STDF PROJECT PREPARATION GRANT (PPG)

APPLICATION FORM

The Standards and Trade Development Facility (STDF) provides Project Preparation Grants (PPGs), up to a maximum of US$50,000, for the following purposes (or a combination thereof):

- application of SPS-related capacity evaluation and prioritization tools;
- preparation of feasibility studies that may precede project development to assess the potential impact and economic viability of proposals in terms of their expected costs and benefits; and/or
- preparation of projects proposals that promote compliance with international SPS requirements, for funding by the STDF or other donors.

Applications that meet the STDF's eligibility criteria are considered by the STDF Working Group, which makes the final decision on funding requests. Complete details on eligibility criteria and other requirements are available in the *Guidance Note for Applicants* on the STDF website (www.standardsfacility.org). Please read the *Guidance Note* before completing this form. Completed applications should be sent by email (as Word documents) to STDFSecretariat@wto.org.

PPG Title	**A Benefit-Cost Analysis for Establishing a Foot and Mouth Disease Free Zone in Tanzania**
Budget requested from STDF	$50,000
Full name and contact details of the requesting organization(s)	**Dr Abdu A Hayghaimo** Directorate of Veterinary Services, Ministry of Livestock and Fisheries Development, TANZANIA 131 Nelson Mandela Road, P. O. Box 9152, 15487 DAR ES SALAAM, TANZANIA. Tel. +255 22286 2592
Full name and contact details of contact person for follow-up	Dr. Joram E Mghwira: joelmghwira@gmail.com; Dr. Niwael Mtui–Malamsha: niwaelanna@ yahoo.co.uk Principal Veterinary Officers, Department of Veterinary Services, Ministry of Livestock and Fisheries Development (MLFD), 131 Nelson Mandela Road, P. O. Box 9152, 15487 DAR ES SALAAM, TANZANIA. Tel. +255 22286 2592

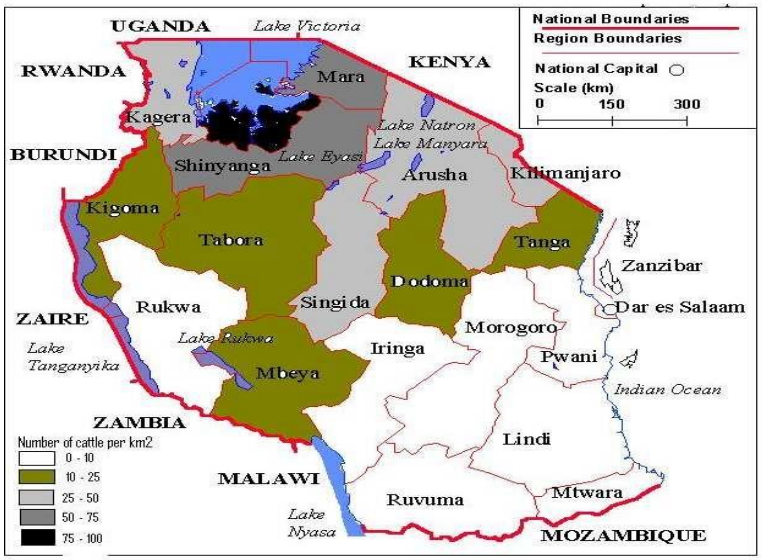
I. BACKGROUND AND RATIONALE

1. What is the purpose of this PPG? Explain whether it is requested to: (i) apply an SPS-related capacity evaluation or prioritization tool; (ii) prepare a feasibility study (prior to project development) to assess the potential impact and economic viability of proposals in terms of their expected costs and benefits; nd/or (iii) prepare a project proposal for consideration by the STDF or other donors?

The purpose of this application for a project planning grant (PPG) is to facilitate undertaking of a feasibility study and cost-benefit analysis to assess the economic viability of establishing a Foot and Mouth Disease (FMD) free zone in Tanzania.

Tanzania has outstanding natural resources for livestock development including resilient livestock breeds, extensive rangelands and diverse natural vegetation. Of 88.6 million hectares of land resources in the country,60 million hectares is suitable land for grazing. According to the 2007/8 livestock census, Tanzania has 22.8 million cattle, 15.6 million goats, 7 million sheep, 2.01 million pigs, 58 million poultry and 0.3 million donkeys. This makes Tanzania's cattle population the third largest in Africa and the largest in both the Southern African Development Community (SADC) and the East African Community (EAC).

Distribution of Cattle Population in Tanzania



Despite the abundant resources, the livestock sector is performing well below its potential. Livestock activities contribute 4.6 % to the country's GDP, on average 13% of the Agricultural Gross Domestic Product (GDP. The sector annual growth rate is low at 2.2%. The growth for the large part reflects increase in livestock numbers rather than productivity gains. Fifty percent of households keep livestock and 70% of the poor rural population depend on livestock for their income and livelihoods (MLDF, 2012). The sector is severely constrained by low livestock reproductive rates, high mortality and high disease prevalence, including FMD and inadequate investments to enhance its contribution to the development of the country, despite its great leverage potential Tanzania is also home to one of the largest wildlife populations in Africa; a major ecological and touristic resource. The African buffalo, one among the big five game animals in Tanzania, is widely known to be a reservoir of FMD virus although its role as a virus maintenance and transmission to domestic ruminants, particularly in the wildlife – livestock interface areas is debatable.

