

Terms of Reference
Feasibility study for establishment of FMD-free fresh meat producing cattle
subpopulations in Zimbabwe
STDF Project Preparation Grant (STDF/PPG/550)

Background

1. About 65% of Zimbabweans live in rural areas and depend on agriculture for their livelihood. Livestock and livestock products are important for rural livelihoods and contribute significantly to the country's agricultural economy, with cattle accounting for 35-38% of the agricultural GDP. Approximately 55% of households in communal farming areas own cattle, more than 60% of whom are in areas that are endemic or at risk from Foot and Mouth Disease (FMD). Livestock and livestock produced in these areas are largely excluded from external trade as a result of sanitary risks and the difficulties to market cattle which have been vaccinated against FMD.
2. FMD is an OIE-listed, contagious transboundary disease that mainly affects cattle and pigs. With an average morbidity rate of about 3.3%, the impact of infection with the Southern African Territory (SAT) types of the virus on extensive rearing systems is considered moderate. However, in infected intensive pig and dairy herds, the effects on production can be devastating. In addition, FMD status is of major importance in international trade of animals and animal products, with serious socio-economic consequences for livestock producers, farmers and infected countries.
3. Until recently, trade in fresh beef from countries endemic for FMD could only be accepted from geographically determined disease-free zones. There is growing interest in alternatives to geographically-based FMD risk management for trade in commodities and animal products, especially in Southern Africa where traditional efforts to control FMD have met challenges linked to wildlife and tourism. New developments in the OIE Terrestrial Animal Health Code (TAHC), Article 8.8.22 (2016), have created opportunities to export fresh beef produced in FMD areas with targeted vaccination. The OIE TAHC article 8.8.22 (2016) provides a non-geographical, value-chain based risk-reduction standard for the production and trade of fresh beef from FMD areas where an official FMD control programme exists, and the disease is prevented by regular vaccination. A system akin to the commodity-based approach is already practised for internal beef markets in Zimbabwe, however, strict application of provisions of the OIE animal health standards remains relatively new and untested in the context of satisfying external trade requirements.
4. Zimbabwe has an official control programme for FMD, which will be optimised by an ongoing review of the national strategy for market access and contribution to the progressive control of FMD, which will be submitted to the OIE for endorsement. The government continues to support the veterinary services' official programme, involving movement control, FMD surveillance, as well as FMD prevention by targeted vaccination, with the aim of gaining confidence of potential importers interested in fresh beef from Zimbabwe. At present, severe drought combined with the continuous threat of FMD re-infection from carrier buffalo means that Zimbabwe is unlikely to achieve country or zonal freedom from FMD in the near future and viable alternatives are needed to incentivise value chain player interest towards progressive FMD control.
5. The government views implementation of the OIE commodity-based beef standards as an important part of the new national FMD strategy and official control programme. Zimbabwe has benefitted from donor support for vaccination as a means to prevent and

control FMD. Developing value chain capacity for commodity-based beef production is considered as the logical next step, which would also show how effective vaccination programmes can help to stimulate economic growth. Commodity-based trade would help cattle producers in Zimbabwe to enter the export market, even if only the regional export market. An OIE expert mission visited Zimbabwe in September, 2015 and among recommendations it made, suggested that authorities in Zimbabwe could pursue alternatives to ensure market access for its fresh beef.

