National Program for the Eradication and Prevention of Foot and Mouth Disease -**PNEFA**

Strategic Plan 2017 - 2026

2019 Update











AND LIVESTOCK





Ministry of Agriculture, Livestock and Food Supply Secretariat of Animal and Plant Health Department of Animal Health

National Program for the Eradication and Prevention of Foot and Mouth Disease - PNEFA

Strategic Plan 2017 - 2026

2019 Update



1. Background and contextualization

The main objective of the Strategic Plan of Brazil's National Program for the Eradication and Prevention of Foot and Mouth Disease 1 (PNEFA) is "to create and maintain sustainable conditions for ensuring Brazil's status as a country free of foot and mouth disease, and to extend the zones that are free of foot and mouth disease where vaccination is not practiced, in order to protect Brazil's livestock wealth and generate the greatest possible benefit both for the actors involved, and for Brazilian society as a whole."

It was designed to be executed over a ten-year period, starting in 2017 and ending in 2026. The Plan is aligned with the Terrestrial Animal Health Code of the World Organization for Animal Health (OIE) and the guidelines of the Hemispheric Program for Eradication of Foot-and-Mouth Disease (PHEFA), converging with their efforts to eradicate the disease in South America.

One of its goals is gradually to replace FMD vaccination throughout Brazil. Vaccination requires several actions to be adopted at municipal, state and national levels involving the Official Veterinary Service (OVS), private enterprise, farmers and political agents.

The actions set forth in the Strategic Plan have been grouped into 16 operations comprising four components:

- a. the extension of the capacities of veterinary services;
- **b.** the strengthening of the animal health surveillance system;
- c. interactions between stakeholders in the foot and mouth prevention program; and
- **d.** the completion of transition throughout Brazil's territory from a foot and mouth disease-free status where vaccination \underline{is} practiced, to one in which vaccination is \underline{not} practiced.

Sixteen operations, comprising 102 operational actions, make up these components.

As set forth in the initial document, during the execution of the plan, the Ministry of Agriculture, Livestock, and Food Supply (MAPA), alongside the state level and federal level Plan-Management Teams (PMTs hereinafter), will monitor indicators and the execution of the predicted activities in order to assess the need for, or possibility of, bringing forward or putting back the transition schedule in specific states of Brazil ("UFs" — Units of the Federation) or in any of the organized blocks.

In order to provide suitable monitoring and assessment of actions carried out in the States and in the Blocks, 12 meetings were held from October 2017 to June 2019 with the official veterinary services, and industry and production chain representatives of the five blocks. On these occasions, all participants were able to put forth their conditions, opinions, concerns and proposals for better running the strategic plan.

This document seeks to show the current status of execution of the Strategic Plan and to update the document for the decisions and adjustments put forward by the participants and by the National PMT, thus constituting an updated version of the plan, two years into its execution.

¹ Available at http://www.agricultura.gov.br/assuntos/sanidade-animal-e-vegetal/saude-animal/programas-de- saude-animal/febre-aftosa/pnefa-2017-2026/pnefa-2017-2026

2. Current scenario for foot and mouth disease in the region and in Brazil

Advances observed in the eradication of foot and mouth disease in South America, based on the PHEFA action plan for 2011-2020, may be assessed in Figure 1. Sanitarily, the vast majority of countries in the region are free of foot and mouth disease (Figure 1), practicing mass vaccination programs for bovines and buffaloes as their main tool for combating the disease. Less progress can be seen in the introduction of zones or countries that are FMD-free without vaccination, and persistence of the disease is observed in Andean countries.

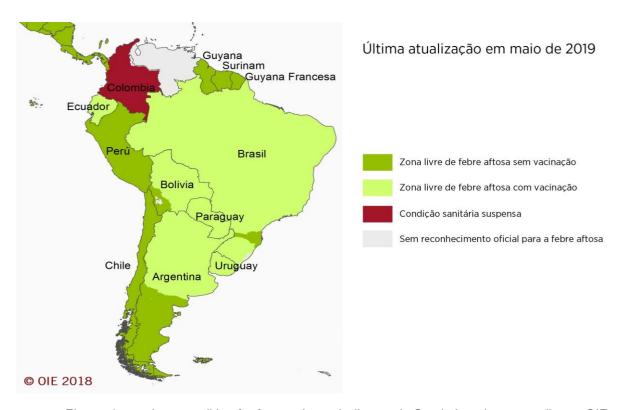


Figure 1 - sanitary condition for foot and mouth disease in South America, according to OIE (adapted).

