Risk Based National FMD Control Program of Pakistan

Presented by
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Formulation of National FMD Control Program

• The need for the program was discussed in steering committee (Administrative heads of federal ministry and all provincial livestock secretaries) meeting of the current FMD control program

• Consultant was hired to draft the national FMD control program

• A national meeting of stakeholders (including Director Generals of all provinces / regions) was held in which concept of FMD control program based on 5 elements was discussed

• First draft of the program was developed and sent to all livestock authorities in federal and provincial governments

• All suggestions were thoroughly discussed and evaluated for incorporated

• Second draft was presented to the stakeholders and a national workshop was again held

• Recommendations of the workshop were incorporated in the final control plan and sent to both federal and provincial veterinary services.

• Veterinary service approved the FMD control program
Contents of Pakistan FMD Control Program

- FMD situation in the country – clinical, serotypes and strains, impact of FMD, prioritization, risk hotspots, organizations of veterinari service, previous control efforts, gap analysis)
- Benefits of FMD control (livelihood, food security, trade, stakeholders)
- Risk based national control program (goal, strategic objective, approach, component objectives, outputs, activities, research & development)
- Monitoring and evaluation plan (logical framework)
- Operational plan including estimated budget
- Technical assistance plan
Description of FMD control plan

Goal of FMD control

• Improving livelihoods through the control of FMD and other major livestock diseases that affect production

Strategic objective

• To progressively reduce the burden of clinical FMD in the dairy sector in Pakistan

Overall strategic approach

• National Control Program (NCP) aims at institutionalizing the control efforts against FMD that, as today, have mainly be supported through the implementation of projects with external funds
Component objectives of FMD control plan

1. Strengthening the liaison between federal and provincial levels to harmonize the procedures for FMD control and prevention
2. To further strengthen the diagnostic laboratory capacity at federal and provincial levels
3. Strengthen the surveillance system for FMD and create a national FMD information centre
4. Promote more extensive use of good quality vaccine against FMD
5. Improving the legal framework for FMD control
6. Promote a more intensive involvement of stakeholders’ on FMD control and prevention
Component objective 1: Strengthening the liaison between federal and provincial levels to harmonize the procedures for FMD control and prevention

- **Output 1 – Establishment of a National Program Coordination Unit**
  - CVO (AHC) to establish the National Program Coordination Unit (NPCU) – to include all federating units
  - NPCU to endorse the proposals received from technical working groups (such as LABNET and EPINET)
  - NPCU will also guarantee that all inputs necessary to implement the NCP (inclusive of diagnostic kits and reagents, vaccine, etc.) are timely procured and delivered
  - NPCU to organize each year a national meeting on FMD control and progress (as part of the informative campaign) to bring most recent updates on FMD at national and international levels
Component objective 2: To further strengthen the diagnostic laboratory capacity at federal and provincial levels

• Output 1 – The FMD diagnostic services currently in place are maintained at least at the same level as now (LABNET, NVL to arrange each year a proficiency testing, NVL to attend each year an international proficiency testing organized by the FMD-World Reference Laboratory, assess the feasibility of further extending the network of FMD diagnostic services)

• Output 2 – sequencing of VP1 of FMD virus is established in one designated laboratory and representative FMD positive samples collected throughout the country are sequenced as routine diagnostic service

• Output 3 – The Laboratory Information Management System (LIMS) established under GCP/PAK/123/USA is maintained and upgraded
Component objective 3: Strengthen the surveillance system for FMD and create a national FMD information centre

• Output 1 – The current surveillance system operates at least at the same level of performance as at present (six elements of current surveillance system are adopted)

• Output 2 – A web-based central information system is established at Federal level in a designated structure (Animal Husbandry Commissioner office) that provides updates on FMD status in the country (in terms of outbreaks, their distribution and serotypes) and that releases all relevant information (seminars, meetings, etc.) related to FMD and possibly other TADs
Component objective 4: Promote more extensive use of good quality vaccine against FMD

• Output 1 – Informative campaigns are launched every year to promote the use of good quality vaccines

• Output 2 – Quality control of FMD vaccine is routinely carried out at NVL

• Output 3 – at least 30% of the animal population in the dairy colonies and 10% of animal population in dairy animals breeding areas is enrolled for FMD preventive vaccination during the first three years of the control program implementation
Component objective 5: Improving the legal framework for FMD control

• Output 1 – A harmonized model legislation framework at federal and provincial level is developed.
Component objective 6: Promote a more intensive involvement of stakeholders’ on FMD control and prevention

• Output 1 – Educational programs are established and routinely implemented targeting stakeholders identified all along the value chain

• Output 2 – Policy and decision makers are regularly updated and made fully aware on the importance of FMD
Research and Development plans

- Development of serotype specific diagnostic (pen-side) kits
- Standardization and validation of ELISA kits for FMD serotypes in the country
- Role of sheep and goats in maintenance and spread of FMD
- Serotyping and genotyping of circulating FMD strains
- Development of an easy methodology for vaccine matching
- Establishment of vaccine production facility in the country
- Quality control of FMD vaccines in the country
- Role of wild ruminants and feral pigs in epidemiology of FMD
- Development of FMD vaccine with long lasting (at least one year) immunity
- Persistence of FMD viruses in water buffaloes
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• Livestock Farmers