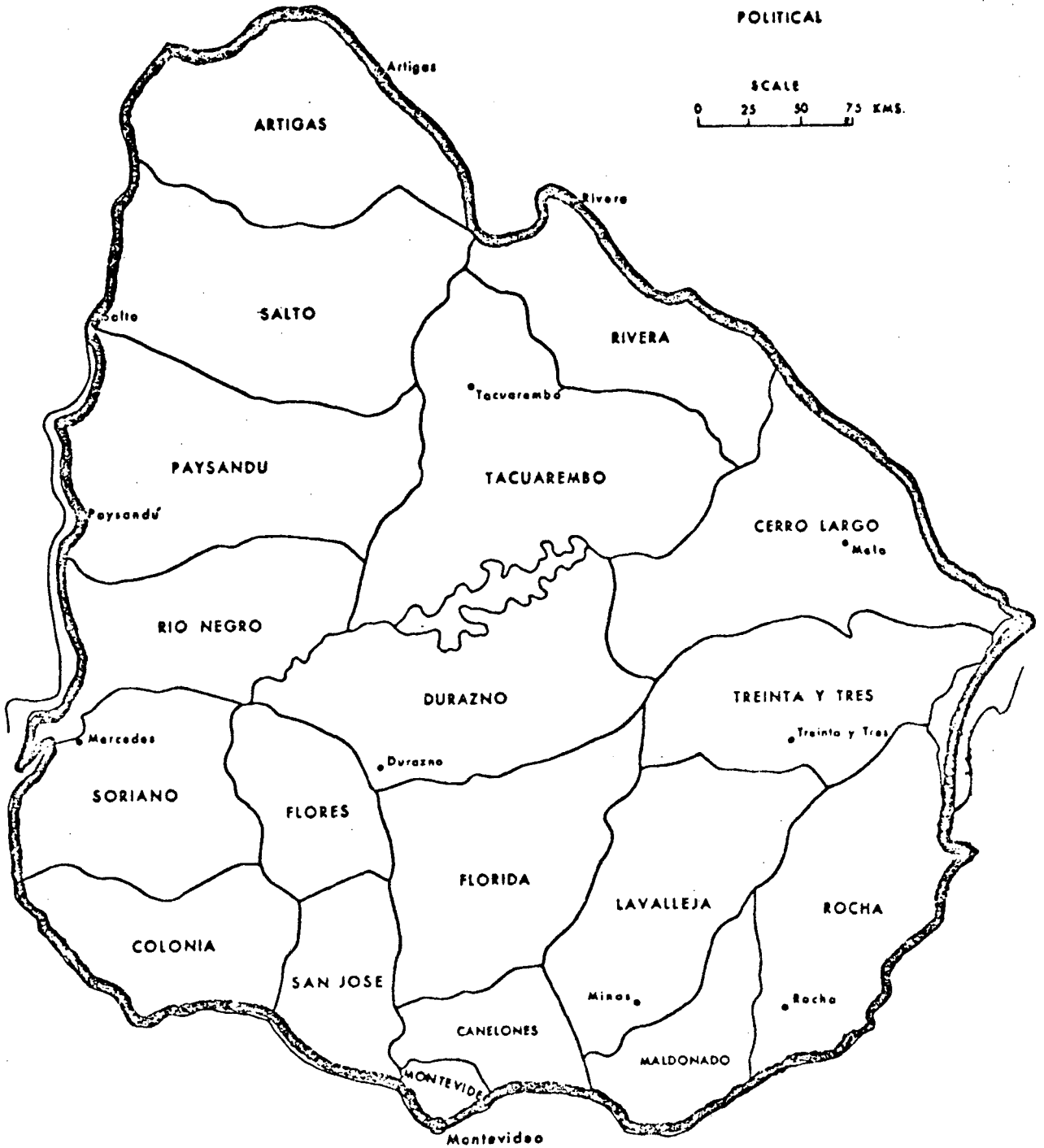
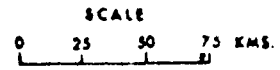


Fig. 1.1

10. VENEZUELA

Susceptible animal population:

Cattle:	6,440,000	Hogs:	1,780,000
Sheep:	83,000	Goats:	1,251,000

Venezuela began its campaign against foot-and-mouth disease at the end of 1950 when a laboratory was established, capable of making diagnoses and preparing vaccines, and undertaking a variety of research projects, especially with attenuated virus.

In 1962 there was an outbreak of extremely virulent Vallée A virus in the state of Zulia which infected many previously vaccinated animals. Viral material initially sent to the Center revealed a difference between this virus and the one used in vaccine production. This observation was confirmed by the regional laboratories, which showed that the vaccine then in use gave no protection against the new virus, probably a new subtype for Venezuela. This finding was subsequently confirmed by the Center and the regional laboratories.

Since Venezuela was only producing virus by intradermolingual inoculation in cattle, the health authorities concluded that inoculating the new virus in the slaughterhouses of the country would spread the infection and, on the basis of experiments already performed, decided to ask the Center to cooperate in emergency research that might lead to the production of live virus vaccines with the Vallée A Cruzeiro strain of that institution.

Cooperation from the Center was prompt and effective, and led in a relatively short time to the production of a vaccine effective against the new Zulia Vallée A subtype.

Application of the modified Vallée O live virus was begun in 1964 with the strain modified by the Veterinary Research Center. In the last four years Venezuela has administered about 9 million doses of modified live virus vaccine (about 4.5 million doses each of types O and A).

Table No. 6 shows the numbers of vaccinations administered in each year from 1951 to 1963. The vaccination figures for 1964 and 1965 are very close to the figure for 1963.

Foot-and-mouth vaccine is prepared, tested and administered by the Venezuelan Government free of charge, and vaccination is compulsory.

Direct economic losses from the disease in Venezuela between July 1950 and July 1953 were estimated at about 210 million bolivars which, together with the campaign expenditures, added up to 255 million bolivars.

It was estimated that, if the campaign had not been waged, Venezuela would have lost 382 million bolivars in those 9 years instead of the aforementioned 82 million.

The current situation in Venezuela is as follows: the country is divided into 3 epizootiological zones (see map page 57).

- a. Infected, vaccination twice a year
- b. Observation zone - focal and perifocal vaccination following outbreaks.
- c. Region free of the disease.

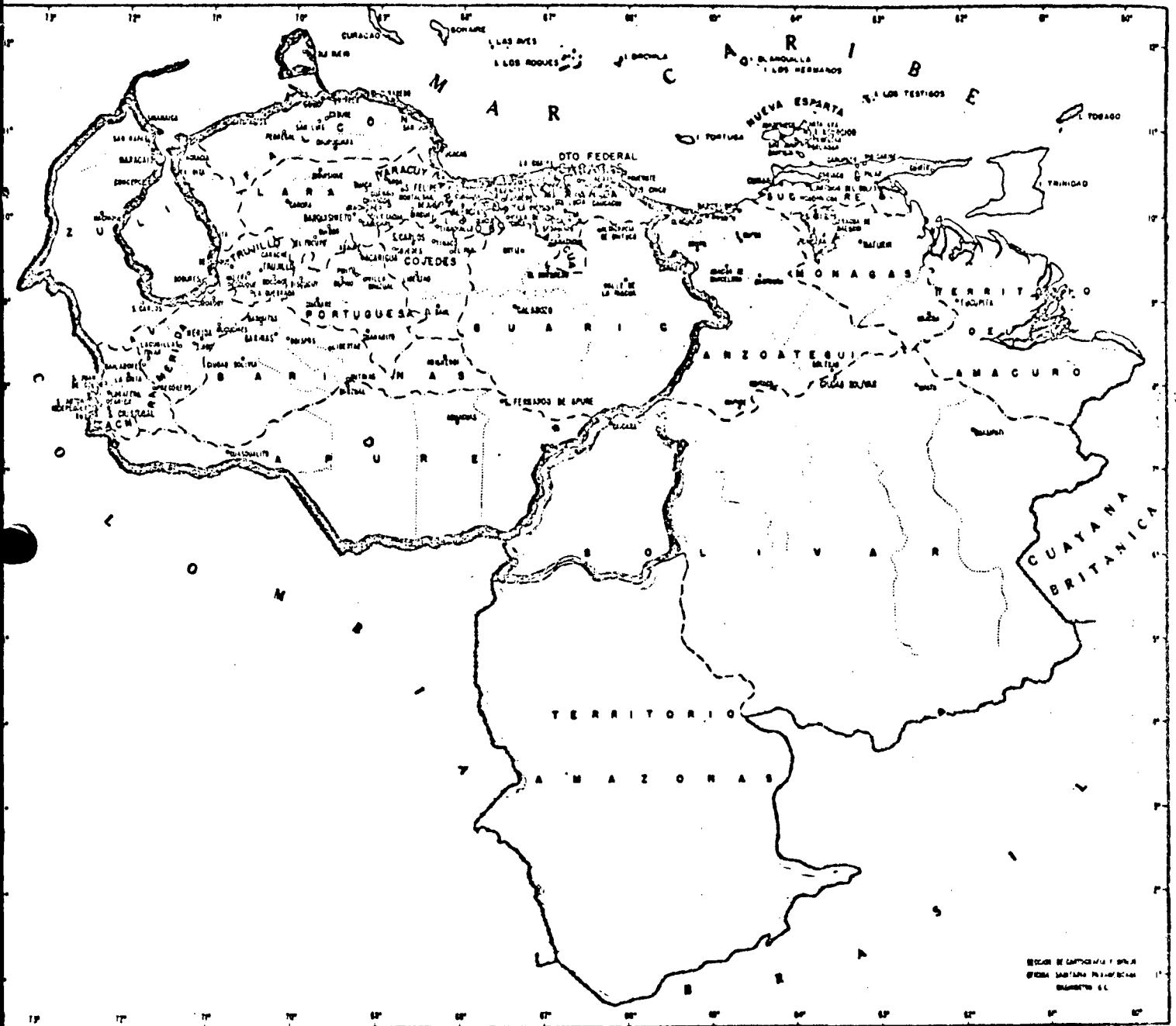
There are some sporadic local outbreaks due to type O and A viruses; the disease is brought under control in cattle by means of modified live virus vaccine. Hogs pose the most difficult problem, as no vaccine is available for immunizing them.

Contribution of the Pan American Foot-and-Mouth Disease Center

The Pan American Foot-and-Mouth Disease Center has trained personnel in diagnosis, the preparation of vaccine and, chiefly, in research work with government agencies (the Center of Veterinary Research of Venezuela), especially in studies of modified live virus vaccine and problems of anaphylactic reactions.

MAPA DE LA REPUBLICA DE VENEZUELA

Escala



ESTADO DE CARACAS Y SU A
GROSA (ANTIGUA PROVINCIA)
MAYAGÜEZ S.C.

TABLE No. 6

FOOT-AND-MOUTH VACCINATION IN VENEZUELA

1951-1963

<u>Year</u>	<u>Vaccinations</u>
50-51	2,411,600
1952	6,718,493
1953	4,548,152
1954	857,650
1955	201,386
1956	3,411,670
1957	5,589,946
1958	3,647,739
1959	4,462,896
1960	4,924,751
1961	4,952,945
1962	6,599,675
1963	8,473,395
<u>T o t a l</u>	<u>57,070,298</u>

VII. ACTIVITIES OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER IN THE HEMISPHERE

Since the establishment of the Center in 1951, it has conducted a series of training courses in vesicular diseases, diagnostic techniques, and vaccine production. These courses have opened the way to the present national control campaigns and have trained technical personnel in methods for the prevention and eradication of the disease, primarily for disease-free countries.

The Pan American Foot and Mouth Disease Center has closely collaborated in the formation and organization of diagnostic and vaccine production laboratories in Ecuador, Peru and Bolivia, and has collaborated closely with vaccine control laboratories in Argentina, Uruguay and Brazil. It has carried on research in cooperation with Venezuela on modified live virus and a joint research program with the United States and Argentina in connection with an epizootiological survey of Tierra del Fuego. Another major project concerned the survival of foot-and-mouth disease virus in cured meats.

It has been collaborating with the countries that make up certain well-defined geographical and epizootiological areas on the study and execution of foot-and-mouth disease control programs in the border areas, aimed at preventing the spread of the disease to other areas of the continent.

In addition, through its research, it helps the countries to identify virus types and sub-types and to prepare sera specific for types and sub-types of foot-and-mouth disease and vesicular stomatitis viruses, and serves as a reference laboratory for the Americas under an agreement with the World Reference Laboratory in Pirbright, England. It also conducts studies on various methods for the production and control of inactivated and modified live virus vaccines with a view to making them available to countries, and answers all requests for information from countries concerning vesicular diseases. Finally, between 1951 and 1966, some 490 fellows have attended its international courses, seminars, and in service training courses.

VIII. IMMEDIATE ACTION PROGRAMS OF THE PAN AMERICAN FOOT AND MOUTH DISEASE CENTER IN DEVELOPING AND COORDINATING CAMPAIGNS FOR THE CONTROL OF FOOT AND MOUTH DISEASE IN SOUTH AMERICA AND ITS PREVENTION IN THE DISEASE-FREE COUNTRIES

The Center will operate directly with the authorities or services responsible for national foot-and-mouth disease campaigns or preventive services, along the following lines:

1. Strengthening and expanding the national foot-and-mouth disease institutes and services carrying on the campaigns so that they may discharge their responsibilities more efficiently. Initially, preference will be given to the diagnosis of the disease and the quality and quantity of vaccine production.
2. Fostering and coordinating field programs by zones, particularly in the border regions, and improving control of the movement of animals and products of animal origin.
3. Cooperating in evaluating the progress of the campaigns.
4. Coordinating the national campaigns of contiguous countries, so as to develop multinational programs on a regional basis.
5. Sponsoring international meetings so as to improve techniques for the analysis and evaluation of campaigns.
6. Conducting research designed to improve the elements available for controlling the disease.
7. Assisting in the training of technical personnel for field and laboratory work.
8. Providing technical assistance on all aspects of the program so as to ensure rapid and effective implementation, for which purpose it will use its technical staff at headquarters or those stationed in the countries as consultants.
9. Assisting the international credit agencies in evaluating requests for financial assistance.
10. Submitting periodical reports on the campaigns to the international credit agencies.
11. Disseminating information on the need for the campaign and on the advances made in order to enlist public support.
12. Acting as a diagnostic laboratory for vesicular specimens from countries free from the disease.

13. Providing countries free of the disease with technical assistance for the coordination of plans and preventive measures.
14. Promoting and coordinating multinational activities.
15. Assisting in the training of the technical staff who will be responsible for the measures to be taken in the event of an outbreak of foot-and-mouth disease in disease-free countries.

IX. RESEARCH ACTIVITIES OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER, THEIR IMPORTANCE AND THEIR BENEFITS

We have already described the activities of the Pan American Foot-and-Mouth Disease Center and its advisory services to countries; however, we believe we should review the research projects that still need to be undertaken in order to enlarge our knowledge of the disease and also to assess how the solution of outstanding problems would affect the economy of the countries of the Continent.

A. STUDY OF VIRUS CHARACTERISTICS

Serological studies of field viruses are of vital importance, not only for determining the virus or viruses present in a zone or country, but also for ascertaining the differences between viruses that produce the so-called sub-types. These sub-types usually largely overcome the immunity conferred by vaccines, especially if they have not been prepared with homologous antigens. They therefore put in doubt any campaign under way, and could cause serious economic losses to the country concerned. This is precisely what happened in Venezuela in 1962. The so-called A-18 sub-type appeared and, in one area, attacked about 79% of the cattle. However, thanks to rapid action on the part of the national authorities and the Pan American Foot-and-Mouth Disease Center the spread of the disease to a cattle population estimated at 4 million head was prevented. Had it infected them, the economic damage it would have caused has been estimated at \$9 million.

In any country in which a foot-and-mouth disease control program is under way, it is essential to know the antigenic characteristics of the viruses used in the production of vaccines, the viruses used for testing the protective value of the vaccine, and the viruses which affect animals in the field; there may be marked differences between these virus strains which, if there are, will create dangerous situations and undermine the success of the program.

The Pan American Foot-and-Mouth Disease Center has had very considerable experience in this field and possesses a vast stock of virus strains and diagnostic sera. It therefore constitutes a reference center whose activities are of extraordinary value to the countries.

B. IMPROVEMENT OF VACCINES

Foot-and-mouth disease viruses are extremely difficult to control since there are not only seven immunologically different types (3 of which exist in South America); there are also sub-types of which for A type Valle virus more than 23 have been identified.

Immunity studies have demonstrated that even in convalescent cattle the duration of the immunity is relatively short (one to two years) and that conferred by inactivated virus vaccines is only four months, so that the cattle population needs to be vaccinated three times a year.

Inactivated vaccines normally consist of three main components: antigen, inactivating agent, and adjuvant. Studies are presently being made at the Center with a view to improving some of these components and consequently to obtaining a more effective vaccine and a longer lasting immunity. The development of such a vaccine would mean a considerable reduction in the cost of national and multinational campaign -possibly as much as one-third to two-thirds of the present costs.

These possibilities have led the Center to undertake research on improved methods of virus production, such as the tissue culture method (in suspension and in monolayers), and to test new cell lines susceptible to the virus, new inactivating agents, and new adjuvants which may make it possible to obtain a cheaper and more effective vaccine. The potential benefits of such research are perhaps more obvious if we bear in mind that the cattle population of South America is roughly 170 million. If cattle are vaccinated three times a year, some 510 million doses of vaccine must be produced. If on the other hand, we succeed in producing an inactivated vaccine that confers firm immunity for six months, only 340 million doses need be produced, in other words, the estimated production for 1966, namely 220 million doses, would be enough to immunize more than 65% of the animal population without difficulty. Modified live virus vaccines have been rapidly developed in the last 15 years, and they appear to hold the promise of a solution to the foot-and-mouth disease problem. Investigations in England, Israel, Brazil, Holland, Venezuela and France indicate that the virus retains its antigenicity in this type of vaccine whose production is easier, cheaper, and has practically unlimited possibilities. Potency and safety tests are easier and the immunity these vaccines confer appeared to be longer lasting and a broader than that of inactivated vaccines. Two countries in the Americas, Venezuela and Ecuador, are at present using only modified live virus vaccines, which are produced in the national institutes of those countries.

Despite the great headway made with modified live virus vaccines, further research is necessary to obtain modified strains with the least possible degree of pathogenicity and the highest antigenicity; it is also necessary to devise a more rapid method for virus selection, which will make it possible to obtain quickly the modified parts of the viruses encountered in the field, whenever epidemiological conditions require it; it is also necessary to improve our knowledge of the survival of these modified viruses in different animal tissues, and to ascertain whether or not inoculated animals, become carriers and, if so, for how long.

The information available to us indicates that the immunity conferred on young cattle by vaccines, either inactivated or modified, is very short; we therefore need to determine the true duration of this immunity and also the frequency at which different types of vaccine should be administered to short-lived animals.

Investigations on immunity in hogs indicate that even in convalescent animals immunity does not last for more than seven months, and the community conferred by vaccine for not more than two months (average protection 66 per cent). For these reasons, in areas with considerable problems with hogs it is essential to revaccinate them at intervals of 4 to 6 weeks, which are obviously extremely difficult, not very practical, and extremely costly. The Center has therefore included in its research program a project for the development of a vaccine that will effectively control the disease in hogs.