The first FMD-free zone where vaccination is practiced was introduced in Brazil in 1998, and included the states of Rio Grande do Sul and Santa Catarina. Brazil then began a gradual process of introducing FMD-free zones throughout its territory. In 2007, OIE recognized the state of Santa Catarina as Brazil's first foot and mouth disease-free zone where vaccination is not practiced, and this situation obtains to the present day. In 2014, the foot and mouth disease-free zone where vaccination is practiced was extended to encompass the seven states of Brazil's north-east, and northern Pará state. In 2018, the foot and mouth disease-free zone where vaccination is practiced was extended once more to include the states of Roraima and Amapá and the remaining part of the states of Amazonas and Pará, at which moment the entirety of the territory of Brazil became free of foot and mouth disease. Since April 2006, in other words for over 13 years, Brazil has not had any occurrence of the disease.

3. Evaluation of the actions of the Strategic Plan in the States and in the Blocks

Twelve Block Meetings were held from October 2017 to June 2019, and each Block staged two meetings, one in each year (2018 and 2019); except for Block I, in which four meetings were held (two in 2017, one in 2018 and one in 2019). Detailed information on the proposed regionalization, and dates and decisions taken during the meetings, are available on the MAPA website2. At all these meetings, the Department for Animal Health (DSA) presented an evaluation of the execution of the planned actions in the States and in the Blocks, in order to guide efforts towards priority actions that have a greater impact on the process of transitioning towards a sanitary condition as an FMD-free zone where vaccination is not practiced.

In Figure 2, how far the 42 actions have been attained by each state is presented as a percentage, grouped by their geographical Blocks. The greatest similarities exist between Blocks II, III and IV. In Block I fewer than 10% of the actions had been completed, whereas block V completed more than 20% of its actions, with the state of Paraná standing out. It should be stressed that in the original schedule, these planned actions would allow Block I to suspend foot and mouth disease vaccination in June 2019, Blocks II and III in June 2020, and Blocks IV and V in June 2021.

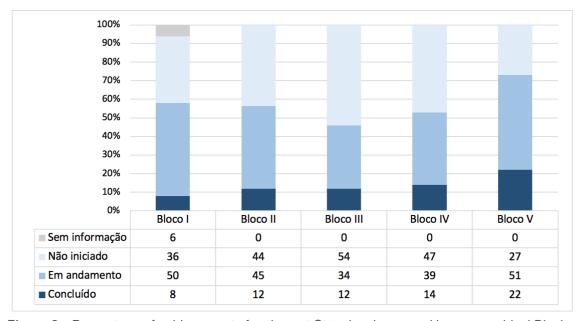


Figure 2 - Percentage of achievement of actions at State level, grouped by geographical Block.

Regarding the structure and the technical and operational capacity of the OVS, despite their being consolidated in the FMD-zone where vaccination is practiced, regular assessments by MAPA show a need for improvements and adjustments to support the advances towards the status as FMD-free zones where vaccination is not practiced.

² http://www.agricultura.gov.br/assuntos/sanidade-animal-e-vegetal/saude-animal/programas-de-saude-animal/ febre-aftosa/pnefa-2017-2026/pnefa-2017-2026

The funding mechanisms for the sanitary program require adjustment in order to provide sufficient and timely resources in order to sustain the new sanitary condition. This vulnerability needs to be analyzed and corrected constantly, while simultaneously the surveillance system needs to be evaluated, adjusted and strengthened, in order better to address the risk of a reintroduction of the disease into Brazil.

It must be stressed that relations between public and private actors must be strengthened and extended, above all in those states where livestock raising accounts for a greater relative share of the economy, so that the community can participate more widely in the execution of the program.

Among important State-level actions that have not yet been completed in the Blocks, three stand out: completing the geotagging of farms of concern to animal health; correcting structural and operational deficiencies in Local Veterinary Units by strengthening their physical infrastructure, human resources and communications technology, bringing them up to date with local demands and aligning them with the new desired sanitary status; and defining and introducing an efficient resource distribution system in order to address zoosanitary emergencies by using government resources and public or private funding.

Nationwide, some of the actions are the direct responsibility of DSA, while other actions are shared with other MAPA departments and with the productive chain. Of the 60 actions at national level to be introduced by 2023, 11% have been completed, 54% are ongoing, and 35% have not yet been started.

