

Annex 2

**EXECUTIVE SUMMARY OF THE FUNDAMENTAL ASPECTS FOR THE EXECUTION OF THE
PROJECT FOR THE ERADICATION OF THE FOOT-AND-MOUTH DISEASE IN ECUADOR.**

Period 2004-2009

ECUADORIAN PROJECT FOR ERADICATION OF FOOT AND MOUTH DISEASE

Executive summary of the fundamental aspects for the execution of the project for the eradication of the foot-and-mouth disease in Ecuador.

PERIOD 2004-2009

This document is the first approximation of the structure and processes of the Ecuador Project of the Eradication of Foot and Mouth Disease, which must, if its concepts are approved, be developed according to the tasks corresponding to each component. The document follows the model of the last version of the national program for the period 2002-2007, having a foothold in the necessity of a perfect coordination of actions and responsibilities between the public and private sectors.

The success of the program, which must count on the commitment of all social actors involved, is based above all on the attention to points cited to the continuation, which reflect the detailed components in the document.

1. Revision and redefinition of the responsibilities and functions of the official sector (SESA) and the private (Cattle Raisers Organizations) incorporated in CONEFA, to achieve a better political, strategic and operational coordination and efficiency.
2. Revision and updating of the legal base related to the current institutional organization of CONEFA (laws, regulations, agreements).
3. Formulation of alternative proposals of institutional organization for the execution of the project of Eradication of Foot and Mouth Disease that articulates harmoniously the entities of the official and private sectors.
4. Formulation and construction of a modern diagnosis laboratory of Foot and Mouth Disease and other sanitary problems of national cattle raising, under the direction of SESA.
5. Establishment of a permanent national system of control of the movement of animals based on the creation of fixed and mobile control posts.
6. Strengthening of the epidemic prevention structure and of the capacity of prevention to denounced suspect cases.
7. Incorporation of the organizations of producers and cattle raisers in the epidemic prevention system of Foot and Mouth Disease and other sanitary of cattle raising at a local level.
8. Implementation of a anti- Foot and Mouth Disease vaccination system that permits the achievement of useful coverage of 100% of the cattle population of high risk endemic areas and of 80% of the areas of sporadic occurrence sustained during the period of the functioning of the project.
9. Regulation and implementation of a system of sanitary emergency services and the creation of an emergency fund, capable of meeting the final stages of the project, as well as confronting the eventual incidence of Foot and Mouth Disease and other exotic diseases.
10. Implementation of a plan of formation of human resources that permits the attainment of project goals and the administration of a long-term sanitary policy.
11. Efficient taking advantage of the potentials of national and international technical and financial cooperation for the execution of the project.

**PROGRAM FOR ERADICATION OF FOOT AND MOUTH DISEASE IN ECUADOR
2004-2009**

PROPOSED DOCUMENT

OBJECTIVE

Eradicate Foot and Mouth Disease from Ecuador before 2009, with the commitment and active and joint participation of the official and private sectors and the support of national and international bodies of technical and financial cooperation.

OPERATIONAL COMPONENTS

1. Institutional strengthening
 - 1.1 Strengthening of SESA
 - 1.2 Strengthening of CONEFA
2. Epidemic prevention
3. Vaccination
4. Movement control
5. Foci control
6. Laboratory diagnoses
7. Emergency system
8. Training and diffusion
9. International cooperation

1. Institutional strengthening

1.1 Strengthening of SESA

Objective

Achieve an entity of sanitary excellence whose goal is to protect and improve the sanitary state of the cattle population in coordination with other public and private institutions.

Expected results

There must be an administrative and financial restructuring for compliance with activities of the project components of the eradication of Foot and Mouth Disease from Ecuador.

Activities

- Elaborate the terms of the CONEFA Law and regulations
- Build, equip and implement a diagnosis laboratory and biological security of SESA that complies with the norms of MNAC (National government) with the technical cooperation of PANAFTOSA.
- Build, equip and implement a laboratory of cattle wastes (quality control) that complies with the norms of MNAC (National Government) with the technical cooperation of PANAFTOSA.
- Incorporate technical and administrative personnel so as to permit coverage of national territory for the eradication program throughout the year.
- Certification of technical and administrative personnel.

1.2 STRENGTHENING OF CONEFA

Objective

Strengthen the institution to execute the activities inherent to the national project of the eradication of Foot and Mouth Disease.

Expected results

With the strengthening of CONEFA the goal of the eradication of Foot and Mouth Disease will be attained by the year 2009.