C. VACCINE TESTING

Every foot-and-mouth disease control program needs a high grade biological agent with which to achieve the fundamental goal of immunizing and protecting animals. Throughout the world the methods used for testing the effectiveness of foot-and-mouth disease vaccines use cattle as laboratory animals. For this purpose, regardless of the methods employed, a considerable number of unvaccinated animals which are either highly susceptible to the disease or come from disease-free areas are needed. Obviously, these prerequisites make it extremely difficult to undertake vaccine testing in South American countries. It is also extremely expensive and therefore, little used, and, consequently, government laboratories test only a very few lots of the vaccine used in the programs. Various research centers in the world, including the Pan American Foot-and-Mouth Disease Center, are carrying out investigations which suggest the possibility of developing other methods for testing the effectiveness of vaccines, in which guinea pigs, adult mice, and chickens are used as laboratory animals. The successful development of any of these methods would automatically reduce the cost of vaccine testing, as well as offering the possibility of testing all the lots produced by national laboratories for use in national campaigns. The potential benefit of such research is exemplified in the case of Argentina whose laboratories for testing the effectiveness of vaccines use approximately 2,000 cattle a year at a cost of \$2 million, yet they test only 150 lots of vaccine, or half of what is currently being used in the national control program.

D. SURVIVAL OF FOOT-AND-MOUTH DISEASE VIRUS IN PRODUCTS OF ANIMAL ORIGIN

The survival of foot-and-mouth disease virus in meat and other products of animal origin is one of the most serious problems for the exporting countries of the southern part of our continent since the strict sanitary measures imposed by the disease-free countries restrict or prevent the import of those products and, therefore, curtail the high price import markets.

The economic consequences of this situation are obvious, particular in the case of the United States of America, which prohibits the import of meat and other products of animal origin from South American countries. In view of the importance of this problem, the governments of the United States of America and of Argentina set up a joint commission which in close collaboration with the Pan American Foot-and-Mouth Disease Center has been investigating the survival of virus meat and other meat products and ways

and means of preventing it and or rendering such products acceptable to the meat processing industry. With the collaboration of the Veterinary Corps of the Armed Services of the United States of America, the Pan American Foot and Mouth Disease Center is carrying out at its headquarters in Rio de Janeiro, a special research program on various methods of eliminating foot-and-mouth disease virus from meat and meat derivatives.

The Center also has a number of other research projects in hand, for example, studies on carriers of foot-and-mouth disease virus and their importance in the epizootiology of the disease, on the administration of modified live virus vaccine in field trials in Chile and Colombia, on new methods of diagnosing and typing viruses, techniques for the concentration and purification of vaccines, methods for evaluating campaigns, epidemiological studies of the risk and cost of economic losses. Together with its training program, which it carries on parallel to these research projects the Center is making an effective and appreciable contribution to the efforts of the countries of the continent to control this disease.

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NOTE: The figures for the susceptible cattle population in each country are taken from this Yearbook even though they may not in every instance correspond with the census data or the latest available estimates.

**REPORT ON FOOT-AND-MOUTH DISEASE,
PRESENT AND FUTURE PROBLEMS ON
THE AMERICAN CONTINENT, AND THE
IMPORTANCE OF THE PAN AMERICAN
FOOT-AND-MOUTH DISEASE
CENTER**

MISSION: EDGARDO SEOANE AND CARLOS PALACIOS



PAN AMERICAN UNION

General Secretariat, Organization of American States

PAN AMERICAN HEALTH ORGANIZATION

Pan American Sanitary Bureau - Regional Office of the

WORLD HEALTH ORGANIZATION

FOOT-AND-MOUTH DISEASE, A PRESENT AND FUTURE PROBLEM OF THE AMERICAS;

IMPORTANCE OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

Report by Edgardo Seoane and Carlos Palacios

INTRODUCTION

The Interamerican Economic and Social Council, at its fourth Annual Meeting at the expert and ministerial levels, held in Buenos Aires in March 1966, approved a recommendation of the Inter-American Committee for the Alliance for Progress (CIAP) to the effect that "the Secretariat prepare a report on the present status of foot-and-mouth disease problem, the development of national campaigns to combat the disease in the hemisphere and the participation of the Pan American Foot-and-Mouth Disease Center in the aforementioned campaigns."

Pursuant to this resolution of IA-ECOSOC, the Pan American Health Organization and the Organization of American States submitted a joint report to the IX Meeting of CIAP held in Washington from 1 to 6 October 1966. The report described the status of the foot-and-mouth disease problem in the Americas, and the functions and activities of the Pan American Foot-and-Mouth Disease Center, both in the field of research and technical assistance, and outlined the permanent and stable financing the Center would need if it was to continue to accomplish its tasks (CIAP/48; OEA/ser.H/XIV; 26 September 1966).

At the meeting of IA-ECOSOC held in Buenos Aires, the following recommendations were also approved: "the Organization of American States and the Pan American Health Organization, in consultation with the Governments of the Hemisphere and in the light of the aforementioned report of the Secretariat carry out a study looking toward the permanent and stable financing of the Pan American Foot-and-Mouth Disease Center through contributions made by the countries, without prejudice to other contributions from public and private organizations for specific activities", and that "this financing study be presented to CIAP for its due consideration". (CIES/966 rev.2; 11 April 1966, page 48, draft resolution 24-E/66).

In view of this resolution the Secretary-General of OAS, Dr. José Mora, and the Director of the Pan American Sanitary Bureau, Dr. Abraham Horwitz, were good enough to appoint me as a special representative of these organizations to visit the countries of the Hemisphere, and to discuss with the governments the foot-and-mouth disease problem in the Americas and the coordination of a continent-wide campaign to gradually reduce the incidence of the disease.

Furthermore, since the countries and the agencies of the Inter-American System recognize the fundamental role of the Pan American Foot-and-Mouth Disease Center in coordinating control activities, I was asked to explain to Governments the need to maintain and expand the activities of the Center and therefore stabilize its financial support.

The report below contains a detailed account of how this task was accomplished and the results obtained.

Edgardo Seoane

Washington, 24 March 1967.

FOOT AND MOUTH DISEASE, PRESENT AND FUTURE PROBLEM OF THE
AMERICAN HEMISPHERE

Foot-and-mouth disease, a disease which affects cattle, sheep, hogs, and goats, is impeding livestock production in South American countries and, consequently, their economic development.

The annual losses caused by this disease in South America are estimated at 400 million dollars by reason of death, loss of weight, cessation of milk production, and measures taken to control the disease. This estimate does not include the loss of markets for meat and other products of animal origin in countries free of the disease, nor the repercussions on the health of human beings owing to lack of animal proteins.

In the Americas, the area affected by the epizootic includes the whole of South America from the Panama-Colombia border to Tierra del Fuego. The area free of the disease includes, Panama, Central America, Mexico, the United States, Canada and the Caribbean countries. Because of the rapid increase in sea, land and air travel it is almost impossible for a region to remain free of the disease unless effective health measures are taken. So far, the Darien barrier constitutes a natural obstacle to transmission overland and has prevented the disease from passing from South to Central America, but the infectivity of the disease is so great that sea, and air traffic constitutes a serious threat of the spread of foot-and-mouth disease from the infected areas to the areas free of the disease.

Unfortunately, the necessary measures to prevent the terrible toll that foot-and-mouth disease takes are not being taken in the affected area. Nor are sufficient and effective sanitary measures to prevent the introduction of the disease being adopted in the unaffected area.

In the affected area not less than 80% of the cattle population must be vaccinated three times a year to ensure effective control. Only

Venezuela and Argentina have managed to reach this vaccination level; thanks to the high educational level of stock raisers a high vaccination level has been achieved in Uruguay but systematic and compulsory vaccination is not carried out there as it is in the other two countries mentioned. Paraguay, Brazil, Chile, Peru, Ecuador, Bolivia and Colombia only manage to vaccinate 40% of their cattle population once a year, and therefore their stock is in serious danger if an epizootic wave were unfortunately to occur.

Most of these countries have drawn up national control plans and the corresponding financial estimates; possibly, in the next few years, control activities in South America may achieve the requisite extent and depth. However, national plans are of no avail unless they are coordinated at the regional level and, subsequently, at the South American level. The viruses that cause the disease do not recognize frontiers; they do not use passports; and the movement of cattle from one country to another is in actual fact uncontrollable in frontier areas.

This is the reason why a joint committee of the countries of the so-called Southern Cone--Paraguay, Uruguay, Argentina, Chile and Southern Brazil--are planning regional control; why Venezuela, Colombia, and Ecuador, countries which only have type "A" and "O" virus and where foot-and-mouth disease was introduced only seventeen years ago, are attempting to coordinate their campaigns, and why Peru and Bolivia need to do so if their national plans are to be effective. In addition, border agreements are being negotiated to prevent the spread of the disease from one country to another.

At the annual meetings of the Ministries of Agriculture and Stock-Raising of the countries of South America, steps must be taken to vitalize and organize national control plans and to coordinate them at the levels mentioned above.

At the ports, airports and land terminals in the countries in the disease-free area, the necessary measures for the fumigation or incineration of products or by-products of animal origin coming from the affected

areas are not being taken or are not being carried out within the framework of the coordinated plan covering all the countries in the region.

There are not sufficient incinerators at the airports and ports, and land terminals are without disinfection equipment and personnel trained to use it properly; furthermore, custom officials do not exercise the necessary care in inspecting baggage and parcels coming from the affected countries and thus animal products which may be vehicles of infection are permitted to enter.

In the Colombia-Panama frontier zone the natural obstacle created by the Darien barrier must be reinforced by the adoption of the necessary isolation measures to prevent the disease crossing from the affected to the disease-free area.

In this respect the Chocó area to the west of the River Atrato, in the northeast of Colombia, a small region so far free from the disease, on the Panama frontier, is of special importance.

There was an agreement between the International Regional Animal Health Agency (OIRSA), the Pan American Foot-and-Mouth Disease Center, and Colombia, which established that this country would not develop that region through stock raising, establishing a free area, but it was denounced by Colombia when it could not purchase cattle from the disease-free countries for the purpose of developing stock raising in the areas adjacent to the disease-free region, which would remain like an island on what we might call the foot-and-mouth disease frontier.

When speaking to the President of Colombia, Dr. Carlos Lleras Restrepo, during my visit to that country, I drew his attention to the serious problem that might be created for Panama and the Central American countries in the very near future if cattle from the affected area were brought into the Chocó area, which appears to be the case, pointing out that the Central American countries, which had succeeded in rapidly

developing stock raising in the last ten years and by so doing had increased their meat exports by nearly 90 times, would lose their markets, and in addition would suffer annual losses of not less than 55 million dollars; furthermore, if the disease were to enter Central America it would spread to Mexico and the United States. The reply of the famous statesman was decisive and categorical: "Colombia sees its problem from the point of view of international solidarity and therefore any benefit that Colombia might obtain from livestock production in the border-region --despite its local importance in a region as poor as Chocó--could not weigh heavily in the balance if it might cause Panama and the Central American countries that are developing their meat-export industry, the enormous losses that foot-and-mouth disease implies. Therefore, Colombia would not hesitate to sacrifice its own interests since it considers that those of the neighboring republics, whose prosperity Colombia does not wish to see impaired in any way, have precedence and must be protected".

This noble statement paves the way for the conclusion of a treaty between the governments of the countries of the disease-free area and Colombia which might take into consideration not only the sacrifice which this country is prepared to make in the spirit of continental solidarity, but also some form of compensation, which might be the sale of cattle free of the disease at special prices, and on one occasion only for the development of stock raising in the areas adjacent to the region in which all stock raising would be prohibited.

Furthermore, after the above-mentioned agreement had been denounced, Panama set up in its territory, in the border region, a so-called animal inspection zone in which the breeding and fattening of cattle, and in general all stock-raising activities were forbidden; as well as another area, adjacent to the one mentioned above, called a control area in which already established ranches were allowed to remain but were submitted to very stringent animal health regulations. All this involves a sacrifice of approximately 18,000 km² of land suitable for stock raising. This sacrifice will benefit the remainder of Panama territory, the Central

American countries, and Mexico. The necessary compensation which this sacrifice calls for should also be provided for in the proposed treaty.

During our visit to Mexico, the Secretary of State for Agriculture, Professor Gil Preciado, stated, when he heard of the above-mentioned decision, that in the very near future, after the meeting of the Chiefs of State, a meeting of the Ministers of Agriculture of the unaffected area and of Colombia should be held, preferably in Bogotá.

In addition, all the countries of the disease-free area should understand that foot-and-mouth disease is fundamentally a problem of the whole region, and not of the country in which it occurs. Therefore, preventive measures must be supported by the technical and financial resources of the governments of the whole region if they are really to be effective, to meet the requirements of a technically oriented health policy, and to have sufficient financial support.

An example is vesicular stomatitis, a disease of cattle which is present in all the Central American countries, and whose symptoms are identical with those of foot-and-mouth disease (but which is neither as virulent, nor as contagious as that disease) to the extent that without a laboratory diagnosis it is impossible to know whether or not the disease in question is foot-and-mouth disease. Now the time taken in collecting the specimen, sending it to the laboratory and making a diagnosis, which is carried out at the Pan American Foot-and-Mouth Disease Center, is not less than 48 hours, sufficient time to permit the spread of foot-and-mouth disease if quarantine measures are not taken, and compensation (the amount of which is beyond the possibilities of small countries) is not paid to livestock owners.

Furthermore, if an outbreak of foot-and-mouth disease should unfortunately occur and make eradication necessary, that is, the slaughter of the animals affected, the funds called for by this extreme, but indispensable measure, would be greater. When foot-and-mouth disease occurs

in a country that does not have the technical and financial resources for eradicating it, which would make it easy for it to spread to other countries in the disease-free area, the seriousness of the case is quite evident.

In view of the foregoing, it is clearly necessary for all the governments of the countries in the disease-free area to conclude a treaty to pool their technical and financial resources so as to prevent the disease and to eradicate it whenever it occurs in any country in the region.

In my opinion, the Organization of American States and the Pan American Health Organization are the international agencies that should suggest and promote the two treaties mentioned above, as well as annual meetings of the Ministries of Agriculture of the countries of the affected zone for the purpose of organizing and strengthening the national control plans and coordinating them at the regional level.

Mention must also be made of the special case of British Honduras, which is in the disease-free area but which does not belong to the inter-American system. For political reasons it could not be a party to the treaty, but the Pan American Health Organization might take steps to ensure that this territory adopts the same health measures as those agreed upon by all countries of the disease-free areas.

In conclusion, in the Canal Zone, which is under the jurisdiction of the United States of America, the same preventive measures as are taken in the United States should be applied just as energetically.

I. AREA AFFECTED BY FOOT-AND-MOUTH DISEASE - SOUTH AMERICA

In this area my task was as follows: to promote mass, systematic, and compulsory vaccination programs, bearing in mind the technical and financial resources of each country and the possibilities of external financing; to coordinate national campaigns at the regional level, and plan their integration into a control campaign in which all the affected countries would take part; finally, to discuss the permanent, adequate and timely financing of the Pan American Foot-and-Mouth Disease Center, which is providing the countries of the inter-American system with such important services in the control of foot-and-mouth disease.

Both IA-ECOSOC and CIAP have acknowledged the importance of foot-and-mouth disease in the economic development of the countries, especially of those in which livestock production is a basic economic activity.

Both international agencies have praised the fundamental role of the Pan American Foot-and-Mouth Disease Center in: research, identification of types and sub-types of foot-and-mouth disease and vesicular stomatitis viruses, studies of inactive and modified live vaccines; meat processing, etc; personnel training; technical advisory services in carrying out immunization programs and finally diagnostic examination of specimens from cattle in all countries of the inter-American system. These activities have been carried out with great success in the last fifteen years.

The need to mount a continent-wide program to control the disease makes it essential to ensure adequate financial support for the Pan American Foot-and-Mouth Disease Center.

It has been estimated that it needs 1,202,836 dollars a year to carry out its functions properly, and it has been proposed that the countries make a special contribution, each country's quota being calculated on a percentage basis, in accordance with the present PAU scale,

and that the quotas be paid directly to the Pan American Health Organization, which would become the Governing Body as well as the operating agency of the Pan American Foot-and-Mouth Disease Center, as from 1 January 1968 (Annex 1).

We visited all the countries in South America with the exception of Bolivia and Ecuador, which are being visited now by the Director of the Center, Dr. Carlos Palacios. We received a favorable response to the various initiatives taken, especially with regard to the financing of the Center. In this respect, the governments pledged their cooperation in writing with the exception of Uruguay, which did it by cablegram, and Colombia and Chile, which gave an oral pledge through their Ministers of Agriculture.

REGIONAL ANIMAL HEALTH AGENCIES

The Regional Animal Health Technical Commission (CIRSA) of the countries of the so-called Southern Cone, established by agreement of the Ministers of Agriculture in Rio de Janeiro, on 27 June 1964, has been endeavoring to get the technical personnel of the five countries to adopt uniform campaign and control systems and health regulations. Considerable progress has been made along these lines as far as foot-and-mouth disease is concerned. At present virus identification, vaccine control, cattle movement certificates, and the main features of campaign plans are the same in all the CIRSA countries.

The Bolivarian Animal Health Organization (OBSA), which should cover Ecuador, Colombia and Venezuela, is not in operation; the draft agreement, which has already been approved by Ecuador, is awaiting ratification by the Governments of Colombia and Venezuela.

The Argentine-United States Joint Commission for the Study of Foot-and-Mouth Disease, to which the Center gives technical assistance, bore its first fruit in the form of two reports published by the

National Academy of Sciences of the United States of America; recently, discussions on the planning and execution of new research programs were begun in Buenos Aires.

The Argentine-Chilean Commission has been working on special cases and has helped to organize a serological survey in Tierra del Fuego. During our visit to South America it met on 10 March 1967 to coordinate the activities of the two countries in view of an outbreak of foot-and-mouth disease, type "C" Waldmann virus, which occurred at the beginning of this year on the Argentine side of Tierra del Fuego. This Commission has been receiving advisory services from the Center.

The Pan American Health Organization and the Pan American Foot-and-Mouth Disease Center have been the prime movers in the conclusion of border agreements between the countries with a view to the control of foot-and-mouth disease. The agreement between Colombia and Ecuador is still in force, and the meeting was held in Ipiales at the end of 1966 to coordinate the 1967 plan of action, which was initiated in Colombia on 15 January with a vaccination program. Border agreements between Ecuador and Peru, and between Peru and Bolivia are under study.

VENEZUELA.- 9-12 January 1967

On 4 January, Dr. Carlos Palacios, Director of the Pan American Foot-and-Mouth Disease Center, arrived in Caracas, and got in touch with the pertinent authorities so as to work out the plan of work of the mission in the country.

On Tuesday, 10 March, after visiting the Director-General of the Ministry of Agriculture, the two members of the mission had a working meeting with the following persons: Dr. William Larralde, Dr. George Casas Briceño, Dr. Pola de Ortiz, Dr. Claudio Carrasquero, Dr. Anibal Bello, Dr. Guillermo Dumith, Dr. Humberto Olmos and Dr. Miguel Villegas Delgado.

The points made by the mission may be summarized as follows:

a) Importance of the Pan American Foot-and-Mouth Disease Center:

1. Research on epizootiological aspects of the disease.
2. Development of new and more potent vaccines.
3. Research on the survival of the virus in meat products.
4. As an information center.
5. Field and laboratory training for individuals and by means of courses.
6. Technical assistance services.
7. Specialized bibliographical center.

b) Economic aspects

1. Need to defend a capital consisting of more than 400 million animals susceptible to the disease in South America.
2. The importance of maintaining and expanding markets, always limited or non-existent, to the affected countries.
3. The importance of actual or potential losses, at present estimated at U.S.\$400,000,000 a year.
4. Award and supervision of international loans for the complete development of foot-and-mouth disease control campaigns.
5. Importance of the joint effort in facilitating the trade aspects of interest to LAFTA.

c) General aspects

1. Importance of the coordination of national campaigns at the regional level.

It was pointed out that the annual quotas of Latin American countries accounted for 34% of the Center's budget, and that the payment of the quotas was essential in order to obtain the United States contribution, which covered the remaining 66%. Venezuela was informed that its quota amounted to 2.9%, or U.S.\$35,242 a year, as from 1 January 1968.