Among national level actions deemed to be priorities, but not yet completed, there are: the definition and introduction of a foot and mouth disease antigen and vaccine bank; the attainment of stability in redistributing financial resources from the federal level and from private funding to state-level veterinary services; a fully-functioning Agricultural Management Platform (*Plataforma de Gestão Agropecuária*—PGA) that is integrated with registries, movements, and inspection posts; the strengthening of surveillance on Brazil's international borders; the introduction of a national emergency fund; and the promotion of Animal Health Education and Communications.

As a result of the second meeting of the national PMT, held in July of last year, two years into the execution of the strategic plan, some of the listed challenges have guided changes that have been described as essential for the ongoing implementation of the Strategic Plan:

- 1. adjustments to the strategic PNEFA plan for 2017-2026 in:
- **a.** the geographical redefinition of the Blocks, taking into consideration their participation in June 2019 in suspending foot and mouth disease vaccination in the state of Paraná (Block V);
 - **b.** the time needed for blocks to carry out their actions; and
- **c.** adjustments in criteria for assessing indicators of risk and importance to livestock;
- 2. improvements to interactions and participations by the National PMT with regard to the frequency of meetings and the sharing of actions;
 - 3. promoting social education and communications in animal health; and
 - 4. strengthening social and political participation in the States.

4. Revision of the Geographical Organization

The first version of the strategic plan, conceived of in 2017, established a geographical organization for transitioning towards an FMD-free health status in which vaccination is not practiced, on the basis of analyses of the spatial distribution of FMD-susceptible herds and of animal movements in Brazil between 2014 and 2015 and with regard to the interdependency found in animal movements.

However, two years after the plan began to be introduced, the current scenario and regional specificities have necessitated adjustments, such that a new geographical organization was put forward by the National PMT, redistributing the states of Brazil into five new Blocks as follows (Figure 3):

- **a.** Block I the Amazon region: Acre, Rondônia, part of Amazonas state and part of Mato Grosso;
 - b. Block II the Amazon region: Amazonas, Amapá, Pará and Roraima;
- **c.** Block III Brazil's north-east: Alagoas, Ceará, Maranhão, Paraíba, Pernambuco, Piauí and Rio Grande do Norte;
- **d.** Block IV Brazil's central region: Bahia, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, São Paulo, Sergipe and Tocantins;
 - e. Block V Brazil's southern region: Paraná, Rio Grande do Sul and Santa Catarina.

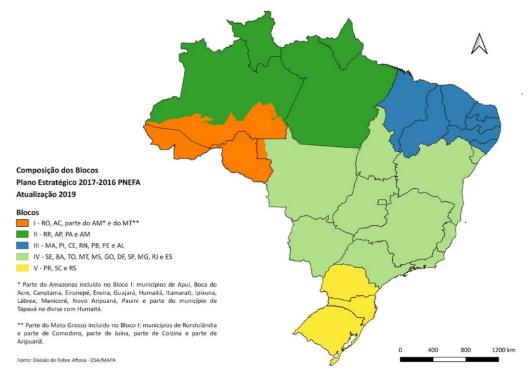


Figure 3 - Composition of Geographical Blocks for foot and mouth disease, two years into the implementation of the Strategic Plan

This grouping aimed to favor the transition process from foot and mouth disease-free zones where vaccination is practiced to FMD-free zones where vaccination is not practiced in a regionalized manner, starting in 2019 and finishing in 2023, at which point the entire country will have attained the status of being FMD-free where vaccination is not practiced, recognized by the OIE.

5. Time line towards transition

It should be stressed that the time line for transition for these blocks is dependent from the outset upon the performance of actions laid down in the Strategic Plan. In this context, a thorough assessment of the execution and ongoing status of these actions must be performed by the State-level PMTs, the national PMT, and by the Ministry of Agriculture, Livestock, and Food Supply (MAPA) for a decision on the suspension of vaccination to be taken. Table 1 shows the time line put forward by the national PMT for the transition in sanitary status for each zone, two years into the execution of the Plan.

Table 1 - Predicted starting times for the timetable for the transition in sanitary condition for each zone, two years into execution of the SP.