Activities

- Elaborate the regulation to the CONEFA Law and its statutes.
- Implement a trust fund system for the adequate management of funds.
- Initiate the reengineering of local committees by means of a prior evaluation and the Planning of vaccination cycles with the participation of the National Federation of Cattle Raisers.
- Implement changes in the vaccination process.
- Create a database for buildings and cattle population with software for such that will be shared with SESA.
- Improve communication and coordination with SESA and the other Bodies involved.

2. EPIDEMIC PREVENTION

Objective

To know the national, regional and local level of the presentation and diffusion of the bladder diseases and frequently confused with Foot and Mouth Disease, with the purpose of permitting the taking of actions for eradication and prevention in the advanced stages of the program.

Expected results

The system in use with the participation of other epidemic sensors connected to the productive sector will be strengthened, with certified professionals and other institutions linked to the sector.

The sensibility must be increased with the incorporation of other serum epidemic tools and the establishment of an active prevention service.

Activities

- **Update the epidemic characterization of Foot and Mouth Disease in Ecuador.** The process of strategic programming of the activities of control and eradication must be based on the knowledge of the forms of cattle production and the presentation of Foot and Mouth Disease in the country. Such activity must be executed immediately, by means of a training seminar of field professionals with the methodology developed by PANAFTOSA. The cost of this activity is approximately US\$ 12,000.
- **Strengthening of the epidemic prevention system.** SESA will evaluate the operational system with the cooperation of PANAFTOSA, including information of the border agreements. It will train technical personnel involved in the operation.
In addition, it is suggested that the CONFEA database to be developed with the support of FEDEGAN/Colombia related to the geographic locations and census may be shared with SESA in this process of strengthening the epidemic inspection. The cost of this activity is US\$ 10,000.
- **Awareness of producers, local committees and other components of the productive sector as to the opportune notification of bladder malfunctioning.** SESA with the collaboration of CONEFA, must develop a program for the divulgation to all primary sensors to stimulate the timely notification of the occurrence of bladder diseases. This activity must also be executed in the short term, including for the sanitary emergence in the country.
- **Active prevention by SESA with a serum epidemiology investigation to detect the virus activity.** This activity must be initiated as soon as a field sanitary level is reached that deserves the development of the processes of the seeking of virus activity. This investigation will be carried out in two manners: based on the characteristics of statistical-epidemic samples in those regions where the disease has not been present and with samples of animals taken to sites of cattle concentration.
- **Identification and follow-up of problematic ranches and sites.** The knowledge shed by the characterization will make it possible the execution of a process of identification of ranches or risk cattle raisings, such as auctions, temporary shelter for animals for transit and importation, border properties, etc. As to these properties, an active prevention system will be established in the mid term.

3. VACCINATION

Objective

Reach and maintain vaccination levels at 100% of the national cattle population in endemic regions of high risk and of 80% in other regions of the country.

Expected result

2004: 1st Cycle –66%, 2nd Cycle – 75%

2005: 80%

2006: 90%

2007: 90% +

Note: The coverage in high-risk zones will be 100%.

Activities

- Purchase of a vaccine that complies with the technical requirements established by SESA and legal procedures in effect.
- Evaluate the link of the prevailing cold weather with the purpose of guarantying the warmth as required for the vaccine until its application.
- Provide vaccination programmers who will be in charge of all activities related to the process.
- Make available vaccination brigades with their respective team to achieve the goals proposed according to annexed Table 1.
- Hold evaluation meetings after each cycle.

4. CONTROL OF ANIMALS AND PRODUCTS MOBILIZATION**Objective**

To control the movement of animals and/or products to impede the diffusion of Foot and Mouth Disease.

Expected result

A system of sanitary control of the mobilization of animals and products must be established based on the country epidemiological regional features and binational border agreements.

Activities

- Control the animals mobilization.
- Apply the Law for Marks, Iron Branding and Signals Registry at a national level.
- Install fixed sanitary control posts at the border level and in strategic areas, in coordination with police control posts, as shown in annexed Table 2.
- Place mobile control units in strategic areas.
- Supervise the functioning of the posts in compliance with the established inter-institutional agreements.
- Exercise control at fairs, auctions, and at cattle products industries.

5. CONTROL OF FOCI

Objective

To meet and control 100% of the foci of detected vesicular diseases.

Expected result

Efficient and opportune control of all of the notified and confirmed foci of vesicular diseases and others confounded with Foot and Mouth Disease, avoiding the occurrence of secondary foci.