All present acknowledged the importance of the Center in foot-and-mouth disease control. The development of Venezuela's position with respect to special financing was recorded and it was unanimously agreed to recommend to the Minister of Agriculture that the quota requested be paid in the most direct form possible and to ask him to reply in writing to the Chief of Mission, since that would help to make the mission a success.

In an interview, Dr. Alejandro Osorio, Minister of Agriculture officially accepted all the points put forward by the mission, and handed over a letter from the Government of Venezuela approving the new type of financing requested (Annex 2).

The Minister also stated that Venezuela did not need any external loan for its national foot-and-mouth disease campaign, and would be pleased if this point was borne in mind so that more assistance could be given to neighboring countries, since, if that were done, the Venezuelan livestock industry would indirectly benefit.

In the visit we made to the Veterinary Research Center at Maracay we were informed that there had been a series of outbreaks due to type "O" Valleé virus to which hogs are particularly susceptible, and that the studies made in cooperation with the Center showed that the virus involved was serologically different from that which is generally present in the country, and for which vaccines are being prepared.

Generally speaking, Venezuela is conducting a properly organized campaign and mass, systematic, and compulsory vaccination is in force. It also has the necessary technical and financial resources.

During our visit we met with the Ministers of External Relations, Health and Social Welfare, and Agriculture.

The Center has assisted Venezuela in the following ways:

1. It has cooperated in the campaign with the modified live virus vaccine.
2. It has supplied A Cruzeiro strain, and has solved problems connected with the A Zulia sub-type.
3. It has assisted in solving problems of anaphylactic shock.
4. It has assisted in solving the new problem of the type "O" virus in the field.

BRAZIL.- 13-22 January 1967

During our meeting with the technical staff we were informed of the present status of the foot-and-mouth disease campaign which began at the end of 1965 in the State of Rio Grande do Sul. At the time of our visit, more than 3 million cattle had been vaccinated. The targets and organization of the campaign were explained to us. It is based on the orderly and progressive vaccination by regions and is geared to the production of vaccine by laboratories and the technical resources available.

We were given full details of the national foot-and-mouth disease plan to be presented to IDB in support of a request for supplementary financing. According to this plan, the campaign will cost 70 million dollars distributed over a period of five years. Brazil wishes to obtain an external loan in the amount of 21 million, of which 5 million will be used as loans to vaccine-producing laboratories. The mission was asked to take steps to see to it that the IDB take this request under active consideration since it has been duly prepared in accordance with the guidelines and criteria of the Center, a document approved by the Bank.

In the statement made by the technical staff, special emphasis was put on the movement of cattle to consumption centers, cost of movement on foot and by vehicles, profit seasons and movement, breeding and fattening areas, etc.

Vaccine production has increased from 25 million doses in 1965 to 40 million doses in 1966, and is thought likely to reach 100 million doses by 1967.

The Government laboratories that test vaccines carry out virus identification, antigen quantity and bacteriological and safety tests. In addition, technicians are assigned to public laboratories to exercise supervision at all stages of production.

The Brazilian Government has agreed to contribute to the financing of the Center, for which it is the host country. Its quota is 7.34% or US\$88,288.00 a year (Annex 3).

The Director-General of Animal Health Defense and Inspection expressed his interest in the various international agencies in the Americas concerned with foot-and-mouth disease--such as FAO, International Epizootic Bureau, Regional Animal Health Commission of the Countries of the Southern Cone, Bolivarian Animal Health Organization, Regional International Animal Health Agency--and suggested that it might be worthwhile to make a study to see how the Center might act as the coordinator, in the matter of foot-and-mouth disease, of all the international agencies mentioned above.

During our visit we interviewed the Minister of Economic Coordination and Planning, Mr. Roberto de Oliveira Campos, the Minister of Agriculture, Dr. Severo Fagundes Gomes, the Minister of Health, Dr. Raimundo de Britto, and the Minister of External Relations, and had two meetings with the technical personnel.

A lengthy visit was made to the Pan American Foot-and-Mouth Disease Center.

The Center has assisted Brazil in the following ways:

1. Assistance in planning and executing the foot-and-mouth disease control campaign both in Rio Grande do Sul and in the remainder of the country.
2. Assistance in preparing the IDB loan application.
3. Agreement for a vaccination pilot project in Itanhandu.
4. Experiments with modified live virus vaccines.
5. Research on modified live virus vaccine, inactivated vaccines, survival of virus, and immunological studies.
6. Assistance in the testing of vaccines through selection of strains, etc. The technical advisory services of a consultant are being negotiated through the Center.
7. Miscellaneous technical assistance.

PARAGUAY.- 22-26 January 1967

A national foot-and-mouth disease control plan is being prepared and has been studied in detail by a special planning company from Brazil, by the Center, and by Paraguayan technical personnel. This plan complies in all respects with the guidelines and criteria of the Center accepted by IDB. The plan provides for external financing in the amount of 3.5 million dollars or 50% of the total cost of the campaign which is to be carried out over a period of five years.

The national plan and the financing plan were held up when we arrived owing to political and their budgetary difficulties. There were difficulties in establishing an administrative and technical agency with sufficient independence for the administration of the campaign. For this reason we visited the President of the Republic, General Alfredo Stroessner, the Minister of Agriculture, the Minister of Health, the Minister of the Interior, and the Minister of External Relations; we had two meetings with technicians, one with the persons in charge of the Paraguayan Livestock Owners Association, and the other with experts of the Ministry of Agriculture, and we visited the Permanent Parliamentary Commission. In all these interviews we talked about foot-and-mouth disease, the significance of the problem for the country, and the need for immediate measures. We also held a press conference and asked the newspapermen to assist us, which they did in a very ample way.

The Minister of Agriculture informed us on the day of our departure that the plan and the project were ready, that Parliament had offered to approve the law establishing the administrative and technical agency with sufficient independence to administer the campaign, and that the project would be submitted to the Inter-American Development Bank.

The National Plan provides for the construction of a laboratory and the preparation of vaccines which at present are purchased from private laboratories in Argentina.

In order to maintain the campaign, and to finance it, a tax amounting to 50 guaranies a head will be levied on cattle sales. It is estimated that it will bring in between 30 and 40 million guaranies a year, which is sufficient to cover both objectives.

Mass, systematic and compulsory vaccination will be carried out and be paid for by the rich ranchers while to the poor ranchers it will be free of charge.

The Paraguayan Government has pledged in writing to pay its quota of 0.31% or U.S.\$3,729.00 a year to the Center (Annex 4).

The Center has assisted Paraguay in the following ways:

1. Promotion of the foot-and-mouth disease campaign.
2. Preparation of the preliminary draft of the national campaign and an IDB loan application.
3. Diagnosis of field material.

URUGUAY.- 26-30 January 1967

At a meeting with technicians held at the Ministry of Health at which we explained the purposes of our mission, they described the status of foot-and-mouth disease control in the country.

Although vaccination is not compulsory, about 13 million doses are administered annually, so that about 50% of the cattle population are vaccinated three times a year.

The state laboratory for testing vaccines produced by private laboratories is not yet completely equipped, but it is expected to be ready in the second half of 1967.

We are informed that various serological studies for the selection of vaccine control strains will be carried out by the Center in cooperation with Uruguayan technicians.

An agreement has been concluded with Brazil, through the Animal Health Regional Technical Commission, to supply that country with high-grade cattle in exchange for vehicles. These vehicles will solve the problem of transportation which has hampered the campaign.

An IDB official informed us that the Government of Uruguay had expressed a desire to obtain external credit for the foot-and-mouth disease campaign, and that it would soon initiate the necessary studies for the presentation of its application. This is very important since it is essential to organize the national plan, to provide for mass, systematic, and compulsory vaccination, and to establish an administrative and technical agency with the necessary independence to administer the campaign.

Our visit to Uruguay coincided with a period of political transition, and for that reason we were unable to obtain an immediate reply about the financing of the Center. However, the oral pledge made to us by the Ministers of External Relations, and Health, that Uruguay would contribute 0.77% of the budget or US\$9,262.00 a year, as from 1 January 1968, was confirmed by cable and subsequently by a letter to Dr. José A. Mora, Secretary-General of the OAS, by Mr. Wilson Ferreira Aldunate, Minister of Livestock and Agriculture, indicating that the National Council of Government had approved the proposal we made (Annex 5).

During our visit to Uruguay we interviewed the President of the National Council of Government, and the Ministers of External Relations and Health as well as the acting Minister of Agriculture.

The Center has assisted Uruguay in the following control matters:

1. Assistance in the preparation of regulations for vaccine control.
2. Assistance in planning the campaign.
3. Assistance in vaccine control and recruitment of Professor Lucam.
4. Assistance in preparing the draft of the IDB loan application.

ARGENTINA. - 30 January-3 February 1967

At our meeting with technicians we were informed of an outbreak of foot-and-mouth disease which had occurred in Tierra del Fuego, the virus being Waldmann type "C". It had caused the death of about 350 out of a population of 900. The farm where the outbreak occurred was quarantined, and the necessary legal measures to permit the slaughter of all the animals exposed to the disease were being studied. No report of the spread of the disease to other farms in the region had been received, and a technical officer of the center had been sent to Tierra del Fuego where he was helping the health authorities to cope with the problem. As is well known, Tierra del Fuego is considered free of foot-and-mouth disease.

Argentina wishes to undertake a new epizootiological and serological survey in Tierra del Fuego. The Pan American Foot-and-Mouth Disease Center, in cooperation with the Argentine authorities, will ascertain the equipment and manpower needed to carry out this survey as soon as possible.

We were informed that Argentina was vaccinating about 90% of its cattle population three times a year, since it had the best

organized national foot-and-mouth disease control campaign, and that close contacts were maintained with the Center.

During our visit we interviewed the President of the Republic, and the Ministers of External Affairs, Agriculture, and Public Health. We held a meeting with the technical officials responsible for animal health services. On each occasion, we explained the purpose of our mission, and obtained positive results.

The Government of Argentina has pledged in writing to contribute 7.11% towards the financing of the center or US\$85,522 a year as from 1 January 1968 through the Pan American Health Organization (Annex 6).

The Center has assisted Argentina in the following ways:

1. Planning of the national foot-and-mouth disease campaign.
2. Recruitment of a temporary consultant to carry out surveys and evaluate the campaign.
3. Vaccine control.
4. Joint Argentine-United States Commission to make studies on cured meat and a serological survey in Tierra del Fuego. Active assistance of the Center in laboratory examinations, field planning, and collection of specimens.
5. Joint Argentine-Chilean-Pan American Foot-and-Mouth Disease Center Commission, in particular new research programs.

CHILE. - 3-8 February 1967

At a meeting held with technical officers of the Ministry of Agriculture we ascertained that mass, systematic, and compulsory vaccination was not carried out in Chile.

The mission learned that the vaccine-production laboratory is part of the Bacteriological Institute of Chile, which is attached to the Ministry of Health; that its transfer to the Ministry of Agriculture

is being studied, although no decision had been taken so far. During our visit to the Bacteriological Institute with the Minister of Health, we learned that the necessary measures had been taken for the transfer to the Ministry of Agriculture of the section responsible for vaccine production and foot-and-mouth disease research.

We were informed of the results of the pilot project in Ilanquihue, region beset with difficulties. Despite the difficulties involved, excellent results had been achieved, thanks to the decisive collaboration of the livestock owners in the region.

The preliminary draft of the national control plan was submitted to the Ministry of Agriculture in 1965; the Government submitted a loan application to the IDB in 1966 for partial financing. Out of the budget of 10 million dollars for a period of 6 years, 80% would be raised by livestock owners and the Government of Chile, and 20% by external financing.

The negotiation of this credit is being held up by the fact that there is no definition in the project of the technical and administrative agency with the necessary independence, for the direction and execution of the campaign as required by the IDB guidelines. The Minister of Agriculture, Mr. Hugo Trivelli, informed us that this difficulty would shortly be surmounted since the above-mentioned agency would be granted the necessary independence for the execution of the national plan.

The situation created by the outbreak of foot-and-mouth disease in the Argentine part of Tierra del Fuego was discussed, and the Chilean experts informed us that great alarm in the area had been caused by reports that there had been more than a month's delay in reporting the outbreak to the Argentine Animal Health Authorities. The Center was requested to intervene without delay and to see to it that an epizootiological investigation to define the extension of the outbreak was undertaken.

We proposed an urgent meeting of the joint Argentine-Chile Commission to study and define the measures to be taken in view of the presence of foot-and-mouth disease in Tierra del Fuego, and to decide on the initiation of epizootiological and serological studies to delimit the area hitherto free of the disease in the parts of Chile and Argentina in that region. This proposal was approved by the technical staff and confirmed by the Ministry of Agriculture.

The Chilean technicians submitted to us three programs which they believe should be carried out by the Center:

1. Techniques for the administration of foot-and-mouth disease campaigns;
2. Epizootiological studies;
3. New vaccines and vaccination techniques.

They were also of the opinion that, in view of the national campaigns to be started in all the countries in the affected zones, it would be advisable to hold periodical meetings of technical personnel to discuss the progress of the programs and to report successes and failures; these meetings on foot-and-mouth disease should be included in the plans of the Regional Animal Health Technical Commission of the countries of the Southern Cone.

We had an interview with the President of the Republic and the Ministers of External Affairs, Health, Agriculture, and two meetings with technicians. On these occasions we gave a detailed account of the purposes of our visit, and emphasized the need to properly organize national control programs and later to coordinate them at the regional level.

Although Chile's quota towards the financing of the Center was considered high, the Ministers of Agriculture and Public Health gave a verbal assurance which, they said, would be confirmed later in

writing. Chile is to contribute 2.09% towards the budget, or US\$25,139 as from 1 January 1968; it will be paid directly to the Pan American Health Organization.

The Center is providing the Government of Chile with the following types of assistance:

1. Agreement on the administration of modified live virus vaccine.
2. Assistance in preparing a preliminary draft of the national foot-and-mouth disease campaign plan, and an IDB loan application.
3. Miscellaneous technical assistance.
4. Program of serological sampling in the Chilean part of Tierra del Fuego.
5. Joint Argentine-Chilean-Pan American Foot-and-Mouth Disease Commission for the protection of the southern part of those two countries.

PERU.- 8 to 13 February 1967

The information obtained during the meeting with technicians and from the documents given to us shows that the present status of foot-and-mouth disease in Peru is as follows:

Although the disease has been known since 1910, the first serological diagnoses were made in 1947, it showed that the three classical viruses were present, namely types "A", "O" Valleé, and "C" Waldmann.

The first great epizootic occurred in 1944, and mainly affected establishments producing milk for Lima and its neighboring valleys. The epizootic continued in the form of minor outbreaks until 1962-1963 when the Peruvian health authorities found themselves confronted with the largest epizootic wave ever produced by "O" Valleé virus. It began in the southern departments close to the Bolivian frontier, and caused losses estimated at 300 million soles.

During and after the epizootic, vaccination campaigns were expanded. The number of vaccinations given each year are as follows:

1963	2,521,716 doses in cattle and susceptible species;
1964	2,792,066 in cattle;
1965	3,285,135 in cattle;
1966	2,646,129 in cattle.

The vaccination level is rather low; the percentage of the cattle population of 3,625,000 head receiving immunizations has ranged from 34.8 in 1963 to a peak of 44.4 in 1965; it then fell to 36.1 in 1966. (Two doses a year).

Mass, systematic and compulsory vaccination is not carried out, and 60% of the cattle population is not protected, which involves a serious risk should an epizootic wave appear.

No national foot-and-mouth disease control plan has yet been prepared. The technical staff of the Ministry of Agriculture and the Center's consultants stationed in Peru are collecting the necessary information. When the draft is prepared, it will be submitted to the IIB in order to obtain external financing. This plan would provide for the expansion of the vaccine production laboratory; approximately US\$500,000 will be earmarked for that purpose.

Vaccine production by the animal pathology laboratory has risen from 45,130 doses in 1960 to 3,028,200 in 1965; with its present equipment the laboratory is capable of producing as many as 6,000,000 doses.

We made contact with the committee for the construction and equipment of the new health institutes; National Institute of Public Health, Nutrition, Animal Pathology, Registration of Human Pathology. We were informed that, although the project was ready, it has not been submitted because it still lacked a feasibility study, which

they offered to complete in a period of 120 days. As has been mentioned, it will cover the corresponding National Institute of Animal Pathology.

During our visit we had two meetings with the President of the Republic, one with the Minister of Agriculture, and his animal health advisers, and another with the veterinarians of the Ministry of Agriculture.

During all these interviews we discussed the foot-and-mouth disease problem in South America, the need for Peru to prepare a national control program as soon as possible and to obtain the technical and financial resources necessary to carry it out. We drew attention to the danger for Peruvian livestock implicit in the low level of vaccination. The problem of the financial stability of the Center was also discussed.

In that connection we received a letter from the Minister of Agriculture containing a copy of Executive Resolution No. 54 ordering the inclusion in the 1968 budget of an amount of US\$9,000 as the Peruvian contribution to the financing of the Center (Annex 7).

All the other points were fully accepted by the Government of Peru.

The Center has assisted the Peruvian Government in the following ways:

1. It has provided a consultant for the last five years, in particular for the installation of the laboratory; at the present time, he has been replaced by an expert in field operations.
2. Assistance in preparing inactivated vaccine by the Frenkel method, and the control of that vaccine.
3. Assistance in planning the foot-and-mouth disease control campaign.

4. Assistance in preparing a draft of the IDB loan application for new laboratories and for the field operations.
5. Draft of an agreement with Ecuador and the Pan American Health Organization for the prevention of foot-and-mouth disease in the respective border area.
6. Draft of an agreement with Bolivia for the same purpose.
7. Draft of an agreement for the administration of modified live virus vaccine.

COLOMBIA.- 13-17 February 1967

We consider our visit to Colombia to have been of great importance and interest since the frontier of that country with Panama is also the frontier between the affected zone and the disease-free zone. Therefore the control established and to be established in the country, and especially in the border area, are of great importance.

Unfortunately, the agreement between Colombia, OIRSA, and the Pan American Health Organization for the prevention of foot-and-mouth disease in the northwestern region of Chocó was not extended as a result of a decision by the Colombian Government, which also denounced the agreement, and authorized the repopulation of the area free of the disease in that department with animals coming from affected areas inside Colombia. As a result there is a serious danger of the disease being able to spread to the Republic of Panama and the Central American countries.

Both in the meeting with technicians, and in our two meetings with the President of the Republic, Dr. Carlos Lleras Restrepo, we expressed our serious concern about this situation and its possible consequences.

Fortunately, the President of Colombia informed us that he was against the livestock development of the Chocó region, if it involved a risk to the neighboring countries of the unaffected area: "I

consider that there is a clear disparity between the benefits that Colombia may obtain from its livestock exploitation of the zone you mention, and the risk it represents for our good neighbors in Central America, and their welfare must have priority." (Annex 8).

We considered the statement of President Lleras so important that we asked him to authorize us to send it to the governments of Panama, and the Central American countries, and to all governments of the disease-free area. As the transmittal of the opinion of President Lleras to the governments of the above-mentioned countries, on the basis of our recollection of an oral statement, seemed a very delicate matter, we asked him to send a memorandum to us, telling him that we did not wish to commit an unwilling mistake by leaving out or putting in a single word more than those expressed by the President. Dr. Lleras was good enough to put into writing the important declaration appearing in Annex 8 of this report; it has been of great importance to the success of our mission in the countries of the disease-free area. It makes possible one of the treaties suggested in the first part of this report, and also strengthens the guarantees of the proposed agreement between the countries of the unaffected area for the prevention of the disease or, if necessary, its eradication.