Zone	Final vaccination against foot and mouth disease
1 - Made up of Block I	November 2019
2 - Made up of Blocks II, III & IV	May 2021
3 - Made up of Paraná	May 2019*
4 - Made up of Rio Grande do Sul	May 2021**

¹ After evaluation of the completion of all the actions allowed for in the SP

As predicted, the need for, and the possibility and timeliness of, bringing forward or pushing back the transition process by State or Block will be evaluated during the execution of the Plan, in order to meet the established technical conditions. The ongoing status of actions will therefore be assessed routinely both by the state-level PMTs and the Coordination Commissions for groups of States, and by the national PMT and MAPA using defined indicators and criteria in order to maintain, postpone or bring forward the planned time line.

If a State, or Block of States, wishes to request that its time line be brought forward, it must comply with the following steps:

- 1. assessment of the Quali-SV, with the minimum necessary point score (or above) for the items laid down in Appendix V of the first version of the Plan, as with the corrective actions plan;
- 2. proposal for zoning, analyzing the impact of the movement of FMD-susceptible animals and animal products;
 - 3. description of the inspection posts introduced to control movements; and
- 4. documentation proving that there has been state-level management and execution of the actions laid down in the Plan.

DSA will examine the aforementioned items and ask for specific supervision of PNEFA to verify the controls and surveillance actions for foot and mouth disease in the proposed zone, in order to underpin its decision.

^{*} In September 2019 it will be evaluated whether the state has taken the outstanding actions

^{**} An audit will be held in September 2019 to assess whether the State has taken one of the outstanding actions (evaluation of QualiSV) to commence evaluation of the request to bring forward the initial time line for the suspension of vaccination.

6. Management of the Plan

6.1. Organization

The success of the Plan essentially depends on: a high degree of political commitment; the availability of funding; the participation of the private actors and their interaction with the OVS; financial support; good management of the operations; and a vigorous and technically thorough implementation and follow-up of the actions.

The Plan is being managed within three basic spheres: the **national level** (central body), **state level** (intermediate bodies) and **local** level (local bodies). In order to achieve the proposed goals the plan managers, or plan management team (PMT) must be: defined for the central and intermediate levels; they must understand sanitary programs and possess a suitable profile for managing projects; and they must be trained to duly execute and communicate the content of the Plan. In the central level, management falls principally to DSA, supported by its own specific technical area jointly with other relevant areas of the Department. DSA is also responsible for liaison with other areas of MAPA, with the intermediate body of SUASA (Brazil's Unified Animal and Plant Health System) and with other institutions and entities involved in operations, in order to plan, execute and evaluate the progress of the several predicted actions.

DSA may also call on internal and external Committees and Commissions, as well as forums organized to address animal health issues, in order to discuss aspects of shared interest and to obtain contributions towards the execution of the actions scheduled in the Plan. To this end, DSA set up a national management team for the Strategic Plan in 2018, and updated it in 2019. The setting-up of a Scientific & Technical Committee to cooperate on more specifically FMD-related technical issues is also expected.

At the intermediate level, management is the responsibility of the SVSs, which are to set up their own state-level management teams, in which the SFAs are to participate, backed up by their own animal health areas and by other partners involved in each state, above all the representatives from the production sector. As with the central level, the intermediate bodies must liaise with their other partners in order to plan, execute and assess the progress of the actions to be carried out in the state or district.

By mid-2019, 26 state-level PMTs had been set up — all except for that of the State of Paraíba, which had been created, but its creation had not been published in a normative state-level legal document.

It must be stressed that in the evaluation of the first two years of the Plan, more actions were carried out in those states where the state PMT is more active and includes greater representation from private enterprise (federations, the industry, and so on) and from the public sector (SVS, SFA and so on). This heightened degree of state-actor involvement was mirrored in a better evaluation, distribution and sharing of responsibilities.

The state-level PMTs play an important role in the transition process because they are responsible for strategic issues and the liaison that is fundamental to the advance in sanitary condition. The following stand out among their duties:

- a. to manage the performance, follow-up and conclusion of actions;
- **b.** to manage the performance, follow-up and completion of corrective actions in the Quali-SV Action Plan:
- **c.** to oversee and discuss the results of studies on zoning and the identification of vulnerabilities;
- **d.** to oversee and monitor the Strategic Plan in order to establish deadlines for the completion of the phases necessary for achieving suspension of vaccination;
- **e.** to pursue discussions with society and other stakeholders in state-level forums and other meetings (for example, excursions or 'caravans' into the hinterland of the state in order to communicate and debate the strategic plan with farmers and other stakeholders); and
- **f.** to participate in State-Group Coordination Commissions (*Comissões de Coordenação dos Grupos de Estados* CCGEs) to monitor the execution of the Strategic Plan do the other States in the Block.