6. The commodity-based beef standard recognizes the challenges linked to wildlife reservoirs and enables cattle to be protected through regular vaccination and use of good animal husbandry practices. Accompanied by intensive surveillance, careful ante-mortem veterinary inspection and post-mortem treatment of meat, this approach will drastically reduce animal health and food safety risks, allowing meat to be traded safely. Consistent culling of animals through slaughter for meat meets food and nutrition requirements at household and national level, and raises income prospects for cattle keepers, many of whom are women. It is also climate smart and helps in reducing land degradation through overstocking. Implementation of the commodity-based standard is likely to create incentives for increased commercialization of cattle production, which is currently very low. Active participation by smallholder farmers in disease control efforts will enhance their effectiveness by making farmers realize the benefits of being part of a value chain. Smallholder farmers are more likely to comply with recommendations that enable them to have market access for their produce and to cooperate in disease control efforts led by the veterinary services, thereby enhancing the country's contribution to the global strategy for progressive FMD control.
7. In March 2016, the STDF Working Group approved a project preparation grant (PPG) entitled "Feasibility study for the production of safe fresh beef from areas in Zimbabwe not free from FMD" (STDF/PPG/550). The PPG was requested by the Department of Livestock & Veterinary Services, Zimbabwe, and supported by various public and private sector stakeholders. The purpose of the PPG is to carry out a feasibility study on the production, of "disease free commodity" or "commodity-based" fresh beef in establishments within areas not free from FMD in Zimbabwe. This document sets out the Terms of Reference for implementation of this feasibility study.
8. A number of international organizations, donors and NGOs are working with national authorities on various initiatives to develop the livestock sector in Zimbabwe, including the beef value chain as well as FMD control (see below). The work to be carried out under this PPG will be designed and implemented in close cooperation with stakeholders involved in other relevant ongoing/planned initiatives in order to ensure synergies and avoid duplication, enhance ownership of the feasibility study, and increase the likelihood that the findings and recommendations of the study will be picked-up and implemented in the future. For instance:
 - The EU is supporting a 4-year (13.78 Million Euro) programme, implemented by FAO to assist poor smallholder farmers to boost production, productivity and engage in commercial agriculture through integrated farming approaches. This programme focuses on smallholder irrigation and the livestock sector.¹ Support under the livestock component (Euro 7.7 million) has been used, among other things, to develop a draft livestock policy, prepare several technical briefs on FMD and to draft an FMD control strategy.

¹ See: <http://www.fao.org/news/story/en/item/215762/icode/>

- The Zimbabwe Agriculture Growth Programme (ZAGP), financed under the 11th European Development Fund in the amount of Euro 40 million and coordinated by TechnoServe, aims at improving existing poultry and cattle value chains to enhance development and economic growth in rural communal areas in Zimbabwe.² Discussions will be undertaken with the EU Delegation in Zimbabwe and other stakeholders concerned to ensure that the feasibility study builds on mapping work and complements the planned beef stream under the ZAGP.
- Under the EU-supported Veterinary Governance Programme, implemented by AU-IBAR, national authorities are planning a pilot to test the viability of commodity-based fresh beef production in FMD areas with routine vaccination controls. Due to funding constraints, it has not been possible to include an economic analysis study under this pilot. The feasibility study to be carried out under this PPG will therefore be very important to provide an ex ante economic analysis as well as tailored information to support implementation of the aforementioned pilot test. It will help to fully understand and evaluate the expected economic viability of commodity-based fresh beef production in FMD areas where regular preventive vaccination is practised, and provide information/evidence to inform possible scaling-up.
- Various NGOs (e.g. Goal, World Vision) have programmes that assist farmers in communal areas to establish cattle finishing and marketing schemes to increase financial returns. This feasibility study will identify options to ensure that cattle finished off in these areas can fetch better prices without discrimination.

Expected output of the PPG

9. The key output of this PPG will be a feasibility study. This study will evaluate the feasibility and expected economic viability (costs and expected benefits) of creating a fresh meat producing scheme in an FMD area where cattle are protected from infection by regular routine vaccination. It will also consider options to mainstream smallholder farmers in these areas into the beef value chain so that they can benefit from market access, which is expected to increase incomes and reduce poverty. The study will analyse and quantify the potential magnitude of the economic benefits associated with a fresh meat producing scheme in an FMD vaccination area. It will help to inform and identify areas for possible future investment to support the development of such a scheme in Zimbabwe. While the findings of the feasibility study may be used to inform and support the development of new project proposals, this PPG will not be used to develop a project proposal.

Description of tasks

10. The consultant contracted under this PPG will conduct this feasibility study under the overall supervision of the STDF Secretariat and in close collaboration with the Department of Livestock and Veterinary Services in Zimbabwe.
11. The feasibility study will be carried out based on in-depth desk reviews, consultations and discussions with all relevant stakeholders in Zimbabwe including relevant government authorities (Department of Livestock and Veterinary Services in the Ministry of Agriculture, Ministry of Trade and Commerce, etc.), relevant private sector stakeholders (Zimbabwe Farmers Union, the Commercial Farmers Union, the Zimbabwe Abattoirs Association, etc.), STDF partners (FAO, OIE), donors (e.g. EU Delegation in Zimbabwe), as well as NGOs and other relevant stakeholders (TechnoServe, Zimbabwe Forum for Agricultural Advisory Services, etc.).