On 14 February in the presence of the Minister of Agriculture, Dr. A. Samper G., we held a meeting with the technical staff of that Ministry, and other official agencies and representatives of livestock owners. We explained the purpose of our mission, emphasizing the need to organize national foot-and-mouth disease control programs; regional campaigns to be conducted by neighboring countries, and ultimately the coordination of these campaigns throughout the affected area; we also explained that it might be possible to obtain external funds for these campaigns, and gave a detailed account of the activities of the Pan American Foot-and-Mouth Disease Center including its services for research and diagnosis, technical

assistance, and training. Finally, we explained why OAS and PAHO wanted this institution to be adequately and permanently financed on a timely basis namely, so that it could provide its services which were becoming more complicated and more numerous. We therefore submitted to the government of Colombia the new financing project whereby Colombia would contribute 1.78% or US\$21,410 a year as from 1 January 1968 and pay it directly to the Pan American Health Organization.

During the meeting the Director of the Livestock Division, described the status of foot-and-mouth disease in Colombia and stated that for the time being they had very few problems with the disease.

Some 8 million doses of vaccine were being administered every year, and usually immunize 4 million cattle or about 25% of the total. These figures show that about 75% of the cattle population are unprotected and would be seriously affected if an epizootic of foot-and-mouth disease were to occur, with the consequent heavy impact on the general economic situation.

The main causes for the low level of immunization appear to be:

- a) Lack of concern and understanding of stock raisers about the problem.
- b) Lack of adequate resources for vaccination.

As for the first point, the solution might lie in taking compulsory measures: no granting of loans, no authorization of movement or sale of cattle without the corresponding vaccination certificate. In addition, it would be necessary to step up educational campaigns.

As to the second, a study might be undertaken to obtain external financing; if that were done, it would be necessary to establish the

financial share of the government and of the Colombian stockraisers within that part of the total costs covering local operations.

The Colombian Animal Health Institute is responsible for production of foot-and-mouth disease vaccines, and is equipped to produce 8 million doses a year. The possibility of increasing that amount, so as to meet the greater demand stemming from the new governmental plans, is under study.

We were told about a program for the foot-and-mouth disease campaign on the northern coast of Colombia covering the departments of Antioquia (northern part) Córdoba, Bolívar, Atlántico, Magdalena, La Goajira and the North of Santander. The area involved measures approximately 170,000 km² and contains 5 million heads or 33.3% of the total Colombian cattle population. The objectives of this program are as follows:

1. To lay the basis for the eradication of the disease in the area concerned.
2. To test the effectiveness of the methods adopted in the pilot project in order to pave the way for similar activities in the remainder of the country.
3. To eliminate a serious potential danger for Panama and Central America.
4. To increase national livestock production.
5. To lay the basis for the establishment of export markets for animal products.
6. To set an example for other countries facing the same problem.

With respect to point 3, this program will obviously be very important if at the same time the measures mentioned earlier are taken in the Chocó region to the west of the Atrato River.

The budget estimates amount to 23,974,000 Colombian pesos for 1967, and a grand total of 119,667,000 for five years; however, an

examination of the documents presented, and the memorandum we received from the President of the Republic (Annex No. 9) shows that these figures are the allocation for all animal health problems in the Region, and that the foot-and-mouth disease control program on the northern coast will receive only 11,173,000 Colombian pesos in 1967, and 57,854,410 over a five-year period.

We believe that the program we have referred to should form part of the national foot-and-mouth disease program in which it should have first priority in view of the density of the cattle population and the national interests.

During our stay in Colombia we had two interviews with the President, Dr. Carlos Lleras Restrepo, and the Ministers of Agriculture, External Affairs, Health, and Development. In all these interviews we explained the purposes of our mission. Since Colombia has the greatest livestock potential of all the countries in the northern region of South America, and in view of its geographical border with the area unaffected by foot-and-mouth disease, we placed special emphasis on the need to prepare and carry out the national control program and to conclude a new treaty with the countries of the unaffected area along the lines of the suggestions made in the first part of this report.

Our suggestions were accepted, as will be seen from the statement of the President which appears in Annex 8.

As for the participation of Colombia in the financing of the Pan American Foot-and-Mouth Disease Center, the government representatives gave an oral undertaking to contribute 7.34% of its budget, or US\$21,410 a year as from 1 January 1968 and to pay it through the Pan American Health Organization.

The Center has assisted the Government of Colombia in the following ways:

1. A consultant has been stationed in Colombia for three years to assist in the preparation of foot-and-mouth disease control programs.
2. Agreement for the administration of modified live virus vaccine in the Bogotá Sabana.
3. Cooperative research program with the Ministry of Agriculture through the ICA and Animal Health Institute.
4. Agreement with OIRSA, Panama, and PAHO for the prevention of foot-and-mouth disease in the northwestern zone of the Chocó. At present a new agreement is being reviewed since the former agreement was denounced by Colombia because of the difficulties it experienced in purchasing cattle coming from Central America for the area covered by the agreement.
5. Agreement with Ecuador and the Pan American Health Organization for the prevention and control of foot-and-mouth disease in the border area of those countries; this agreement is still in force.

II. AREA FREE OF FOOT AND MOUTH DISEASE IN AMERICA

Panama, Central America, Mexico, United States of America, and the
Caribbean Islands

Foot-and-mouth disease, one of the most serious livestock diseases in the world, is a constant menace for the few disease-free regions in the Americas which include Panama, the Central American countries, Mexico, the United States, and the Caribbean Islands.

The importance of the losses caused by foot-and-mouth disease is not based so much on the toll it sometimes produces in cattle as in the loss of weight and the complications which hamper the recovery of animals, the loss or reduction of their specific functions, and other difficulties which interfere with the normal reproductive cycle. All this has a negative effect on the economy of the countries affected, which is proportionate to the importance of stock raising in their general economy. Furthermore, the importance for Panama and the Central American countries of the loss of important markets such as those of the United States of North America must not be overlooked.

It is difficult to appraise the financial, social and even political consequences of foot-and-mouth disease if it were to occur in the disease-free zone of the Americas. But the estimate made in the pamphlet entitled: "Possible impact of foot-and-mouth disease on the economies of the countries of Central America and Panama," by Dr. Carlos Meyer Arevalo, Director of OIRSA, is worth mentioning.

Summary of possible losses in the Region of Central America and Panama:

Deaths Cattle	US\$	10,699,580
Deaths Hogs		6,108,875
Milk Production		5,306,222
Meat Production		5,122,437
Depreciation Cattle		20,112,355
Depreciation Hogs		7,636,102
Total Loss	US\$	<u>54,985,571</u>

According to this estimate, the losses occasioned by foot-and-mouth disease in the countries mentioned would amount to 55 million dollars a year, not to mention the effect on their economic development of the loss of the United States meat market.

The Pan American Foot-and-Mouth Disease Center has prepared a plan of action giving the countries of the disease-free area precise indications of how to deal with outbreaks of vesicular diseases, or diseases caused by the introduction of an exotic virus into the regions already affected.

The purpose is to control and eradicate an outbreak of foot-and-mouth disease and any other vesicular disease that might appear. To implement the measures recommended in the plan of action, energetic steps would undoubtedly be required and possibly new legislation would be needed to authorize the administrative and technical agency responsible for control activities to take quarantine measures, order the slaughter of animals, pay compensation, request aid from the armed forces, establish incineration and disinfection posts.

The Pan American Foot-and Mouth Disease Center was established by OAS and PAHO so that the countries of the Hemisphere would have and international agency to provide diagnostic services and assistance in controlling and eradicating foot-and-mouth disease and other vesicular diseases.

The above-mentioned countries are still free of foot-and-mouth disease and therefore rarely need to make use of the services of the Center, and the measures adopted by them are intended to prevent the introduction of the disease, but the fact of the matter is that, regardless of how strict these measures may be, they can never guarantee absolute protection, the risk that foot-and-mouth disease may appear in a country hitherto free of it always remains.

When that happens, the speed with which action is taken determines the success of control and eradication and any delay in investigating or in taking the necessary measures will contribute to the spread of the disease, make its immediate control impossible, and therefore considerably increase the cost of eradication.

The problem becomes even more difficult in the case of countries such as those of Central America where other vesicular diseases occur. Any outbreak of vesicular disease there must be isolated as if it were a case of foot-and-mouth disease until laboratory examinations have proved the contrary.

The most economical and effective way of dealing with an outbreak of foot-and-mouth disease in a country in the disease-free area is to eradicate it by means of quarantine measures, slaughter, and disinfection.

We quote below the measures which should be taken and which are recommended by the Center in the plan of action to be followed in the event of an outbreak of foot-and-mouth disease, because they show the technical and economic dimensions of the problem:

Measures to be taken:

1. To quarantine the ranch or infected area.
2. To collect specimens of vesicular epithelium and to send them by air mail to the Pan American Foot-and-Mouth Disease Center.

3. To establish the limits of the affected area to which the disease may have spread, and to prohibit the movement of animals presumably infected, products and other materials which may be possible vehicles of the pathogenic agent.
4. To identify possible sources of the outbreak as well as direct and indirect contacts which may have taken place.
5. To report the clinical diagnosis of the vesicular disease to the authorities and stock raisers in the neighborhood of the affected area.
6. To prepare inspection of livestock in order to investigate the presence of any new outbreak.
7. To initiate a livestock survey and investigation of local conditions.

Laboratory diagnosis

The clinical diagnosis of foot-and-mouth disease is complicated by the similarity of the symptoms with those of other diseases, especially vesicular stomatitis and vesicular exanthema.

In all cases the diagnosis can only be made accurately by means of laboratory tests. These examinations must be carried out by specialists and solely in a laboratory prepared to handle infectious material.

This is part of the service provided by the Pan American Foot-and-Mouth Disease Center.

Reporting

The serious consequences of a positive diagnosis of foot-and-mouth disease for a country which was hitherto free of the disease may be easily understood.

The first positive results must therefore be confirmed with additional proofs.

Both the provisional notification of a diagnosis of foot-and-mouth disease and the confirmation will be sent by the Center not only to the country affected but also to neighboring countries, the Pan American Sanitary Bureau, its zone offices, to OIRSA, and to other regional animal health organizations.

In the event of a positive diagnosis of vesicular stomatitis, only the affected country and OIRSA (if a member country is involved) will be notified.

Plan of action

Objective: Control and eradication of an outbreak of foot-and-mouth disease in Central America and the Caribbean area by means of slaughter (sanitary rifle).

Measures to be taken in the event of a diagnosis of foot-and-mouth disease

- a) By the Pan American Foot-and Mouth Disease Center:
 1. To arrange for one of its technical staff to prepare to proceed immediately to the country affected if the diagnosis is confirmed.
 2. To make arrangements for the possible recruitment of temporary technical staff.
 3. To get in touch with the agencies responsible for preventive programs so as to ensure that financial assistance is available if additional funds are necessary.

- b) By the affected country:
 1. To use the services of the police or the army to ensure that the outbreak is isolated, to strengthen preventive health measures, and secure the application of such other measures as may be necessary.
 2. To make arrangements for the evaluation and slaughter of infected animals or animals exposed to infection, and the disinfection of the ranch or area infected.
 3. To order the inspection of cattle in order to ascertain any new outbreak and to continue the livestock survey in the area affected which was begun when the clinical diagnosis was made.

- c) By the neighboring countries:
 - 1. To take preventive measures.
 - 2. To notify livestock owners to be on the lookout for the appearance of symptoms of vesicular diseases.
 - 3. To prepare to mobilize all the necessary services for the control of the disease.

Measures to be taken when the existence of foot-and-mouth disease is confirmed

- a) By the Pan American Foot-and-Mouth Disease Center:
 - 1. To immediately send one of its technical staff to the affected country;
- b) By the affected country:
 - 1. To begin the slaughter of the animals in the infected area and to initiate disinfection.
 - 2. To maintain the limits of the affected zone and, if necessary, to enlarge them or to establish additional zones according to the information obtained during inspections and investigations.
 - 3. To continue the inspection of cattle and to complete the cattle survey in the affected zone.
- c) By the neighboring countries:
 - 1. To strengthen preventive measures.
 - 2. To continue vigilance operations for the purpose of discovering outbreaks of vesicular diseases.
 - 3. To purchase for the technical staff such supplies and equipment as may be necessary.

Other measures will depend on the geographical location of the outbreak.

Measures to be taken after terminal disinfection at the site of the outbreak.

- a) By the Pan American Foot-and-Mouth Disease Center:
 - 1. To keep the neighboring countries, the Caribbean islands, the Zone Offices of the Pan American Sanitary Bureau, OIRSA and other regional animal health organizations informed of the development of the outbreak and the situation in the country affected.

b) By the country affected:

1. Thirty days after the terminal disinfection of the ranch, and the infected areas:
 - a. To introduce test animals into the ranch or infected area and to keep them under close supervision for thirty days.
 - b. The affected area may be reduced, but the restrictions within the infected area should continue in force.
2. Sixty days after completion of terminal disinfection:
 - a. Provided the test animals have remained negative, to authorize re-stocking (if the test animals are infected, the whole procedure must be repeated.)
 - b. To cancel all restrictions in the affected area.
3. During the next ten months: to maintain vigilance by means of regular and frequent inspections to ensure that any outbreak that may occur will be immediately discovered.

c) By the neighboring countries:

All the preventive measures that are not part of the normal animal health program may be abolished when the conclusion is reached that the affected country may be considered free of foot-and-mouth disease."

In point of fact, the Central American countries and Panama do not have the technical and financial resources necessary to deal with a possible outbreak of foot-and-mouth disease and, furthermore, for the same reasons, they are not taking the appropriate health measures, especially in cases of outbreak of vesicular stomatitis, all of which constitutes a serious risk for the countries of the unaffected area in the Americas.

The deficiencies found may be summarized as follows:

1. Insufficient number of technical staff assigned to animal health activities. At the present time there is one veterinarian for every 90,000 cattle and the range is from 1 per 214,000 to 1 per 37,000.
2. Very little research on outbreaks of vesicular stomatitis, as a result of which there is little relationship between the number of outbreaks that occur and the number reported (the Center has received 252 specimens in the course of fifteen years or 16.8 specimens per year.)

3. The quarantine measures recommended in the plan of action and other measures to be taken on an outbreak of vesicular diseases are not being applied.
4. Lack of financial and technical resources to deal with an outbreak of foot-and-mouth disease.
5. Lack of suitable transport services for the technical staff responsible for investigating and reporting outbreaks of vesicular stomatitis.
6. Lack of incinerators at airports, with the exception of Panama.
7. No adequate equipment for disinfection at ports, airports, and road terminals as well as for other animal health services.
8. The employees responsible for supervision and control of customs posts are not sufficiently trained to prevent the introduction of products of animal origin.
9. It is noted that the application of the Center's Plan of Action which is fundamentally based on the rapid discovery of vesicular outbreaks and the corresponding isolation measures is not being applied; it is therefore to be assumed that, if an outbreak of foot-and-mouth disease were to occur, it would be diagnosed very late, and consequently the disease would spread far and wide, which would cause difficulties in eradicating it.

REGIONAL ANIMAL HEALTH AGENCIES

In the region comprising Panama, Central America, and Mexico, there is a Regional International Animal Health Committee, composed of the Ministers of Agriculture of the countries of the region (CIRSA), which has an executive agency known as the Regional International Animal Health Agency (OIRSA).

This agency establishes the plant and animal health policy of the region and is a positive factor in reducing border difficulties and in actuating animal health measures.

As a result of the denouncement of the Colombia/OIRSA/PAHO agreement in March 1966 by the Republic of Colombia, the XIV Meeting of CIRSA in July 1966, approved the expansion of the foot-and-mouth disease control

program in the Darien area and decided to levy on the member countries a special contribution of US\$15,000 each, or a total of \$105,000, which together with the contributions of the Government of Panama and the Panamanian livestock institute would make it possible to step up vigilance operations in the border area.

Another OIRSA program is to have each country appoint a full-time veterinarian to deal exclusively with outbreaks of vesicular diseases. So far, three technicians have been appointed, but they lack the transport and financial resources to discharge their duties properly.

In our opinion, twelve years of experience shows that OIRSA is doing an extremely important job in plant and animal health in the region. As for the difficult tasks of preventing the introduction of foot-and-mouth disease into Panama, Central America, and Mexico, we believe that it must be endowed with sufficient technical and financial resources to allow it to accomplish this arduous task. We also believe that, in this connection, the advisory services of the Pan American Health Organization and the Pan American Foot-and-Mouth Disease Center are essential.

The Mexican-United States Commission responsible for preventing the introduction of the disease continues to operate in Mexico very efficiently since the disease was eradicated in that country.

For many years the Pan American Foot-and-Mouth Disease Center and the Pan American Health Organization have been very much interested in the disease-free area, thus the Center in 1953 when the first meeting was held in Panama provided technical assistance in laying the groundwork for the future health policy of the region.

Its laboratories were the first in the world to identify and classify sub-types of the Indiana virus of vesicular stomatitis since they possessed specific sera.

Of the work done by the Center in the disease-free area, the diagnosis of vesicular diseases is of fundamental importance and has the highest priority; for that reason when specimens are received from the unaffected area, the staff works even on holidays, if necessary, in order to give an immediate reply.

The plan of action, of which a small part is reproduced here, was prepared by the Center at a special request of the countries concerned. This plan was approved at the VI Meeting of CIRSA in Managua 1958, and revised in Mexico in 1962. It has been widely distributed in all the countries of the unaffected area.

At the request of CIRSA, a permanent consultant was assigned to the region, and since 1963 has been stationed in Panama. He has been helping with the drafting of health regulations, supervision of inspection measures at ports and airports, in educational campaigns for livestock owners and the public at large, personnel training, dispatch of vesicular specimens, and evaluation of the Colombia/OIRSA/PAHO Agreement for the prevention of foot-and-mouth disease.

Eight training courses organized in the area by the Center were attended by 55 veterinarians. It has also given assistance to the courses on plant and animal quarantine conducted by OIRSA.

COOPERATIVE FOOT-AND-MOUTH DISEASE CONTROL PROGRAM

In the course of our visit, the Ministers of Agriculture briefed us on the preparation of the preliminary draft of the Cooperative Foot-and-Mouth Disease Control Program, which had been drawn up by the OIRSA technical experts in cooperation with the technical divisions of the U.S. Department of Agriculture, and subsequently submitted to Mr. Orville Freeman, the Secretary of Agriculture.

The objectives established in this program are:

1. To make continuing surveys of vesicular diseases.
2. To investigate reports of such diseases.
3. To collect specimens and material for diagnosis by laboratory tests when necessary.
4. To train and organize livestock owners to recognize and promptly report all suspicious symptoms of vesicular diseases.
5. To develop a workable program for the prompt eradication of foot-and-mouth disease as soon as it appears, and to train the staff of the veterinary services to work in such a program.
6. To develop information services to educate stockmen on the danger of foot-and-mouth disease and other exotic diseases with important economic implications.

It is understood that the Government of the United States of America, on the one hand, and the countries of Central America on the other, will each contribute one-half of the cost of financing the program.

A special mission, headed by Mr. René David Escalante, Chairman of the CIRSA and Minister of Agriculture of El Salvador, and including Mr. Alberto Reyes Rigüero, Minister of Agriculture of Nicaragua, and Mr. Carlos Meyer Arévalo, Executive Director of OIRSA, visited Washington to place the draft project before the Secretary of Agriculture of the United States.

This mission spoke to the Secretary of Agriculture of the growing danger that foot-and-mouth disease might be introduced into the countries of Central America, Mexico, and Panama, and, consequently into the United States, and of the urgent need for a concerted effort by all of the countries unaffected by the disease to establish a more effective control policy so as to assure real protection of the livestock population and the derivative industries, and hence to support governmental programs already in operation to promote the livestock industry for the purposes both of the domestic market and the export trade.