- **Attention and follow-up of detected foci.** SESA must carry out the epidemic follow-up of all suspected information at the service units, as soon as possible, attempting such within 12 hours. SESA must evaluate the current condition of the prevention to suspected structure and establish the complementary necessities of personnel. Training, material, equipment and resources to comply with the activity. PANAFTOSA will support this evaluation.
- **Update the Foci Prevention Manual.** SESA must update the manual in use, with the support of PANAFTOSA, in such a manner as to include the biological security norms linked to the prevention of foci, interdiction of properties, measures of foci contention including vaccinations, epidemic investigation of the origin and possible secondary foci. This activity must be executed in the short term, as well as training of personnel. The cost is US\$ 10,000.
- **Support on part of CONEFA.** CONEFA must participate in the process of control of foci, by means of the facilitation of materials, support personnel, establishment of transit checkpoints and vaccination. This activity has an annual cost of US\$ 15,000.

6. LABORATORY DIAGNOSES

Objective

Realize the diagnosis in 100% of the sample materials sent to the laboratory, of the herds affected by Vesicular Diseases and proceed with differential diagnosis.

Expected results

An efficient laboratory service must be implemented for the diagnosis and investigation of vesicular diseases and others confounded with Foot and Mouth Disease. There must be established a laboratory of veterinary diagnosis under the responsibility of SESA.

Activities

- Strengthen agreements with the Izquieta Pérez Laboratory to carry out the permanent diagnoses of vesicular diseases and others confused with Foot and Mouth Disease.
- Implement differential techniques of diagnosis at the laboratory level of diseases confounded with Foot and Mouth Disease, Syndromes of neurological diseases,

haemorrhagic disease of suine and other pathologies of interest for the of national cattle raising, at the Izquieta Pérez installations.

- Periodically realize the control of heat levels and the updating of laboratory techniques for the diagnosis of vesicular diseases at Izquieta Pérez.
- Build, equip and implement a diagnosis laboratory that counts on biological measures security, under the administration of SESA that complies with the norms of MNAC (National Government), with the cooperation of PANAFTOSA and other international bodies.
- Build, equip and implement a cattle raising input control laboratory (quality control) that complies with the MNAC rules (National Government) together with PANAFTOSE and other International Organizations.

7. EMERGENCY SERVICES SYSTEM

Objective

Control emergency situations of Foot and Mouth Disease, when the project has attained favorable sanitary levels.

Expected results

There must be established a system of sanitary emergencies that counts on specific legislation and economic resources to confront the eventual entry of vesicular and other exotic diseases.

Activities

- Creation of emergency system legislation. SESA must study the legislation in use and make changes to include the functions and reach of an emergency system, which will be composed of a national Emergency Services Commission and an executive group of emergency services, composed of professionals from SESA and CONEFA, among others, trained to comply with this function. The legislation must include mechanisms of indemnity of properties in case of a sanitary sacrifice.
- Creation of an emergency fund. Composed of official/private resources immediately available from the National Emergencies Commission to be mobilized to cover expenses with operations of an executing group and to pay indemnity.
- Training of personnel in emergency services. The executing group must be submitted to periodic emergency simulation exercises at least once a year.

Development of contingency plans for the diseases. The executing group, with the cooperation of international bodies must develop contingency plans for risk diseases for the national cattle production.

8. TRAINING AND DIFFUSION (SESA/CONEFA/FEDEGAN/IICA/PANAFTOSA/SUPPLIERS)

Objective

Train all involved in the project of eradication of Foot and Mouth Disease as to its components and objectives.

Expected results

The involved actors in the productive chain will be trained, made aware and motivated to facilitate and collaborate in compliance with the project objectives of the eradication of Foot and Mouth Disease.

The cattle raising professionals, helpers, and members of brigades will have been trained for compliance with the objectives of the project of the eradication of Foot and Mouth Disease.

Activities

- Elaborate, execute and evaluate the annual Plans of training and diffusion as to the components of the project, for the actors involved in the productive chain and the technicians, helpers, and certified personnel involved in the project.

9. INTERNATIONAL COOPERATION

Objective

Strengthen the veterinary services structure of the country by means of technical and economic assistance of International institutions so to give dynamism to the sanitary actions.

Expected result

The eradication of Foot and Mouth Disease by 2009 and the prevention of the entry of exotic diseases will be achieved, with the institutional strengthening of the veterinary services structure at a national level.

Possible international participants

- PANAFTOSA - OPS/OMS
- OIE
- GIEFA
- IICA
- USAID
- APHIS
- BID
- ICA
- FEDEGAN/COLOMBIA
- SENASA/PERU

- SUPPLIERS OF MATERIALS
- CAF
- WORLD BANK
- CAN
- GTZ
- UE
- Ministry of Cattle, Agriculture and Fishing of Uruguay
- Other interested institutions

Activities

- Establish a work group for the elaboration of projects of technical and financial cooperation to be presented to international organs.