² See: http://ec.europa.eu/europeaid/sites/devco/files/ad2-annex-zimbabwe-2015_en.pdf

12. Wherever possible, the feasibility study will pay attention to and learn from relevant experiences in other African countries. A small study tour (up to three officials with different areas of expertise) to a country in the region will be organized to ensure that the feasibility study learns from and builds on relevant experiences and lessons elsewhere in the region. The destination for the study tour will be selected based on consultations between the Department of Livestock and Veterinary Services and the international expert contracted to implement the PPG. The study tour may focus on: (i) efforts and experiences to plan and implement commodity-based trade and/or gradually move towards progressive zoning in Namibia; (ii) efforts to move towards progressive zoning in Botswana; or (iii) efforts to develop a commodity-based trade approach in Malawi.

13. The feasibility study will examine and evaluate the expected economic viability (costs and benefits) of creating FMD-free fresh meat producing cattle sub-populations in an FMD vaccination area. It will analyse and quantify the potential magnitude of the economic and socio-economic benefits associated with the establishment of fresh meat-producing cattle subpopulations, protected against the disease by regular vaccination. In particular, the feasibility study will:
 - i. Assess market demand (and SPS requirements) for beef from FMD areas with vaccination control in Zimbabwe, as well as the expected trade benefits of establishing such a fresh meat producing scheme. This analysis should consider aspects related to the livestock population and productivity, as well as potential access to markets (regional and international), and other important factors that affect market access beyond the sanitary condition or reduction of FMD virus circulation by vaccination. For instance, issues related to breeding, production management systems, husbandry practices, biosecurity, access to slaughterhouses and/or processing plants, policy and regulatory frameworks, animal identification and traceability, etc. should be considered in the economic analysis of the levels of investments needed and expected benefits.
 - ii. Consider the options and requirements (including investments) to mainstream smallholder farmers in FMD areas with vaccination into the beef value chain so that they can benefit from market access. This should include attention to possible options to connect large commercial farmers to small holders through a more integrated livestock value chain approach. An illustration of the benefits to smallholder communal farmers will also be important in the total evaluation of benefits. It should also consider socio-economic and cultural aspects related to existing herd management practices, possible resistance to change and how to overcome this.
 - iii. Consider environmental aspects and impacts related to the establishment of such a fresh meat producing scheme from a conservation and tourism point of view (e.g. game-proof fencing, opportunity cost of wildlife based ventures, good stockmanship, etc.).
 - iv. Identify and pay attention to relevant political, economic and other factors/risks (e.g. current business environment, limited organization of smallholders, international embargo and access to international markets, resources available in the veterinary authority and private sector, capacity of the private sector), which are likely to influence the establishment of such a fresh beef producing scheme in FMD area practising regular routine preventive vaccination, and consider possible mitigation strategies.
 - v. Consider relevant aspects related to zoning (considered as a longer-term national objective) including the current context of weak control and enforcement of animal movements, free ranging between ranches and communal areas, requirements to update relevant legislation and regulations, bilateral relation with neighbouring countries that have open borders with Zimbabwe), and take account of future prospects to achieve zonation by introducing the

implementation of provisions of OIE TAHC article 8.8.22 in producing a safe commodity in an FMD vaccination area where an FMD control programme exists.

- vi. Take into account relevant recommendations of the OIE PVS Pathway in Zimbabwe.
 - vii. Clearly identify the inputs (human resources, logistics, infrastructure, etc.) related to upfront and ongoing costs to establish and effectively maintain a fresh beef producing scheme, as well as requirements to increase public and private sector investment and options to develop public private partnership approaches.
 - viii. Attach a list of all the persons consulted/interviewed, as well as a bibliography of documents consulted.
14. Discuss the draft feasibility study with relevant public and private sector stakeholders in Zimbabwe, as well as concerned STDF partners, donors and others. On the basis of comments and suggestions received, revise the feasibility study as necessary.
 15. Facilitate all meetings during implementation of the PPG, lead interviews, prepare meeting agendas and summaries.
 16. Provide a short written report on the implementation and outcomes of this PPG to the STDF within one month of its completion. This report should describe the activities implemented, the results achieved, and the key stakeholders who were actively involved and/or consulted. It should also attach copies of relevant documents produced under the PPG. Wherever possible, the consultant should provide electronic copies of SPS-related documents identified as part of this PPG to the STDF Secretariat for inclusion in the STDF Virtual Library.
 17. The international consultant contracted to implement this PPG may sub-contract qualified experts to provide necessary complementary expertise, logistical and/or other support, as required, to implement the feasibility study. In this case, the international consultant will prepare Terms of Reference for the international and/or national consultant.

Timeframe

18. The planned starting date is September 2016 with a completion date of end March 2017.