The mission pointed out that the proposed plan would in general have the same objectives as those currently being sought by the Departments of Agriculture in Mexico and the United States, through the joint Mexican-United States Commission for the Prevention of Foot-and-Mouth Disease and that that proposal would tend to protect the livestock industry of all the countries in the disease-free area from the consequences of introduction of the disease.

Mention was also made of the potential livestock resources of some of the countries in the area.

We were told that Secretary Freeman had accepted the proposal in principle but had indicated that enabling legislation would have to be passed by the Congress before the Department could participate directly in the project, and that he had offered to take the necessary steps to accomplish this. However, in view of this reply and the fact that the procedure for obtaining such legislation is time-consuming, it was decided to try to obtain financial assistance from AID for the initial phase of the program, until such time as the United States Department of Agriculture can participate directly.

In our opinion, this was a very important step. However, it is essential that a country-by-country study be made, in order to estimate the technical, manpower, and financial resources needed to accomplish all of the above-mentioned objectives and to carry out the recommendations in the action plan of the Pan American Foot-and-Mouth Disease Center. On this basis, it will be possible to prepare a budget and establish the contributions to be made by each of the interested countries in the unaffected area.

Given the magnitude of the problem and the tremendous losses that the countries in the unaffected area might suffer, we believe that an agreement is required between the Governments, with the cooperation of

the international technical bodies such as PAHO and the Pan American Foot-and-Mouth Disease Center, as institutions of the inter-American system, and of CIRSA and its executive agency OIRSA, as institutions of the regional Panama-Central America-Mexico system.

SUGGESTIONS

We believe that it is urgently necessary to conclude the following two types of agreement in order to make sure that foot-and-mouth disease does not spread to the countries in the unaffected area. The recommended agreements are outlined below:

- A. A convention or an agreement between Colombia and the countries of the unaffected area--Panama, Costa Rica, Honduras, Nicaragua, El Salvador, Guatemala, Mexico.

This convention or agreement would provide for:

1. A commitment on the part of Colombia not to introduce animals from the affected zone into the Chocó region and to take such preventive (health) measures as may be recommended by the Pan American Foot-and-Mouth Disease Center for the countries in the disease-free area; to carry out a plan to control the disease through systematic and compulsory mass vaccination in an area on the northern coast of Colombia comprising the Departments of Antioquia (extreme north), Córdoba, Bolívar, Atlántico, Magdalena, La Goajira and North Santander, and, finally, to enforce stringent inspection at its Atlantic and Pacific ports to prevent illicit traffic in livestock or products of animal origin from those ports to Panamanian ports.
2. A commitment on the part of the governments of the countries in the unaffected area to sell disease-free stock to Colombia for the development of the Chocó zone, at special prices, in compensation for the measures that Colombia would take for the benefit of the unaffected area. The governments could subsidize the livestock owners in each country in order to compensate them for the losses occasioned by sale at special prices. The agreement would specify the number of heads, the breed and the age, as well as the prices, and it would be understood that such sale would be a one-time transaction intended to re-stock the Chocó zone.

The Mission would recommend that, if feasible, a zone be established in the northwestern part of the Chocó, west of the Atrato River, in which all stock raising would be prohibited. Immediately adjacent would be the region in which stock raising would be permitted on the conditions previously set forth.

This agreement would have the advantage of eliminating one of the points-of-entry through which the foot-and-mouth disease can most readily be introduced into the unaffected countries.

B. A convention or agreement between all of the countries in the unaffected area would have the following objectives:

1. To coordinate and carry out the health measures recommended in the action plan of the Pan American Foot-and-Mouth Disease Center in ports, airports and land terminals, on aircraft and ships, and on international buses, so as to prevent the introduction of foot-and-mouth disease.
2. To establish appropriate quarantine measures in the event of vesicular stomatitis outbreaks, until such time as a laboratory diagnosis is made, and make provision for an appropriate compensation to livestock owners for any financial losses they may suffer by reason of the quarantine measures.
3. To eradicate the disease by the slaughter of animals should an outbreak of foot-and-mouth disease occur, and provide for the corresponding payments to livestock owners who are obliged to slaughter their stock.
4. The agreement would set forth in detailed form:
 - a. The measures to be taken in defense of the unaffected area;
 - b. The technical, manpower, and financial resources that each country in the unaffected area would have to contribute according to its level of economic development.

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As factors favoring the conclusion of the first type of agreement, we mention the statement of Dr. Carlos Lleras Restrepo, President of Colombia, to the effect that Colombia would not undertake any economic activity in the livestock sector in the Chocó region that might threaten the countries in the unaffected area; the control project now being carried out by that country in the States in the Atlantic region and, finally, the concern of all governments of the disease-free countries about the potential danger of the infection.

At the same time, with regard to the convention or agreement between the countries in the unaffected area, consideration must be given to Panama's decision to establish an animal inspection zone in its border areas, in which stock susceptible to the disease could not be raised or fattened, and another control zone in which stock raising would be limited and subject to appropriate inspection.

Inasmuch as British Honduras is in the unaffected area, it would be necessary for that territory to take such sanitary measures as may be established in the agreement between the countries of the unaffected area but, since this would be difficult for reasons of a political nature, it is suggested that this case be handled through the intermediary of the Pan American Health Organization.

The Canal Zone, now under the jurisdiction of the United States, would have to be included in the agreement.

It is suggested that it would be desirable to call a meeting of Ministers of Agriculture of Colombia and of the countries in the unaffected area to consider the points referring to the proposed treaties. Such a meeting should be held as soon as possible but after the Chiefs of State Meeting.

PANAMA - 17-21 February 1967

During our visit we had an interview with Mr. Marcos Robles, the President of the Republic, and with Mr. Ruben Darío Carles, the Minister of Agriculture, Commerce and Industry. We called on the Ministers of Foreign Affairs, Treasury, and Interior, and had a meeting at the Ministry of Agriculture with the technical officers in charge of animal health. The last-mentioned meeting was also attended by Dr. Edwin Pérez, officer of the Pan American Foot-and-Mouth Disease Center, assigned to the preventive program of the disease-free area.

We explained the purposes of our mission and relayed the statement of President Lleras, which made a magnificent impression. It was suggested that Panama might sponsor the agreements referred to above.

It was also proposed that according to the established scale Panama would contribute 0.31 per cent, or US\$3,729 per year, towards the financing of the Center, and pay it through PAHO, beginning on 1 January 1968.

After a thorough discussion all of these proposals were accepted. The President of the Republic issued a communique (attached as Annex 10) in connection with the Lleras statement, in which he indicated that conversations would be initiated immediately with the Colombia Government. The Minister of Agriculture, for his part, stated that he would inform the Central American Ministers of Agriculture and OIRSA of the decisions taken.

We were handed a letter in which the Government of Panama undertook to make the above-mentioned quota contribution (Annex 11).

Information Received

We were given information about Decree No 121 of 12 May 1966 under which Panama is establishing an animal inspection zone in the area of the border with Colombia, from the Pacific to the Atlantic Coasts, running

westward from the Colombian border, in which the raising, fattening, purchase or sale of cattle or hogs and other cloven-hoofed animals, is prohibited, as is the processing for sale of by-products from this type of animal, except for the consumption of products from such animals originating in other areas of Panamanian territory.

A control area is also being established, bounded by the line at which the animal-inspection zone terminates and another line that begins at Alighandi on the Atlantic Coast and runs to a point where the borders of the provinces of Panama and Darien and of the parish of San Blas meet, following the line between Panama and Darien to the San Lorenzo Point on the Pacific Coast (see map attached.)

Within the control area described in the preceding paragraph, stock raising will be held to its present level, and its expansion will not be encouraged. The establishment of new livestock establishments will be prohibited and the national government will expropriate stock farms within the control area when so requested by the owners.

For control purposes, official veterinary doctors will periodically inspect the stock farms in that area.

The transport and movement of live hogs, as well as the meat or other products derived from hogs or cattle or any wild animal susceptible to the disease is prohibited.

In the same area no range animals are permitted, and owners of hogs and other cloven-hoofed animals must keep them penned and subject to vigilance and inspection by the Ministry of Agriculture, Commerce and Industry.

The transport of live cattle from the control zone is only permitted under a shipping manifest, and when they are intended for the yards of the stock weighing official where they will be examined by veterinarians before they can be unloaded for slaughter.

The area Panama is withdrawing from livestock development is estimated at approximately 18,000 km² (almost a fourth of the national territory) and is potentially capable of supporting 500,000 beef cattle.

CENTRAL AMERICA - 21 February-8 March 1967

The Central American countries are well advanced in their efforts toward regional integration, and hence we were interested in discussing the prevention of foot-and-mouth disease with their governments, since the solution of that problem depends on the integration measures to be taken, in one specific aspect of animal health, which will pave the way for other types of measures in this field as well as in the field of human and plant health.

A step forward has been made with the creation of CIRSA and its Executive Agency, OIRSA, to which we have previously made reference.

We informed the Presidents of the five Republics and their Ministers of Foreign Affairs, Agriculture, and Health of the statement of the Colombian President, which elicited much favorable comment and approval.

In all of these interviews, as well as in our meetings with the animal health experts in the five Republics and at OIRSA, we emphasized the need to coordinate and intensify measures to prevent the introduction of foot-and-mouth disease into the Central America area.

We laid special stress on the need for a new agreement with the Republic of Colombia which would be similar in part to the earlier one that was denounced by that country, but include some changes that would meet the requirements of both contracting parties. The new agreement should also embrace the governments of Panama and the Central American countries, and of Mexico and the United States, that is, all of the continental countries of the unaffected area. The purposes and advantages of such an agreement were discussed in great detail.

The need for a treaty that would include all of the countries in the unaffected area was stressed, since the problems of animal health and specifically of foot-and-mouth disease must be regarded as regional problems rather than individual problems of each country, and therefore resources of all countries in the unaffected area should be used to cope with prevention, quarantine and eradication since it is the only way such measures can be effectively and successfully enforced.

The Government representatives, and their technical advisers received these two proposals favorably and expressed their interest in having the respective draft proposals prepared immediately so that they could be examined, discussed and implemented at the earliest possible moment.

We also requested contributions from the Central American countries for the support of the Pan American Foot-and-Mouth Disease Center, explaining that PAHO had estimated that the Center needed an annual budget of US\$1,202,836. That amount would be covered by all of the countries in the inter-American system in accordance with the PAU quota scale, and the quota for each of the Central American countries was 0.31%, or US\$3,729 for each country. It was further explained that the annual payments should be made through PAHO, beginning on 1 January 1968. The five countries agreed in writing, in letters signed by Guillermo Iglesias P., Minister of Agriculture of Costa Rica, Alberto Reyes R., Minister of Agriculture of Nicaragua, Julio C. Pineda, Minister of Natural Resources of Honduras, René David Escalante Orozco, Minister of Agriculture of El Salvador, and Francisco Montenegro Girón, Minister of Agriculture of Guatemala. (Annexes 12, 13, 14, 15, and 16.)

COSTA RICA

In the course of our meeting with Mr. Guillermo Iglesias, Minister of Agriculture, we were told of his great concern about the economic difficulties that an outbreak of foot-and-mouth disease would cause the country, and we were asked what solution we could offer. This question, considered in the light of our background information and the actual conditions we had been observing, gave us an opening to bring up the treaty between the countries of the unaffected area.

The background mentioned is the interest shown by the Central American countries since 1961 in attempting to set up a reserve fund lest the disease be introduced; the recommendations of CIRSA that OIRSA, its executive agency, have an emergency fund; by the steps taken by PAHO and the Center in the United States to establish an emergency fund; and by the efforts of CIRSA to obtain the cooperation of the U. S. Department of Agriculture in establishing a service similar to that of the Joint Mexican-United States Commission for the Prevention of Foot-and-Mouth Disease.

We were told of the measures taken to prevent the introduction of this disease in Costa Rica, particularly with regard to the boats coming from the affected zone to load cattle in Costa Rican ports.

We had the opportunity, on two occasions, to meet with Mr. José Joaquín Trejos Fernández, President of the Republic, to whom we explained the purpose of our mission, the desirability of the proposed treaties, and expressed our appreciation for the full cooperation we had obtained in his country.

NICARAGUA

In the course of our visit to the Ministry of Agriculture and in the meeting with the animal health experts, we were told of the efforts of Mr. René David Escalante Orozco, President of CIRSA and Minister of Agriculture of El Salvador, Alberto Reyes, Minister of Agriculture of Nicaragua, and Dr. Carlos Meyer Arévalo, Executive Director of CIRSA, previously mentioned in this report.

Mr. Lorenzo Guerrero G., President of the Republic, and his Minister of Agriculture, Mr. Alberto Reyes, were in agreement with the proposals made by our mission. A communication (Annex 13A) was prepared by the President's Office stating in part: "President Guerrero offered the visitor his full support for all measures which are multilaterally agreed upon and which will help control any spread of foot-and-mouth disease in the Central American area. He also offered financial assistance for the necessary studies and the appropriate sanitary measures to avert the danger of this serious livestock disease. Moreover, he has expressed his full agreement with the statements of the Colombian Government and its President, Mr. Carlos Lleras Restrepo, to the effect that the question should be examined more thoroughly, in particular, contamination through shipping that does not undergo proper disinfection."

HONDURAS

In a meeting with the technical experts of the Ministry of Natural Resources, which was also attended by the Minister, Mr. Julio C. Pineda, we expressed our concern about the small number of vesicular specimens examined--not more than six in fifteen years. In reply we were informed that this was due to a lack of cooperation on the part of livestock owners who attached no importance to vesicular stomatitis so that when the veterinarians became aware of the problem the disease had already abated and hence no quarantine measures had been possible.

We were told that the Government of Honduras was concerned about the export of livestock in vessels coming from the affected zone, and we in turn explained the measures that should be taken in such cases, pursuant to the sanitary regulations and recommendations of the Center and of OIRSA, and drew their attention, in particular, to the use of special equipment by the personnel responsible for disinfection.

The technical staff asked that training courses be given in the countries so as to increase the number of trained personnel, since the international courses do not offer opportunities for training more than one technical expert per year, and local courses at a lower level should, in their opinion, be organized for sanitary and customs inspectors.

We had an opportunity to call on General Oswaldo López Arellano, President of the Republic, Dr. Tiburcio Carías Castillo, head of the Ministry of Foreign Affairs, and Dr. J. Antonio Peraza, Minister of Public Health, who expressed great interest in the purpose of our mission and in the proposals we made, to which they gave their full approval.

EL SALVADOR

Mr. René David Escalante Orozco, Minister of Agriculture, briefed us, giving us background information on the mission that had carried him to the United States in his capacity as President of CIRSA. Later, the Minister's report was expanded by Dr. Carlos Meyer Arevalo, Executive Director of OIRSA, when we visited the headquarters of that agency.

We had occasion to call on Colonel Julio Rivera, President of the Republic, and the Ministers of Economy and Public Health, and to explain to them the purpose of our mission, the problems observed, and our suggestions on how to solve them. They gave their full approval to our suggestions.

GUATEMALA

In Guatemala we interviewed Professor Carlos Méndez Montenegro, President of the Republic; Mr. Emilio Arenales, Minister of Foreign Affairs; and Mr. Francisco Montenegro, Minister of Agriculture. Two meetings were also held with technical personnel.

The Guatemalan authorities gave their approval to the proposals of our mission, and expressed their satisfaction with the solutions presented to the government leaders since they constituted a typical example of integration.

The animal health situation of the area was discussed, and it was agreed that neither the technical personnel nor the financial resources to combat an outbreak of foot-and-mouth disease were available.

The major problems noted by the technical experts are:

1. The paucity of technical personnel working in the field of animal health, despite the fact that there are veterinarians who would be able to do this work. (The ratio is 8 to 10 veterinarians per 1,200,000 cattle population).
2. The low level of remuneration for services rendered, with the result that the professional workers will not devote full time to such work.
3. The impossibility of applying sanitary measures, such as quarantine under the present circumstances, for lack of funds.
4. Lack of understanding of the problem on the part of livestock owners.
5. Insufficient funds for the investigation of vesicular outbreaks and the dispatch of specimen to the Center.

MEXICO. - 9-21 March 1967

The visit to Mexico was of particular importance because of the trade relations between Mexico and its neighbors in Central

America, and because the country had gone through the difficult experience of a foot-and-mouth disease eradication campaign that not only cost many millions of dollars but created certain social problems as well.

On 13 March a meeting was held in the Department of Agriculture with the Secretary, Professor Gil Preciado, and his technical staff. On that occasion the mission presented for consideration by the Mexican Government the following points connected with the measures considered essential to prevent the introduction of the disease into the disease-free area.

1. The reasons for, and the advantage of, concluding the two agreements referred to earlier were explained and the Secretary was informed of the statement made by President Lleras and its acceptance by Panama and the five Central American countries.
2. Professor Gil Preciado suggested the desirability of holding a meeting of the Ministers of Agriculture of the countries in the unaffected area and Colombia, preferably in Bogotá, as soon as possible following the meeting of Heads of State at Punta del Este, to study all the aspects for which provision should be made in both agreements.
3. We pointed out the need for adequate and permanent financing of the Pan American Foot-and-Mouth Disease Center, the agency in the inter-American system devoted to the specific study of this disease and to the rendering of technical assistance to the countries, and for such funds to be provided by all the countries in the system according to the scale of quotas for the support of the OAS, and paid to PAHO beginning 1 January 1968. The Mexicans were informed that their quota would be 6.26 per cent, or US\$75,297 per year. It was indicated that this new method of payment was being proposed because both OAS and PAHO considered that an institution at the highest technical level, dedicated primarily to research, diagnosis, technical assistance and training for the purpose of foot-and-mouth disease control should not be subject to possible budget cuts or delays in the receipt of funds.
4. The special case of British Honduras and the Panama Canal Zone, in the matter of the coordination of health measures, was discussed.

The same subjects were discussed with Dr. Rafael Moreno Valle, Minister of Health, and Mr. Antonio Carrillo Flores, Minister of Foreign Affairs.

As for the treaties to be concluded, the Minister of Foreign Affairs expressed his satisfaction in the name of the Mexican Government with the proposals made, and stated that Mexico would give its full support to the conclusion of the agreements.

With regard to the quota, it was agreed in principle that the amount would be paid directly to PAHO, but I was told that a decision would have to be made whether the payment would imply an increase in the overall Mexican contribution to the support of international agencies, or whether it would be a deduction from the quota Mexico pays to support the OAS. In any case, it would be necessary to hold consultations on this point before giving a reply in writing.

UNITED STATES OF AMERICA. - 21-28 March 1967

After making oral reports to Dr. Abraham Horwitz on 22 March, and to Dr. José A. Mora, on 23 March on the impressions we had gained during our visits to the member states of the inter-American system and the results reached, we had our first meeting with the animal health experts in a working session on 24 March, under the chairmanship of Dr. Abraham Horwitz, which was attended by Dr. John C. Cutler, Assistant Director; Dr. Frank Mulhern, Director of Animal Health, U.S. Department of Agriculture; Dr. Benjamin Blood, Division of International Health, U.S. Public Health Service; Dr. Nels Konnerup, Office of War on Hunger, AID; Dr. Virgil Petersen, AID; Dr. Alfredo Bica, Chief of the Communicable Diseases Branch, PAHO, and Dr. Pedro N. Acha, Regional Adviser on Veterinary Medicine, PAHO.