Diagnosis

- Diagnosis kits for the Izquieta Pérez Laboratory, for the analysis of samples of diseases confusable with Foot and Mouth Disease.
- Periodically realize quality control and updating of laboratory techniques for the diagnosis of bladder diseases. (Izquieta Pérez)
- Training of other professionals for the diagnosis of vesicular diseases.
- Evaluate the conditions of biological security of the laboratory of vesicular diseases of Izquieta Pérez and implement corrective measures.
- Build, equip and train for the diagnosis laboratory and biological security of SESA to comply with international norms.
- Build, equip and train for the control laboratory of cattle wastes of SESA (quality control) to comply with international norms.

Training and diffusion

- Courses to certify cattle raising professionals and technicians
- Database of buildings and the cattle population with a same software, hardware, GIS and training, common to SESA/CONEFA.
- Support the elaboration of training materials and diffusion in different components of the project
 - o Diagnosis
 - o Vaccination
 - o Control of foci
 - o Epidemic prevention
 - o Control of mobilization
 - o Emergencies

Control of animal mobilization

- Support the establishment of the infrastructure of fixed and mobile strategic posts of sanitary control at a border level and in strategic areas.

Vaccination, epidemic prevention, control of foci and emergencies.

- Equipment and materials for the maintenance of the cold chain.
- Providing of materials and equipment to the field personnel involved in the campaign of eradication, such as kits of foci prevention, GPSD, emergency services kits, etc.
- Transportation equipment (vehicles, boats, motorcycles, animal transport)
- Equipment and materials of disinfection and biological security
- Office equipment, especially furniture and computers
- Communications equipment, such as radios
- Technical assistance for the epidemic characterization of Foot and mouth disease.
- Technical evaluation of the epidemic prevention system
- Designs of models of serum epidemic studies
- Materials and reactives for serum epidemic studies.
- Training of personnel that execute emergency services
- Contingency plans and images for the diseases
- Emergency Units equipment
- Operational expenses and vehicle maintenance

TABLE 1

SPECIAL AREA	UPAS	CATTLE	QUANTITY VACCINE	REAL VACCINE	VACCINATERS	VACCINATER COST
Azuay	61,873	341,799				
Bolivar	26,526	196,523				
Cañar	21,040	139,773				
Chimborazo	60,548	246,787				
Loja	37,178	361,455				
Tungurahua	40,536	151,258				
	247,701	1,437,594	2,875,188	2,300,150	256	345,023
ENDEMIC MOUNTAIN REGION						
Carchi	7,984	93,784				
Cotopaxi	37,356	193,129				
Imbabura	16,746	105,057				
Pichincha	29,767	444,573				
	91,835	836,543	1,673,086	1,673,086	186	250,963
ENDEMIC COASTAL REGIONS						
El Oro	6,733	162,467				
Esmeraldas	6,778	219,385				
Guayas	12,487	344,798				
Los Ricos	5,733	117,803				
Manabi	25,255	783,592				
	56,986	1,628,045	3,256,090	3,256,090	362	488,414
AMAZON REGION						
Morona Santiago	10,918	229,205				
Napo	2,394	50,984				
Pastaza	2,145	26,820				
Zamora Chinchipe	6,725	130,677				
Sucumbios	4,117	49,591				
Orellana	2,705	35,942				
	29,004	523,219	1,046,438	837,150	93	125,573
			8,850,802	8,066,477	896	1,209,972

VACCINE COST	1,290,636
VACCINATERS	1,209,972
COMMITTEE 10%	322,659
EQUIPMENT	64,980
COLD NETWORK	5,000
TRANSPORT	12,000
SUBTOTAL	2,905,247
CONEFA	480,000
TOTAL	3,385,247
VACCINATERS	3,226,591
	158,656

TABLE 2

7 MOBILE POSTS		6 FIXED POSTS		MASCARILLA	IMBABURA
MOBILE STATIONS	25,000	CONSTRUCTION		MERA	PASTAZA
1 MVZ	6,000	1 OFFICE	20,000	EL CARMEN	MANABI
2 AUXILARY	7,200	EQUIPMENT		MORONA	MORONA
OPERATIONAL COST	13,200	1 COMPUTER	2,000	MACARA	LOJA
GASOLINE	500	1 MOTOR PUMP	500	CHACRAS	EL ORO
LUBRICANTS	400	1 TELEFAX	200		
LLANTAS	200	1 VEHICLE	15,00		
EQUIPMENT	1,100	PERSONAL			
TV	500	2 MVZ	12,00		
DVD	100	6 HELPERS	20,000		
AMPLIFYING EQUIPMENT	400	WORK TEAM	800		
COMPUTER	1,000	SERVICES			
	2,000	LIGHT	500		
		WATER	500		
TOTAL X MOBILE	16,300	TOTAL X FIXED	78,650	TOTAL	471,900
	114,100				