As with the national level, the state-level PMTs may use Committees, Commissions and state forums to provide access to stakeholders so that all can discuss shared interests that will contribute towards the execution of the Plan, seeking the necessary operational support to better manage their projects.

At local level, the actions are the responsibility of the farmers' unions, with the participation of the LVUs, duly supported and overseen by the intermediate-level bodies. LVU veterinarians and experts must be perfectly integrated into the community through the Local Councils and Committees, seeking always to achieve greater social participation in the performance of their activities, and replicating the guidelines of the Plan. CNA (Brazil's National Agriculture and Livestock Confederation) and the state PMTs therefore encourage the communication of the plan and keep it permanently up to date in the farmers' unions and municipal councils. They must keep them informed of the execution of the Plan in other spheres.

6.2. Monitoring

The management of the Plan must be guided by the criterion of the effectiveness of the operations and actions carried out. Monitoring by indicators and frequent checking in the field allow effective assessment of the performance of actions and achievement of results, and of any need for timely revision and adjustment in order to attain the established objectives and targets.

Since MAPA is legally empowered to oversee the actions performed in other agencies within the SUASA, it must use this prerogative to follow up, evaluate and control the activities. The supervision must focus on operations that produce the greatest impact for the Plan, seeking to ensure compliance with the time lines and attain the established goals. The DSA will provide capacity-building for those involved and will define the standard, flow, frequency and means of communication of the information, thus enabling rapid and transparent understanding of the results and effective, timely intervention.

Plan-related issues, nationwide, are to be put forward annually for the national management team to evaluate.

This team will be responsible for sharing the management of the Plan, under the coordination of DSA, indicating the priorities and helping build viable alternatives to attain the expected goals and targets. Both DSA and the state-level PMTs will have the support of the CCGEs, whose main objective is to provide regional management of the Strategic Plan through the follow-up of the execution of the actions in the States and Block. CCGEs were set up in the first half of 2019 for Blocks I, II, III and IV, making four Commissions to date.

The Commissions comprise one private enterprise representative and one from the OVS of each state-level PMT in the States. The CCGE has a one-year mandate, and is intended to be coordinated by a private-enterprise member from PMT of the State hosting the annual Block meeting. At that meeting the members of the entire Commission are defined or updated. Ordinary meetings are to be held every two months; extraordinary meetings may be convened whenever necessary by the Commission coordinator. To facilitate interaction among the members and optimize costs, meetings may be held remotely, by video call.

A report is drafted for each CCGE meeting, and sent to DSA and the state-level management teams of each of the related States. In order to monitor the progress of Blocks' actions, DSA may hold meetings on a face-to-face basis or by link, with the coordinator; these may or may not be followed by the members of each CCGE.

The main duty of the CCGEs is to monitor and evaluate the operations and activities planned for each of the Block's member-states, particularly in terms of whether the objectives have been attained, and whether the coverage and management of the scheduled targets have been appropriate.

In order to promote the communication with, and the involvement of, farmers and other actors participating in the actions of the Plan, the state-level PMTs are annually to organize state forums under the coordination of their OVSs in order to discuss aspects of the execution of the Plan in each group of States. In addition to the state forums, the PMTs are to hold meetings in all regions of the state in order to disseminate and update farmers on the progress of the Strategic Plan. To this end, the Agricultural Federations should be involved with and participate in the liaison with farmers' unions in order to organize these events. Successful examples for 2019 were the so-called "caravans through the heartlands" in Rondônia and Paraná.

At a nationwide level, DSA organizes a two-yearly national forum to disseminate upto-date information on the progress of the Strategic Plan, and to foster discussion among, and encourage the participation of, actors engaged in the most relevant and impactful aspects at national level. It should be stressed that the national forum is an event that brings together 27 state-level PMTs and the national PMT.

The 1st National Forum of the PNEFA Strategic Plan (*I Fórum Nacional do Plano Estratégico do PNEFA 2017-2026*) will be held in 2019 in the town of Esteio, Rio Grande do Sul, at the same time as the 42nd Expointer (International Animal Show), making use of the infrastructure of the event and the guaranteed presence of the sectors that are involved.

MINISTRY OF AGRICULTURE AND LIVESTOCK

BRAZILIAN GOVERNMENT