At this meeting, the undersigned made a detailed report on the following points:

1. The present status of the foot-and-mouth disease campaign in the countries of South America.
2. The special situation of Colombia among the countries of the affected area, as the country bordering on the disease-free area.
3. Preventive measures in the disease-free area.
4. Importance of concluding an agreement between the countries in the unaffected area on one hand and Colombia on the other, aimed at strengthening health measures to prevent introduction of the disease into the countries in the unaffected area.
5. Need for a convention between the countries of the unaffected area for the coordination and enforcement of general health measures, quarantine measures and possibly eradication measures in the event of an outbreak of foot-and-mouth disease; it should stress that this disease should be regarded as a problem of the region and not as a separate problem of each of the countries in the unaffected area.
6. The urgent need to make a study to assess the technical, human and economic resources required in each country and in the unaffected area as a whole, was emphasized.
7. The special situation of British Honduras, as a territory that is not a member of the inter-American system, and of the Canal Zone, was explained.
8. Emphasis was given to the fundamental role of the Pan American Foot-and-Mouth Disease Center both in the campaign against this disease and in the preventive measures that should be taken in the affected area and in the unaffected area, and the desirability that it be given an adequate and permanent financing beginning on 1 January 1968. It was pointed out that the present financing is inadequate and that all of the Latin American Governments have accordingly agreed to pay the required quotas directly to PAHO, amounting to 34 per cent of the Center's budget, or US\$1,202,836. It was indicated that the quota for the United States would be 66 per cent.
9. The desirability of holding a Conference of Ministers of Agriculture of the countries in the unaffected area, in Colombia and preferably in Bogotá, following the meeting of Chiefs of State in Punta del Este was stressed.

At the conclusion of this report, which was supplemented by Dr. Abraham Horwitz, the experts present brought up the following questions:

1. Dr. Blood, the situation of the countries in the unaffected area in the West Indies, in the framework of these continental plans.
2. Dr. Mulhern, the need to coordinate national plans so that the continental campaign might be effective.
3. Dr. Petersen, the need to prepare for the meeting of Ministers of Agriculture.

The following answers were given:

1. A special mission will be sent to the Caribbean countries at the earliest possible date.
2. It is essential to stimulate the national campaigns as a preliminary step to the coordination of national plans; Brazil, Paraguay, Uruguay, Argentina and Chile have already organized a multinational committee; Ecuador, Colombia and Venezuela propose to do the same, and finally, Peru and Bolivia are getting ready to coordinate their campaigns.
3. The technical bodies of the OAS and the PASB will prepare drafts of the suggested agreements and will make the necessary technical and economic studies, all of which will be presented to the Ministers prior to the meeting in Bogotá, if it is so agreed.

As agreed, we met on 28 March 1967 with Dr. Lincoln Gordon, Assistant Secretary of State for Latin American Affairs, accompanied by Dr. José A. Mora, Secretary General of the Organization of American States and Dr. Abraham Horwitz, Director of the Pan American Sanitary Bureau, to give a report on the results of our mission and to request the cooperation of the United States for the permanent financing of the Pan American Foot-and-Mouth Disease Center. Mr. Howard Calderwood, Office of International Economic and Social Affairs, Department of State; Mr. Simon N. Wilson, Officer in Charge of Inter-American Organizations and Conferences, Department of State; Dr. Virgil Petersen, Agency for International Development; Mr. Curtis Cutter, Chief, Political Affairs, Office of Peruvian Affairs, Department of State; and Dr. Pedro N. Acha, Regional Adviser on Veterinary Medicine, Pan American Sanitary Bureau, also attended the meeting.

After informing Dr. Gordon of the splendid reception given to me in the Latin American countries, I made a detailed report on the following points:

1. Status of the foot-and-mouth disease problem in the affected countries and of the preventive measures in force in the unaffected area.
2. Present status of the national foot-and-mouth disease campaigns in the South American countries and the possibilities of integrating them into a multinational campaign.
3. Status of the problem in Colombia and its relation to the countries in the unaffected area, as well as the statement made by President Carlos Lleras Restrepo, which was received with deep satisfaction by the Central American countries and Mexico.
4. The importance of concluding an agreement between the countries of the unaffected area and Colombia to strengthen preventive health measures in the Chocó region of Colombia. Likewise, the necessity of a treaty between the countries of the unaffected area for the establishment and coordination of the necessary measures for preventing the introduction of the disease and for concerted action in the event of an outbreak. Before this treaty is concluded, a thorough study must be made to determine the available human, technical and financial resources in each country and those that will be needed by each to carry out the above-mentioned measures effectively.
5. The desirability of holding a conference of Ministers of Agriculture of the countries in the unaffected area and Colombia, which could be held in Bogotá, on a date subsequent to the meeting of Chiefs of State in Punta del Este.
6. In conclusion, I pointed out that the Pan American Foot-and-Mouth Disease Center has a leading role to play in the control of this disease in the affected countries, and in the application of preventive measures in the unaffected area. Accordingly, it should be provided with an adequate and permanent budget beginning January 1968. I informed Dr. Gordon that the current budget is inadequate, and pursuant to a resolution adopted at the Fifth Meeting of the IA-ECOSOC, the Governments had been approached to obtain appropriate financing. After a careful study of the activities carried out by the Center and the expansion needed if it was to render improved services to the countries in carrying out their national

campaigns against the disease and in the coordination of these campaigns at the regional level, it had been estimated that a budget of US\$1,202,836.00 would be required. That was regarded as a very conservative budget, considering the heavy responsibilities assumed by the Center and the benefits derived from its activities. All of the Latin American Governments approached on our trip had agreed to pay quotas, based on the PAU scale directly to the Pan American Health Organization. It was indicated that the United States' quota would be 66 per cent, and that the United States was being formally requested, in the name of Latin American Governments, to contribute this sum to support the Center, which played an essential role in the campaign against foot-and-mouth disease in the Americas.

I reported to Dr. Gordon the great satisfaction of the Latin American countries with the interest expressed by President Johnson in supporting foot-and-mouth disease control in the Hemisphere, so eloquently expressed in his message to the Congress on 28 February 1966:

"Control or eradication of animal diseases could increase the meat supply by more than 25 per cent in a number of developing nations. As many as three-fourths of the rural population suffer from debilitating diseases that originate in animals. I am requesting funds to support the Pan American Health Organization in developing and testing vaccines against rabies and foot-and-mouth disease. In addition, we will support the Pan American Health Organization, as it initiates and expands control measures against foot-and-mouth disease in several Latin American countries." (Department of State Bulletin, Vol. LIV, No. 1392, February 28, 1966, "President Johnson's Message to Congress on International Education and Health.").

On conclusion of this report, Dr. Gordon expressed his pleasure at the success of the mission and the benefits that would accrue from the decisions taken by the Latin American countries in their attack on a common problem, and stated that the United States is resolved to cooperate in its solution. One of the problems specifically cited by Dr. Gordon concerns the financing of the Center. He indicated that the amount did not present any particular problem but that it would have to be presented in the appropriate form so that it could be handled under the existing administrative procedures. He continued to say that both he and his staff had been giving considerable thought,

and are continuing to do so, to an appropriate and rapid solution that would obviate any administrative complication. Mr. Wilson observed that the current Government policy was not in favor of establishing new inter-governmental bodies under the inter-American system and in this connection, he continued, Congressional approval of the quota might encounter difficulties.

Dr. Horwitz pointed out in this connection that the Pan American Foot-and-Mouth Disease Center has been incorporated in the Pan American Sanitary Bureau for sixteen years, and that the only question involved was the strengthening of its financial position--removing it from the Technical Cooperation Program of the OAS, as recommended in a resolution of the IA-ECOSOC--but not the establishment of a new inter-American body. Dr. Horwitz added that the Pan American Foot-and-Mouth Disease Center has been administered by the Pan American Health Organization ever since its establishment, under a delegation of authority by the OAS. Its program and budget were approved each year by the Governing Bodies of the Pan American Health Organization. Dr. Horwitz pointed out that it was a matter of a specific financial contribution to the Center, as a supplement to the annual quota that the United States contributed to the Organization, as did all the Member Governments.

In this exchange of views, both Dr. Gordon and Mr. Wilson agreed that a way should be found to solve the problem of financing the Center. They stated further that the United States was giving special attention to the latter problem and was prepared to make every possible effort to find a positive and favorable solution in the matter.

Dr. Mora, in turn, clarified certain points in relation to the Pan American Foot-and-Mouth Disease Center which has been sponsored by the OAS Technical Cooperation Program, in cooperation with the Pan American Health Organization, for the previous sixteen years.

He referred to the Meeting of Ministers of Agriculture recommended by the PAHO Adviser for the purpose of approving the special agreement proposed for the unaffected area and Colombia, and suggested that perhaps it might be held concurrently with the next meeting of IA-ECOSOC, to which the interested governments would be invited to send their Ministers of Agriculture.

In concluding the meeting, Dr. Gordon again expressed the desire of the United States to cooperate and to participate in putting the financing of the Pan American Foot-and-Mouth Disease Center on a stable basis, and offered to seek a prompt solution to assure the contribution of his Government.

CONCLUSION

The international agencies are fully justified in their concern for the tremendous losses foot-and-mouth disease is causing in South America, and for those that the introduction of the disease could cause in the area now unaffected.

International credit institutions, such as the Inter-American Development Bank and the World Bank, are linking their livestock development loans to the financing of campaigns to combat foot-and-mouth disease.

It is pertinent to note that the Inter-American Development Bank has given serious consideration to the fact that foot-and-mouth disease is a very grave problem for those South American countries in which the livestock industry is of major importance to economic development and to the supply of meat and milk for a population whose diet is deficient in proteins.

The Bank has rightly concluded that livestock production is not keeping pace with the accelerated rate of population growth in the Hemisphere, and is unable to meet the domestic demand while, at the same time, the demand for meat on the world market is expanding rapidly.

Foot-and-mouth disease is seriously hampering intra-regional trade among the member countries of LAFTA and the Central-American Common Market, and at the same time is restricting export markets and impeding Latin American plans for integration.

The policy of the Inter-American Development Bank quite logically includes the promotion of livestock production, to offset the imbalance between a supply that is failing to keep pace with the demand, to increase export earnings and to encourage production of animal proteins in an area where the deficiency of high-quality proteins is one of the most serious problems.

The Bank has the support of the Pan American Health Organization, through the Pan American Foot-and-Mouth Disease Center, which acts as a coordinating institution for the Bank's activities in programming the control and prevention of foot-and-mouth disease.

The Pan American Health Organization acts as an advisory body to IDB on all plans for the financing of foot-and-mouth disease campaigns, and renders advisory services to the countries in matters of sanitary control and international agreements and in preparing projects for the control of the disease where they are lacking and in organizing those that already exist. The Bank has also established criteria for evaluating and studying loan applications, covering economic, administrative, financial and regional aspects, in line with the operating policy governing the Bank's activities.

The Pan American Health Organization and the Pan American Foot-and-Mouth Disease Center have made such an important contribution to the campaign against the disease that the international credit institutions consider their participation essential.

The Joint Argentine-United States Commission, on terminating its work in Tierra del Fuego, made the following statement with reference to the Pan American Foot-and-Mouth Disease Center, expressing its interest in continued utilization of the technical resources offered by that institution:

"The Argentine-United States Joint Commission on Foot-and-Mouth Disease has found the counsel and cooperation of the Pan American Foot-and-Mouth Disease Center to be invaluable in its program of research. In planning future work the Commission finds continuing participation of the Center to be essential not only for its own interests but also because expectation that the results from the research will promote efficiency in the control and eradication programs now developing in South American countries.

"The current financial position of the Center, without prospects of immediate amelioration, provokes serious concern within the Commission. We urge all those who may be in a

position to assist in the restoration of its operating funds to make every effort to correct the existing situation promptly and to take realistic steps to assure that adequate continuing support will be extended. The Commission is appalled that such action can be taken in view of the Center's demonstrable contribution to Latin American welfare."

This statement was transmitted to the President of the National Academy of Sciences of the United States, over the signature of Mr. George C. Poppensiek, Chairman of the United States Delegation on the Joint Argentine-United States Commission, with the concurrence of the Argentine Delegation.

We are certain that honoring of the pledges made by the Governments of the American States for the adequate and permanent financing of the Center will be reflected in even more effective action on its part in its technical assistance and training activities, and in its important research programs.

The countries visited have indicated that they would be pleased to see the Pan American Foot-and-Mouth Disease Center continue under the technical and administrative supervision of the Pan American Health Organization, in this way assuring themselves of the valuable cooperation they have been receiving from these institutions over the last sixteen years.

We hope that through the organization of national programs for the control of foot-and-mouth disease in these countries, strengthening of existing campaigns, and their coordination at the regional level, an effective hemisphere-wide campaign will be launched against this disease in the affected zone and that, at the same time, the two agreements suggested herein will prevent the introduction of the disease into countries that are now free of it and its disastrous consequences.

Washington, 28 March 1967

Edgardo Seoane
Carlos Palacios

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER
BUDGET ESTIMATES

	<u>Field Services</u> \$	<u>Train- ing</u> \$	<u>Research</u> \$	<u>Adminis- tration</u> \$	<u>Tech- nical Council</u> \$	<u>Total</u> \$	<u>Total</u> %
Personnel Services	275,101	148,414	353,945	66,564	-	844,024	70.2
Duty Travel	28,137	1,787	11,287	1,787	-	42,998	3.6
Fellowships	-	46,200	-	-	-	46,200	3.8
Supplies and Equipment	23,833	29,164	133,234	1,100	-	187,331	15.6
Contractual and Other Services	18,179	18,177	19,827	1,100	25,000	82,283	6.8
Total:	<u>345,250</u>	<u>243,742</u>	<u>518,293</u>	<u>70,551</u>	<u>25,000</u>	<u>1,202,836</u>	
% Total:	28.7	20.3	43.1	5.8	2.1	-	100.0

DISTRIBUTION OF THE BUDGET OF
THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER
IN ACCORDANCE WITH THE QUOTA SCALE OF
PAU

<u>País</u>	<u>Percentage</u>	<u>Contribution in \$</u>
Argentina	7.11	85,522
Bolivia	.31	3,729
Brazil	7.34	88,288
Chile	2.09	25,139
Colombia	1.78	21,410
Costa Rica	.31	3,729
Cuba	1.54	18,524
Dominican Republic	.31	3,729
Ecuador	.39	4,691
El Salvador	.31	3,729
Guatemala	.31	3,729
Haiti	.31	3,729
Honduras	.31	3,729
Mexico	6.26	75,297
Nicaragua	.31	3,729
Panama	.31	3,729
Paraguay	.31	3,729
Peru	.69	8,299
United States of America	66.00	793,872
Uruguay	.77	9,262
Venezuela	2.93	35,242
	<u>100.00</u>	<u>1,202,836</u>

ANNEX 2
(Translation)

REPUBLIC OF VENEZUELA
Ministry of Agriculture and Livestock
Directorate for Animal Health and Industry
Division of Animal Health

No. Sia 000506

Caracas, 12 January 1967

Mr. Edgardo Seoane,
Special Representative of OAS and PASB,
Caracas.-

Sir:

I have pleasure in transmitting to you our formal reply to the points made by you in conjunction with your important mission.

In the light of your statement and the favorable opinion expressed unanimously by the working meeting arranged for the purpose -with which I am fully in agreement- I have the honor to inform you that this Ministry has confirmed its support of the project for financing the Pan American Foot-and-Mouth Disease Center, in accordance with the terms and general conditions laid down.

Convinced as we are of the tremendous importance for the Continent of continuing and expanding the activities of the Pan American Foot-and-Mouth Disease Center, especially in regard to research on new and more potent vaccines and the survival of the virus in meat products; considering too the economic effects of the disease on livestock development throughout the Continent, and reiterating the explicit and logical stand taken by Venezuela in this matter, we have no hesitation in supporting the proposal for a new joint effort for the continued operation of a body vital to the coordination of the Continental campaign against foot-and-mouth disease.

I shall be grateful if you will kindly transmit this decision to the agencies which you so ably represent, and I wish you every success in your important mission, which I am sure will be warmly welcomed throughout all the sister nations of this Continent.

I have the honor to be, etc.

(Signed)
Alejandro Osorio
Minister of Agriculture and Livestock

ANNEX 3
(Translation)

Rio de Janeiro, 19 January 1967

Dr. Edgardo Seoane.

Sir:

In accordance with the understanding reached between us, I am happy to confirm herewith the intention of the Ministry of Agriculture to contribute the sum of \$88,288 to the Pan American Sanitary Bureau in 1968 specifically for the financing of the Pan American Foot-and-Mouth Disease Center.

I have the honor to be, etc.

(Signed)
Severo Fagundes Gomes
Minister of Agriculture

ANNEX 4
(Translation)

Ministry of Agriculture and Livestock
("Centenary of the National Epic,
1864 - 1870")

S/Nº 23

Asuncion, 24 January 1967

Mr. Edgardo Seoane,
Special Representative of OAS and PASB,
Asuncion, Paraguay

Sir:

I have the honor to inform you, on behalf of the Government of Paraguay, that we are fully in agreement with the proposals you put forward for joint efforts to promote the foot-and-mouth disease campaign on the occasion of your visit to Paraguay as special representative of OAS and PASB.

I am happy to confirm that at the working meetings held between us in which we discussed exhaustively all the problems relative to foot-and-mouth disease, especially the question of campaigns at the national level and the need for integrating these at the continental level, there was entire agreement between us.

Fortunately, as you are aware this country has already gone ahead with the preparation of a control plan; this has now been completed and as soon as the legislation approving it has been enacted, it will be submitted to the international organizations with a view to financing. In this connection, your good offices with these bodies in favor of our application will be greatly appreciated.

In the interest of integration, I consider it of vital importance to continue and strengthen the Pan American Foot-and-Mouth Disease Center so as to make it an organ capable of undertaking the direction and coordination of efforts to this end.

To attain our goal, I fully share the view that each participating country within the Continent should make its contribution to the financing of the Pan American Foot-and-Mouth Disease Center by means of an annual quota payable through the Pan American Sanitary Bureau, beginning in 1968.

As regards this country's quota payment of \$3,729, I am happy to inform you that my Government is in agreement and will include it among the funds allocated for the campaign, taking advantage of the fact that the financial structure of the plan provides for this type of investment.

I have the honor to be, etc.

(Signed)

Ezequiel Gonzalez Alsina
Minister of Agriculture

ANNEX 5
(Translation)

Telegram from the Government of Uruguay, Montevideo

To: PAN AMERICAN SANITARY BUREAU,
BOGOTA

17 February 1967

PLEASE INFORM MESSRS. SEOANE AND PALACIOS URUGUAY NATIONAL COUNCIL
OF GOVERNMENT YESTERDAY APPROVED PARTICIPATION IN FINANCING PAN
AMERICAN FOOT-AND-MOUTH DISEASE CENTER

ANNEX 5(A)
(Translation)

REPUBLIC OF URUGUAY
Ministry of Livestock and
Agriculture

C. t. No. 104061

Montevideo, 23 February 1967

Dr. José A. Mora
Secretary General
Organization of American States

Sir:

On my return from the Federal Republic of Germany I was informed of the visit to this country of the Vice-President of the Republic of Peru, Mr. Edgardo Seoane, as special representative of the Organization of American States and the Pan American Health Organization to discuss the problem of foot-and-mouth disease in the Americas and the coordination of a Continent-wide campaign for the gradual elimination of the disease.

I need hardly say that such a project has the full support of the competent authorities and technical organs in Uruguay, and is entirely in keeping with all the efforts being made by this country to organize an intensive and effective campaign against foot-and-mouth disease, which does untold harm to the economy, both by destroying or decimating the herds, and by directly or indirectly increasing the difficulties of marketing our meat products abroad.

During his stay in this country, the distinguished visitor was explicit in regard to the purpose of his mission, and was informed at the political and technical level of our future plans and of the work already carried out by Uruguay in this Matter. He was likewise assured of the support of Uruguay for the notion of reinforcing the activities of the Pan American Foot-and-Mouth Disease Center and its agreement in principle, to meet the annual quota of approximately \$7,500 payable by Uruguay in the event of the project as programmed likewise enlisting the financial support of the Government of the United States of America.

Nevertheless, in order to enable the Executive to adopt the specific resolutions called for, I should be grateful if you could furnish this Ministry with a report on the general outcome of the mission, and in particular with information as to the way in which the financial support of the countries to the Pan American Foot-and-Mouth Disease Center will be administered.

I would inform you at the same time that the National Council of Government of Uruguay, at a meeting held on 16 February 1967, approved the text of the present note.

I have the honor to be, etc.

(Signed)
Wilson Ferreira Aldunate
Minister of Livestock and
Agriculture

ANNEX 6
(Translation)

Office of the Secretary of State
for Agriculture and Livestock

Buenos Aires, 1 February 1967

Dr. José A. Mora
Secretary General,
Organization of American States
Washington, D. C.

Sir:

With reference to the visit of Mr. Edgardo Seoane to this country on a special mission from the Organization of American States to outline a scheme for financing the Pan American Foot-and-Mouth Disease Center in Rio de Janeiro from 1 January 1968 so as to expand and improve the valuable advisory work being done by the Center in the campaign against the disease on this Continent, I have to inform you that the Republic of Argentina is ready to support enthusiastically and actively any efforts to further the development of this research body.

Consequently, I am happy to inform you that the Office of the Secretary of State for Agriculture and Livestock, through the divisions concerned with the study, control and elimination of foot-and-mouth disease, will have great pleasure in making the cash contribution fixed for it in accordance with the OAS quota scale, which we are informed will mean 7.11% for the first three years beginning 1968, or the sum of \$85,522 annually.

We trust that the work of the Center will thus be adequately financed and brought to maximum efficiency. This cannot fail to benefit the foot-and-mouth disease programs undertaken by the various countries, the only real solution to the control of the disease throughout the American Continent.

I have the honor to be, etc.

(Signed)
Lorenzo A. Raggio
Secretary of State
for Agriculture and Livestock

ANNEX 7
(Translation)

REPUBLIC OF PERU
Ministry of Agriculture

Lima, 11 February 1967

Of. No. 97 SGA

Mr. Edgardo Seoane
Special Representative of OAS and PASB

Sir:

In the course of our conversation in connection with the study entrusted to you by the Organization of American States and the Pan American Sanitary Bureau on the control of foot-and-mouth disease throughout the American Continent, you urged the desirability that the various countries should contribute funds to finance the Pan American Foot-and-Mouth Disease Center, in view of the growth of its expending activities as adviser to Governments in regard to research and the execution of campaigns for the control of foot-and-mouth disease.

The Government of Peru is well aware that control of foot-and-mouth disease at the Continental level and the ultimate eradication of the scourge depends basically on a vast joint effort by the American countries. It therefore feels that the utmost support should be given to the Pan American Foot-and-Mouth Disease Center as an organ of coordination and advice in respect of the campaigns to be carried out by our countries at the Continental level, in view of the valuable work it is doing in this country and in the countries affected and threatened by the scourge of foot-and-mouth disease.

Since my Government is eager to give concrete expression to the above, it has enacted the attached Executive Resolution No. 54, under which the National Budget for 1968 will include an item of nine thousand dollars (\$9,000) as Peru's contribution to the financing of the Pan American Foot-and Mouth Disease Center.

Thanking you for the valuable information you gave us in connection with the above-mentioned disease, I have the honor to be, etc.

(Signed)
Javier Silva Ruete
Minister of Agriculture

REPUBLIC OF PERU
Ministry of Agriculture

(Coat of Arms of Peru)

Register No. 54

Lima, 9 February 1967

EXECUTIVE RESOLUTION

CONSIDERING:

That foot-and-mouth disease, an enzootic disease in this country, is the cause of considerable economic loss to the livestock industry of Peru,

That the Pan American Foot-and-Mouth Disease Center has been providing advisory services and technical assistance to the competent organs of the Ministry of Agriculture for more than five years,

That the Pan American Foot-and-Mouth Disease Center needs the help of the countries of the Americas in financing its budget if it is to cope with the expansion of its operations occasioned by the increase in the assistance it furnishes to them,

That the specialists of the Ministry of Agriculture are agreed as to the need for the continued advice and technical assistance of the Pan American Foot-and-Mouth Disease Center at the level of active campaigns and research services for the effective prosecution of the national campaign against foot-and-mouth disease,

That the quota scale adopted for financing the Center is that of the Organization of American States, under which Peru's quota would be the equivalent of 0.7 per cent, and

That to enable Peru to comply with this international undertaking it is desirable that an appropriate item should be added to the Functional Budget of the Republic of Peru for the year 1968,

IT IS RESOLVED AS FOLLOWS:

The Minister of Agriculture shall include in the Functional Budget of the Republic of Peru for the year 1968 an item in gold soles equivalent to the sum of \$9,000 (Nine thousand U.S. Dollars) to be handed over by the Directorate of Agricultural Inspection and Protection to the Pan American Sanitary Bureau as Peru's contribution to the Pan American Foot-and-Mouth Disease Center.

The present Resolution shall be countersigned by the Minister of Agriculture and the Minister of Finance and Commerce.

(two signatures - Illegible)

ANNEX 8
(Translation)

OFFICE OF THE PRESIDENT OF THE REPUBLIC
REPUBLIC OF COLOMBIA

Bogota, 17 February 1967

In the course of the conversation between the President of the Republic, Dr. Lleras Restrepo, and the Vice-President of Peru, Mr. Seoane, the President made the following general points:

In weighing the problem of the possibility of foot-and-mouth disease spreading along the frontier between Colombia and Panama, the Government of Colombia is concerned above all with the question of international solidarity. The advantage to Colombia of the livestock development of the border region, although it is of some local importance to a region as poor as Chocó, can hardly be considered seriously if at the same time it is calculated to have the disastrous effect which the spread of foot-and-mouth disease would have for Panama and the other Central American Republics which are building up their meat export industry. This being so, Colombia would not hesitate to sacrifice its own interests, since it feels that the interests of the neighboring Republics, whose prosperity Colombia would not wish to jeopardize in any way, are more important and most be protected.

It would seem that the lack of overland routes practically rules out the danger of foot-and-mouth disease being spread in this way at present; and in addition, the health authorities of Colombia have taken steps to maintain the livestock west of the Atrato River in perfect health. Nevertheless, the Colombian Government endorses the views of President Lleras and is anxious that this question should be examined more fully together

- 2 -

with the seemingly more difficult problem of the possibility of the disease being spread by boats crossing the river and not properly disinfected. If a sober and impartial study were to show that there was a danger of Panamanian and Central American livestock becoming affected, President Lleras would not hesitate to put in motion the necessary measures to eliminate any risk even if it meant economic sacrifices for the Colombian Government, which would have to seek other alternatives for the land now peopled with livestock, or to purchase the land from the owners.

At all events it is essential to ascertain whether there is a real danger. If there is, President Lleras considers that there is a clear disparity between the benefits that Colombia may obtain from its livestock exploitation of the zone in question and the risk it represents for our good neighbours in Central America, and that their welfare must have priority.

M e m o r a n d u m
FOOT-AND-MOUTH DISEASE IN COLOMBIA

To: His Excellency Dr. Carlos Lleras
Restrepo, President of the Republic
of Colombia.

1. With regard to the document "Specific Programs of the Ministry of Agriculture, Livestock Division", we would point out that the five-year plan will cover only 5 million head of cattle in the northern coast zone of Colombia, on a budget of \$57,854,410. We consider that a national foot-and-mouth disease campaign is called for, the zonal priorities to be set in accordance with the density of the cattle population and the interests of the country. Such a plan would determine whether the "Specific Program for the Foot-and-Mouth Disease Campaign on the Northern Coast of Colombia" should have top priority. The plan should take due account of the guidelines and principles laid down by PASB and accepted by IDB.
2. At the present time, Colombia administers some 8 million doses of vaccine, which at most will immunize 4 million head of cattle, or only 25 per cent of the total cattle population. These figures indicate that 75 per cent of the cattle population are unprotected and would be seriously affected if an epizootic of foot-and-mouth disease were to occur, and this could have repercussions on the general economic situation.
3. The main causes of the low level of immunization of the cattle population would appear to be:
 - (a) Lack of concern and understanding of stock raisers about the problem;
 - (b) Lack of adequate resources for vaccination.

With regard to (a) the solution might lie in compulsory measures: no granting of loans, no authorization of movement or sale of cattle without the corresponding vaccination certificate. In addition, it would be necessary to step up educational campaigns. With regard to (b), a study might be undertaken to obtain external financing. If that were done, it would be necessary to establish the financial share of the Government and of the Colombian stockraisers, within that part of the total costs covering local operations.

4. Since Colombia is the country with the greatest livestock potential, and in view of its geographical border with the disease-free area of the Continent, it is vitally important to draw up and conclude treaties concerning foot-and-mouth disease with Colombia's neighbors, especially Panama.

Egota, 15 February 1967

(Signed)
Edgardo Seoane

(Signed)
Carlos Palacios

STATEMENTS BY THE PRESIDENT OF THE REPUBLIC OF PANAMA

The president of the Republic, Mr. Marcos A. Robles, stated at the meeting held this morning with Mr. Edgardo Seoane, Vice-President of Peru, in the presence of the Ministers of the Interior, Agriculture, Health and Finance, that he had asked the Government of Colombia to resume conversations with a view to reaching a solution to the problem of foot-and-mouth disease.

President Robles indicated that he was most gratified by the attitude of the President of Colombia, Carlos Lleras Restrepo, as expressed in statements made to Vice-President Seoane of Peru and published by the latter in Panama.

The Panamanian Head of State said that the statement showed President Lleras to be a great statesman and a great American, and it would undoubtedly bind Panama and the rest of Central America even more closely to Colombia.

The President added that the Panamanian Chancellery would take of the question together with the Ministry of Agriculture, and that his personal representative in Bogota, Dr. Hernán Porras, would be paying a visit shortly in that connection.

Negotiations with Colombia would involve not only the Panamanian Government but the International Regional Animal Health Agency (OIRSA) as well.

(Seal reading: "Republic of Panama,
Ministry of Agriculture, Commerce
and Industry.")

ANNEX 11
(Translation)

REPUBLIC OF PANAMA
Ministry of Agriculture, Commerce
and Industry

D. M. 67-690

Panama, 18 February 1967

Mr. Edgardo Seoane,
Vice-President of Peru

Sir:

I would refer to the interesting talks we had this morning in my Office, in the presence of a number of national and international officials, when we discussed the foot-and-mouth disease situation on this Continent.

I wish to reiterate on behalf of the Panamanian Government that we are ready to participate and cooperate actively in any programs recommended by either the Pan American Foot-and-Mouth Disease Center or the Organization of American States.

To this end, the Republic of Panama agrees to contribute the quota assigned to it within the scale fixed by OAS, namely 0.31 per cent, or the sum of \$3,729,00 yearly.

I trust that as a sequel to your important mission, the American countries will be in a position to carry out an effective campaign against the scourge of Foot-and-Mouth Disease.

I have the honor to be, etc.

(Signed)
Ruben D. Carles Jr.,
Minister of Agriculture, Commerce and
Industry

Act No. 57 of 2 February 1967, by which extraordinary powers are temporarily vested in the Executive in conformity with article 118 (25) of the National Constitution, states as follows Article 23:

"To draw up regulations to deal with infectious and contagious diseases in animals

To adopt the measures required for purchasing from the livestock owners affected by the quarantine system applied in connection with the campaign for the prevention of foot-and-mouth disease in the province of Darién, Colón and the frontier district of San Blas."

ANNEX 12
(Translation)

MINISTRY OF HEALTH
Republic of Costa Rica

No. 1083-67

San Jose, 22 February 1967

Mr. Edgardo Seoane
Special Representative of OAS and PAHO
to study the problem of Foot-and-Mouth
Disease in the Americas,

Sir:

In accordance with our conversation with you today, we have pleasure in informing you herewith that we undertake to include in the Regular Budget an annual item of \$3,729,00 (Three thousand seven hundred and twenty-nine dollars) to be handed over to the Pan American Sanitary Bureau for the financing of the Pan American Foot-and-Mouth Disease Center.

We have the honor to be, etc.

(Signed)
Dr. Alvaro Aguilar Peralta
Minister of Health

(Signed)
Guillermo Yglesias P.
Minister of Agriculture and Livestock

Copies to: The President of the Republic
The Director of the Pan American Sanitary Bureau
The Secretary General of OAS
The Minister of Finance
The Director of the Planning Officer
The Representative of OAS in Costa Rica
The Representative of PAHO/WHO in Costa Rica
The Undersecretary for Health
The Health Budget Officer
The files of the Ministry of Health and
the Ministry of Agriculture.

ANNEX 13
(Translation)

MINISTRY OF AGRICULTURE AND LIVESTOCK
Republic of Nicaragua

Managua 25 February 1967
("Ruben Dario Year")

Mr. Edgardo Seoane
Vice-President of the Republic of Peru,
Special Representative of OAS and PAHO
to study the problem of Foot-and-Mouth
Disease in the Americas

Sir:

As a sequel to the conversations held with both the President of the Republic, Dr. Lorenzo Guerrero, and the undersigned, I am happy to confirm herewith the willingness of the Government of Nicaragua to furnish all possible cooperation for the financing of the Pan American Foot-and-Mouth Disease Center and the development of its work programs.

In consequence, and pending special instructions from the President of this Republic, authority is being given to include in the General Expenditure Budget the percentage fixed under the OAS quota namely 0,31 per cent, or an amount of \$3,729 each year, as Nicaragua's contribution to this project.

Let me say once again that I hope the important mission so wisely entrusted to you will be entirely successful, in view of its tremendous importance for the future of livestock in this region of America.

I have the honor to be, etc.

(Signed)
Alberto Reyes R.
Minister of Agriculture and Livestock

OFFICE OF THE PRESIDENT OF THE REPUBLIC
INFORMATION AND PRESS DEPARTMENT
MANAGUA, NICARAGUA

PRESS RELEASE

The President of the Republic, Dr. Lorenzo Guerrero, yesterday received in his office at the Presidential Mansion the Vice-President of Peru, Mr. EDGARDO SEOANE, who is making a tour of the countries of the Central American Isthmus in connection with the establishment of general measures to prevent the spread of foot-and-mouth disease in the region.

President Guerrero offered the visitor his full support for all measures which are multilaterally agreed upon and which will help control any spread of foot-and-mouth disease in the Central American area. He also offered financial assistance for the necessary studies and the appropriate sanitary measures to avert the danger of this serious livestock disease. Moreover, he has expressed his full agreement with the statements of the Colombian Government and its President, Mr. Carlos Lleras Restrepo, to the effect that the question should be examined more thoroughly, in particular, contamination through shipping that does not undergo proper disinfection.

The studies, in question, which should be carried out as rapidly as possible, with the help of all the neighboring sister countries, will determine whether there is a real danger and what measures should be taken to prevent it.

Information and Press Department,
Office of the President of the Republic

Managua, 25 February 1967

OFFICE OF THE SECRETARY OF STATE
Division of Natural Resources
REPUBLIC OF HONDURAS

Tegucigalpa, 28 February 1967

Mr. Edgardo Seoane,
Vice-President of Peru,
Tegucigalpa.

Sir:

Allow me, on behalf of the Government of Honduras, to offer you our most profound thanks for your kindness in accepting the invitation of the Organization of American States and the Pan American Health Organization to carry out a special mission connected with the problem of foot-and-mouth disease in this Continent.

I take this opportunity to confirm the assurance I gave you verbally that my Government will be happy to contribute the sum of \$3,729 (Three thousand seven hundred and twenty-nine dollars) each year beginning in 1968 for the Pan American Foot-and-Mouth Disease Center, in accordance with the OAS scale of contributions. Incidentally, this expenditure item has been authorized by the President of the Republic, General Oswaldo Lopez Arellano.

May God bless the lofty and important mission you are undertaking in conjunction with Dr. Carlos Palacios for the benefit of all the sister nations of this Continent.

I have the honor to be, etc.

(Signed)
Julio C. Pineda
Minister for Natural Resources
(Seal of the Ministry)

REPUBLIC OF EL SALVADOR
MINISTRY OF AGRICULTURE
AND LIVESTOCK

San Salvador, 2 February 1967

Subject: Decision of El Salvador to
participate in the Continental
Foot-and-Mouth Disease Campaign.

Mr. Edgardo Seoane
Vice-President of Peru
San Salvador

Sir:

The Government of El Salvador, this Ministry, and the professional associations of livestock-owners in the country have followed with great satisfaction the reports of your important mission designed to awaken all-round interest in preventing any possible appearance of the scourge of foot-and-mouth disease.

The annual quota fixed as our contribution to the Pan American Foot-and-Mouth Disease Center for the campaign from 1968 seems to me acceptable, and indeed essential as a means of reinforcing the strategy of protection. In accordance with our administrative regulations, I am required to request the Ministry of Finance and the Audit Office for authorization to commit these funds. I am initiating the necessary formalities at once, the first step being for this Ministry to endorse the proposal, as indeed I do herewith.

Realizing as I do the tremendous importance of this problem, in my capacity as President of CIRSA (Regional Animal Health Technical Commission), the Directing Body of OIRSA (International Regional Animal Health Agency) I have given complete and total support to all foot-and-mouth disease campaigns, and on 10 February last, in Washington, I urged upon Secretary Orville Freeman, the importance of collaboration along these lines between the Secretary of Agriculture of the United States and the OIRSA Region. Mr. Freeman intimated that he regarded this as a sound and wise policy, and promised his support.

I should like to congratulate you on the manner on which you are conducting this difficult mission at the level of the Presidents and Ministers of Agriculture of the American countries, as assigned to you by the Organization of American States and the Pan American Health Organization.

I am at your service, and I should be honored to be able to give you any future assistance you may require. Let me add, Mr. Vice-President, that during your short visit among us you made many friends and well wishers.

GOD, UNION AND FREEDOM

(Signed)

René David Escalante Orozco
Minister of Agriculture and
Livestock

ANNEX 16
(Translation)

MINISTRY OF AGRICULTURE
National Palace
Guatemala

Guatemala, 8 March 1967

Mr. Edgardo Seoane
Vice-President of Peru,
Guatemala.

Sir:

I wish to thank you most sincerely on behalf of the Ministry of Agriculture of Guatemala for so kindly accepting the invitation of the Organization of American States and the Pan American Health Organization to undertake the special mission connected with the problem of foot-and-mouth disease on the American Continent.

In view of the importance of control and eradication of this disease for the national economy and for livestock development in Guatemala, my Ministry agrees in principle to an annual contribution by Guatemala of the sum of three thousand seven hundred and twenty-nine quetzales.

With best wishes for the success of your undertaking, I have the honor, to be, etc.

(Signed)
Francisco Montenegro Girón
Minister of Agriculture

ANNEX 17
(Translation)

To: JOSE A. MORA
SECRETARY GENERAL, ORGANIZATION OF AMERICAN STATES,
WASHINGTON

CHILEAN MINISTER OF AGRICULTURE HAS SENT ME HIS ACCEPTANCE OF
PROPOSAL FOR FINANCING PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER
PLEDGING CHILE'S QUOTA FROM 1 JANUARY 1968 DOCUMENTS FOLLOW BY MAIL

SINCERELY
EDGARDO SEOANE
VICE-PRESIDENT OF PERU

(Telegram sent from Lima on 14 April 1967, received in the Office
of the Secretary General on 14 April)

REPUBLIC OF ECUADOR
MINISTRY OF AGRICULTURE
AND LIVESTOCK

ANNEX 18
(Translation)
Ref. No. 0480
QUITO, 31 March 1967

Sir:

I have had the pleasure of receiving in this Ministry Dr. Carlos A. Palacios García, the Director of the Pan American Foot-and-Mouth Disease Center in Rio de Janeiro, who has been in Ecuador for a few days as the special representative of OAS. The purpose of his visit was to put before all the Member Countries the financial plan to be applied with a view to the permanent and stable financing of the Pan American Foot-and-Mouth Disease Center.

Dr. Palacios drew my attention to the percentage quota scale drawn up by OAS and informed me that Ecuador's quota for the budget of the Center would be 0.39 per cent of the total, or in monetary forms \$4,691 a year beginning 1 January 1968. The Government of Ecuador is entirely in agreement with the percentage quota and the amount estimated, and wishes to indicate this through the Ministry of Agriculture and Livestock under my charge. The sum in question will be forwarded to the Pan American Sanitary Bureau.

I trust that the Pan American Foot-and-Mouth Disease Center will go from strength to strength in its excellent organization and functioning, which have benefited and will continue to benefit all the American countries, Members of OAS.

I have the honor to be, etc.

GOD, COUNTRY AND FREEDOM

(signed)
Homero Andrade Alcívar
MINISTER OF AGRICULTURE
AND LIVESTOCK

Dr. José A. Mora
SECRETARY GENERAL,
ORGANIZATION OF AMERICAN STATES (OAS),
Washington, D. C. 20037 U.S.A.

MINISTRY OF AGRICULTURE
La Paz, Bolivia

ANNEX 19
(Translation)

La Paz, 26 April 1967

Dr. José A. Mora
SECRETARY GENERAL
ORGANIZATION OF AMERICAN STATES (OAS)
Washington, D. C. 20037
U. S. A.

Sir:

In connection with the visit to this country of Dr. Carlos Palacios, Director of the Pan American Foot-and-Mouth Disease Center, for the purpose of explaining the present economic situation of that excellent organization, which is doing invaluable work for the control of foot-and-mouth disease -- training post-graduates from the various countries of the Continent; rendering advisory services through its technicians to health campaigns and biological testing; carrying out research on the types of virus producing the disease and sharing its rich experience in the study of new methods of preparing vaccines -- I should like to inform you as follows:

As a Member of the Organization of American States regularly receiving real benefit from the Pan American Foot-and-Mouth Disease Center, Bolivia has no hesitation in pledging its quota, under the OAS scale, of 0.31 per cent or \$3,729 yearly from 1968 onwards; and it does so with the willing consent of the national Executive and the technical personnel of this Ministry, which is following the scientific progress of the Center in question with the utmost interest.

I have the honor to be, etc.

(signed)
HUGO BOZO ALCOCER
Minister of Agriculture

ANNEX 20
(Translation)

DOMINICAN REPUBLIC
OFFICE OF THE SECRETARY OF STATE FOR AGRICULTURE

Santo Domingo, 10 May 1967

Dr. Abraham Horwitz,
Director, Pan American Sanitary Bureau
Washington, D. C.

Sir:

With reference to the visit of Dr. Pedro N. Acha and Dr. Hector Coll to this country on a special mission from the Organization of American States and the Pan American Health Organization to outline a scheme for financing the Pan American Foot-and-Mouth Disease Center in Rio de Janeiro from 1 January 1968 so as to expand and improve the valuable advisory work being done by the Center in the campaign against the disease on this Continent, I have to inform you that the Dominican Republic is ready to support enthusiastically and actively any efforts to further the development of this research body.

Consequently, I am happy to inform you that the Office of the Secretary of State for Agriculture, through the divisions concerned with the study, control and elimination of foot-and-mouth disease, will be pleased to make the cash contribution fixed for it in accordance with the OAS quota scale, which we are informed will mean as of January 1968 a quota of 0.31 per cent or \$3,729 a year payable through the Pan American Health Organization. Furthermore, in view of the budgetary difficulties being experienced by the Center at the present time, my Government would like to demonstrate its eagerness to collaborate by making an immediate voluntary contribution of \$3,000, which we are placing at your disposal to this end.

We trust that the work of the Center will thus be adequately financed and brought to maximum efficiency. This cannot fail to benefit the foot-and-mouth disease programs undertaken by the various countries -- the only real solution to the control of the disease throughout the American Continent.

I have the honor to be, etc.

(signed)
FERNANDO ALVAREZ
Secretary of State for Agriculture

ANNEX 21
(Translation)

Republic of Haiti

DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES AND RURAL DEVELOPMENT

No. 0-3

Port-au-Prince, 11 May 1967

Sir:

I have pleasure in informing you that I have had interesting talks with Dr. Pedro N. Acha and Dr. Hector A. Coll, special representatives of the Organization of American States and the Pan American Health Organization, and I have taken careful note of the main outlines of the program to be launched in Rio de Janeiro from 1 January 1968 with a view to intensifying the campaign against foot-and-mouth disease throughout the American Continent.

My Department is enthusiastically in favor of anything that can be done to promote the development of the Pan American Foot-and-Mouth Disease Center, and will therefore take all the necessary measures to fulfill the obligations which the scheme implies.

I trust that the work of the Center will continue to develop to maximum efficiency, since there is no doubt that in this way it will benefit the foot-and-mouth disease programs undertaken by the various countries--the only real solution to the control of the disease throughout the American Continent.

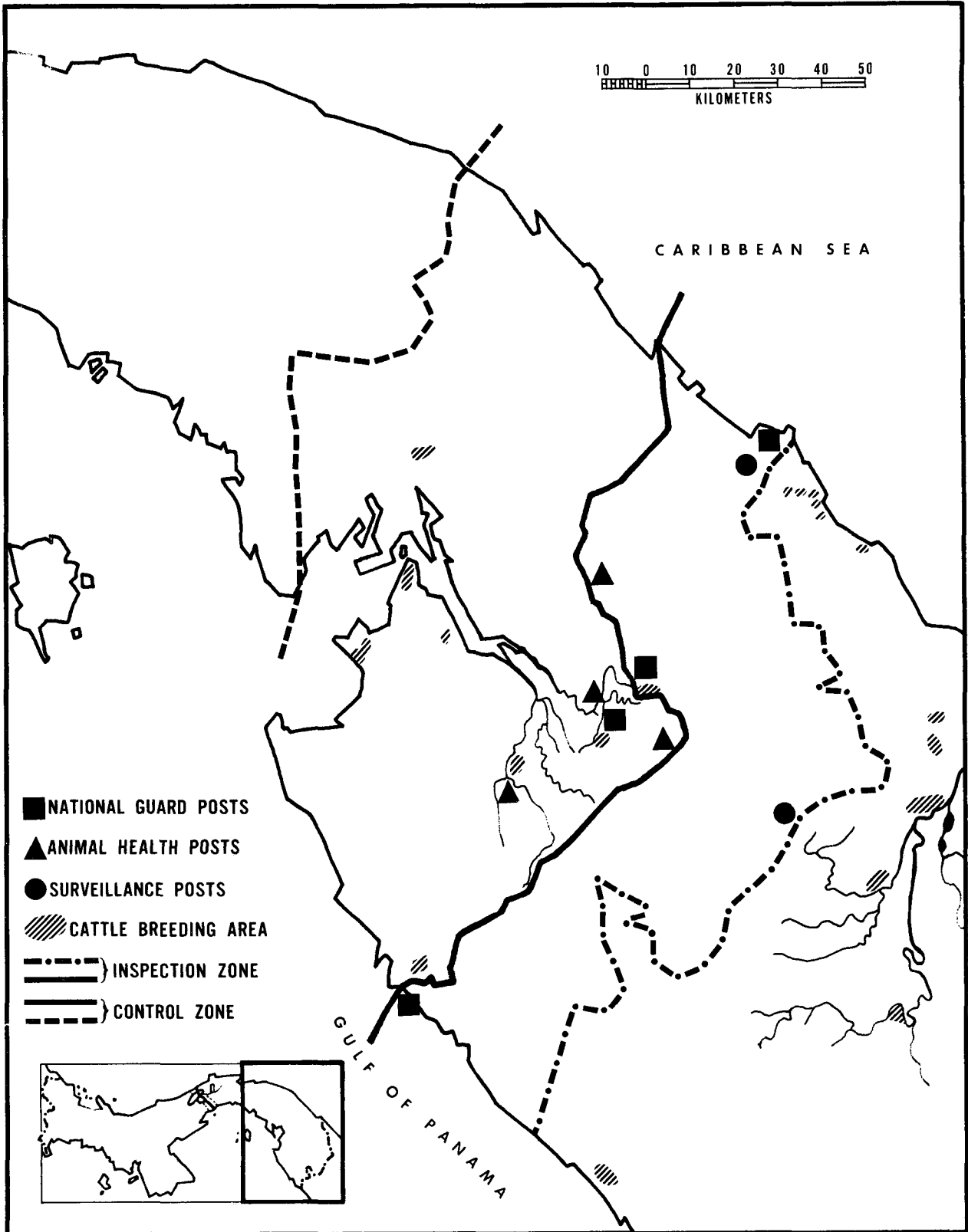
I have the honor to be, etc.

(signed)
Victor Nevers CONSTANT
Secretary of State

Dr. Abraham Horwitz
Director, Pan American Sanitary Bureau
Washington, D. C.

REPUBLIC OF PANAMA

FOOT-AND-MOUTH DISEASE CONTROL ZONE



DECLARATION BY CIAP ON THE PROBLEM OF FOOT-AND-MOUTH DISEASE^{1/}

The Inter-American Committee for the Alliance for Progress (CIAP) at its XI Meeting held in Washington, D.C. from 27 to 31 March 1967, heard and considered with the utmost interest a statement by the Vice-President of Peru, Mr. Edgardo Seoane, concerning the present situation of the problem of foot-and-mouth disease in the Latin American countries, the result of a survey entrusted to him by Resolution 34-M/66 adopted by the fourth Meeting of the Inter-American Economic and Social Council (IA-ECOSOC) in March 1966.^{2/}

Without prejudice to the Report to be submitted to the Inter-American Economic and Social Council at its next meeting in June this year, the Members of IA-ECOSOC decided to make the following declaration:

1. Cattle-rearing constitutes an economic activity and an economic asset of the utmost importance for the Latin American countries, and the incidence of foot-and-mouth disease reduces the possibility of increasing internal consumption of meat and shuts off the external markets which are a highly important source of foreign currency (Approximately \$500 million);

2. The campaign against this disease calls for prompt action on the part of the countries affected with a view to controlling and eliminating the latent foci;

3. Coordination of the national efforts at the Inter-American level is urgent to ensure that the campaign against foot-and-mouth disease produces effective results, and this coordination is of the utmost importance for frontier countries;

4. CIAP reiterates its desire to give the fullest cooperation to coordinating bodies such as the Pan American Foot-and-Mouth Disease Center, the International Regional Animal Health Agency for Central America(OIRSA), the Bolivar Organization for Animal Health, the Pan American Health Organization, the Inter-American Development Bank, and to all other regional technical bodies concerned with this problem;

5. CIAP appeals to all the countries belonging to the Inter-American system to equip and endow with adequate resources as soon as possible the Pan American Foot-and-Mouth Disease Center; at the same time it urges the international credit organs to contribute wherever possible to the financing of special programs undertaken by the Center;

^{1/} See annex I of the Final Report of the XI Meeting of CIAP (CIAP/128).

^{2/} See Final Report of the fourth Annual Meeting of IA-ECOSOC at the expert and ministerial levels, Buenos Aires, Argentina, Vol. I, page 74.

6. CIAP has agreed to consult with the Latin American countries whenever economic surveys of those countries are carried out, in regard to the progress made in the campaign against foot-and-mouth disease.

directing council



PAN AMERICAN
HEALTH
ORGANIZATION

XVII Meeting

regional committee

WORLD
HEALTH
ORGANIZATION

XIX Meeting



Port-of-Spain
Trinidad and Tobago
October 1967

Agenda Item 22

CD17/19 (Eng.)
ADDENDUM
6 October 1967
ORIGINAL: SPANISH

FINANCING OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

(Translation)

REPUBLIC OF CUBA
MINISTRY OF HEALTH

Havana, 12 August 1967
"YEAR OF HEROIC VIETNAM"

Dr. Pedro Acha,
Regional Veterinary Public Health Advisor
PASB/WHO

Dear Dr. Acha:

With reference to your request that this country participate in the activities of the Pan American Foot-and-Mouth Disease Center, we have pleasure in informing you that as soon as the Center is brought directly under PASB, the Cuban Government will make its participation effective, since we are interested in taking advantage of all the experience gained by the Center. We are therefore making arrangements to include the quota payable by Cuba in our National Budget.

While Cuba is free from foot-and-mouth disease, the development of livestock in this country necessitates the strictest possible control measures; for this reason we should be grateful if you would let us know at your earliest convenience what formalities are required for joining the organization, and what measures the Cuban Government should take as of the present time.

I have the honor to be, etc.

(signed)

Dr. José R. Machado Ventura
MINISTER OF HEALTH

(signed)

Dr. Pedro Roca
DIRECTOR
NATIONAL INSTITUTE OF
VETERINARY MEDICINE

(Translation)

REPUBLIC OF COLOMBIA
MINISTRY OF AGRICULTURE

BOGOTA, D.E., 29 September 1967

Dr. Antonio Ordoñez Plaja
Minister of Public Health

Dear Friend:

The Ministry of Agriculture is very interested in having the Pan American Foot-and-Mouth Disease Center continue to give Colombia and the other Member Countries in the Hemisphere technical assistance in its field of competence. These services are a matter of special interest to us because of the great livestock potential of the country and because of our geographical location which marks the bounds of the disease-free area of the Continent.

The Center must be appropriately financed if it is to continue its operations. We therefore support the idea of establishing for the Member and Participating Governments of the Pan American Health Organization quotas based on the scale approved by the Council of the Organization of American States. In accordance with that scale the Colombian contribution to next year's proposed budget estimates is 1.75 per cent or U.S. \$20,862.

Accordingly, in the proposed budget estimates of the Ministry of Agriculture for the forthcoming fiscal year the above-mentioned sum has been requested for the payment of a possible quota to the Center.

Yours sincerely,

(signed)

Enrique Blair Fabris
Minister of Agriculture

directing council



PAN AMERICAN
HEALTH
ORGANIZATION
XVII Meeting

regional committee

WORLD
HEALTH
ORGANIZATION
XIX Meeting



Port-of-Spain
Trinidad and Tobago
October 1967

Agenda Item 22

CD17/19 (Eng.)
ADDENDUM II
9 October 1967
ORIGINAL: SPANISH

FINANCING OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

Inter-American Economic and Social Council (IA-ECOSOC)

Inter-American Committee on the Alliance for Progress (CIAP)

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Financing of the Pan American Foot-and-Mouth Disease Center
- Project 77 of the Technical Assistance Program- Special Development
Assistance Fund

(Translated by the Pan American Sanitary Bureau)

PAN AMERICAN UNION, General Secretariat of the Organization of
American States, WASHINGTON, D. C.

FINANCING OF THE PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER
-PROJECT 77 OF THE TECHNICAL COOPERATION PROGRAM- SPECIAL
DEVELOPMENT ASSISTANCE FUND

The Thirteenth Meeting of the Inter-American Committee on the Alliance for Progress.

CONSIDERING:

That the Inter-American Economic and Social Council at its Fourth Annual Meetings at the expert and ministerial level, held in Buenos Aires, Argentina, in March 1966 recommended that "the secretariat prepare a report on the present status of the foot-and-mouth disease problem, the conduct of national foot and mouth disease campaigns in the Americas, and the participation of the Pan American Foot-and-Mouth Disease Center in those national campaigns" and that "the Pan American Health Organization, in consultation with the Governments of the Hemisphere and in the light of the above-mentioned report of the Secretariat, prepare a study on the permanent and stable financing of the Pan American Foot-and-Mouth Disease Center, based on quotas to be paid by countries, without prejudice to other contributions from public and private agencies for specific purposes";

That CIAP at its meeting held in October 1966 and IA-ECOSOC at its Fifth Annual Meetings held at Viña del Mar, Chile, in June 1967 considered the report prepared by the Pan American Union and the Pan American Sanitary Bureau and that IA-ECOSOC during its meeting approved the recommendation of CIAP that Project 77, Pan American Foot-and-Mouth Disease Center, continue to be financed by the Special Fund until 30 June 1968 and that arrangements for the stable and permanent financing of the Center by means of funds other than those from the Special Development Assistance Fund should be made (CIAP/110, 3 February 1967, p.16);

That the Executive Committee of the Pan American Health Organization at its 56th Meeting held in April-May 1967, approved Resolution XVIII on the Pan American Foot-and-Mouth Disease Center, in which it requested the Director to submit to the XVIII Meeting of the Directing Council the recommendations on program and financing arrangements appearing in the report of Seoane-Palacios mission, the joint report of the Ninth Meeting, the Declaration of CIAP on foot-and-mouth disease (CIAP/48) with the recommendation that it consider the proposals therein and that it provide for the continuation of the operations of the Center at an effective level under the administration of the Pan American Health Organization (CE56/22);

That Resolution 12-M/67 (IA-ECOSOC/1306, Add. 3) approved by IA-ECOSOC at its Fifth Annual Meetings in Viña del Mar, Chile, decided "to request the Pan American Health Organization to continue to assume technical and administrative responsibility for the Pan American Foot-and-Mouth Disease Center, in accordance with the instructions of the Inter-American Economic and Social Council;

That the Pan American Health Organization should submit each year to IA-ECOSOC, through the regular channels, a report on the work of the Center and its program and budget estimates";

That the report presented by the Pan American Union and the Pan American Sanitary Bureau outlines a system of quota contributions for financing the Pan American Foot-and-Mouth Disease Center and the arrangements for putting it into effect before 1 July 1968 (Doc.CIAP/144, 28 August 1967).

RESOLVES:

1. To take note of the report prepared by the Pan American Union entitled "Financing of the Pan American Foot-and-Mouth Disease Center- Project 77 of the Technical Assistance Cooperation- Special Development Assistance Fund" (CIAP/144 Spanish).
2. To recommend that in order to ensure stability in its financing and operations the Pan American Foot-and-Mouth Disease Center be financed by means of quota contributions by the Governments of the Member States of the Organization of American States in accordance with the scale of quotas established by the Pan American Union.
3. That in conformity with the resolution of the IA-ECOSOC, the Pan American Health Organization shall continue to assume technical and administrative responsibility for the Pan American Foot-and-Mouth Disease Center, in accordance with the policy laid down by the Inter-American Economic and Social Council. The Directing Council of the Pan American Health Organization shall determine the amount and the manner in which the contributions are to be paid.
4. That the Center continue to receive appropriate assistance from the Special Development Assistance Fund until such time as the new arrangements come into force, in accordance with the resolution approved by IA-ECOSOC (Doc. IA-ECOSOC/1240 Spanish Rev.).

5. To recommend that the contributions of the Governments begin with effect from 1 January 1968 in order to allow them to be progressively absorbed into the financing of the Center.
6. To authorize the Special Development Assistance Fund, in the event that sufficient money is not received to continue the activities of the Center, to advance funds including those of its working capital reserve, in an amount not exceeding 50 per cent of the corresponding budgetary allotment in the 1967/68 Budget Estimates. The Pan American Health Organization shall repay to the Special Development Assistance Fund any advances received.
7. The Pan American Health Organization shall submit to the Inter-American Committee on the Alliance for Progress for consideration and transmittal to the IA-ECOSOC, an annual report on the work of the Center and on its program and budget estimates.
8. To recommend that the Pan American Health Organization undertake negotiations with a view to obtaining financial contributions from the countries which are not part of the Inter-American system.
9. To urge the Governments to obtain support and financial contributions for the Center and the national foot and mouth disease programs from stock raisers who benefit directly from foot and mouth disease control programs.
10. To take note of the thanks expressed by the Pan American Health Organization to the Organization of American States and the Inter-American Committee on the Alliance for Progress for the assistance they have been giving the Pan American Foot-and-Mouth Disease Center, through the Technical Cooperation Program.