Since mid 1980s, Tanzania economy has been undergoing gradual and fundamental transformations towards a market-based economy. The macro-economic policy reforms have required a redefinition of the roles of the public and private sectors in livestock development.These changes have paved the way for the withdrawal of the Government involvement in subsidies and non-participation in private good inputs and services provision, which could be better performed by the private sector((Umali et al 1994). The government mandate has remained to create conducive and enabling environment to support private sector growth and development. Implementation of these policies has led to among other things to the launching of the KILIMO KWANZA initiative that aims at facilitating for active participation of the private sector in agricultural production, which includes livestock farming. The initiative is committed to promoting investment in the livestock sector.

2. *Explain the key SPS problems and/or opportunities to be addressed. Clarify why these issues are important, with attention to market access and poverty reduction. Describe, if relevant, how these issues relate to SPS priorities in the Enhanced Integrated Framework's Diagnostic Trade Integration Studies (DTIS), the findings of SPS-related capacity evaluations, national poverty reduction strategies, sector development strategies or policies, etc. See Qn. 7. (b) – (d) of the Guidance Note.*

SPS Problems and Opportunities to be Addressed

After global eradication of rinderpest, many African countries are beginning to realise the economic potential of their livestock sectors. Tanzania is also exploring ways to modernise its livestock sector as an instrument for economic growth and poverty reduction; but this ambition faces challenges. The Tanzanian ruminant livestock population, which is largely (about 90%) indigenous is challenged by low productivity, livestock diseases; land tenure policies which make inadequate provision for pastoral and agro-pastoral needs to access pastures and water; interactions with wildlife; low productivity farming systems, a poor internal market flow and almost non-existent export trade in livestock commodities. Animal diseases reduce both livestock productivity and market access.

Recently (in July 2015) the Ministry of Livestock and Fisheries Development (MLFD) launched the Livestock Modernization Initiative (LMI) aimed at promoting the potential of the meat, dairy and poultry sectors for poverty alleviation. Improvements will be made across the value chains including improvements in security and access to grazing, supplementary feed and water, genetic potential of traditional livestock, animal husbandry and disease control, access to markets, quality and safety of livestock products, processing and value addition. Coordinated interventions needed will be identified across sectors to support desired improvements and the necessary regulatory environments to ensure safe and healthy livestock products. Generally, the main objectives of the TLMI is to transform the traditional livestock sub-sector into a modern, responsive, sustainable and environmentally friendly engine for rural development and improved national health and nutritional standards by:

- guiding and supporting livestock farmers in technology transfer to equip them with appropriate knowledge and skills in livestock keeping;
- delivery of livestock inputs and services;
- improving market infrastructure and marketing systems for livestock and livestock products;
- empowering livestock farming communities and the private sector;
- strengthening national and local government institutions to modernise the livestock sector; and streamlining the policy and regulatory environment to provide a conducive environment for private and public sector investments.

Livestock and Veterinary Policy

The development of the livestock industry is guided the National Livestock Policy of 2006. The instruments for the implementation of this policy come from the Livestock Sector Development Strategy of 2010, the Livestock Sector Development Programme of 2011 and various legal and regulatory frameworks with respect to: Veterinary Act,2003, Animal Diseases Act, the Dairy Industry Act, the Meat Industry Act, Hides and Skins and Leather Trade Act, Animal Welfare Act, Livestock Identification, Registration and Traceability Act, and the Grazing-lands and Animal Feed Resources Act.

Control of livestock diseases and public health is one of the key objectives of Tanzania Livestock Sector Development Program (LSDP). The overall goal of the LSDP is to increase food security, stakeholder's incomes and contribution to the national economy. The purpose of the programme is to improve the livelihoods of the livestock farmers (pastoralists and agro-pastoralists) by enhancing the delivery of livestock inputs and services to livestock farmers; improving marketing infrastructure and marketing systems for livestock and livestock products; strengthening the capacity of livestock farming communities and the private sector; and strengthen national and local government institutions to provide services to the livestock sector.

The delivery of public Veterinary Services in Tanzania is the mandate of the Directorate of Veterinary services (DVS) and is driven by five core functions, namely (i) safeguarding animal and public health; (ii) promoting pro-poor policies in line with the national strategy for growth and reduction of poverty (NSGRP); (iii) promoting trade through a sanitary policy that facilitates access to urban, regional and international markets for livestock commodities; (iv) pro-conservation, animal welfare and environment protection; (v) delivery through Public-Private Partnerships.

Trans boundary animal diseases (TADs) are the most damaging and difficult to control. In addressing the challenge posed of trans boundary animal diseases nine priority diseases of national importance have been identified which require strategic and tactical interventions. At present these include Foot and Mouth Disease, Peste des Petit Ruminants (PPR), Rift Valley Fever (RVF), Rabies, African Swine Fever (ASF), Lumpy Skin Disease (LSD) and Newcastle Disease. Emerging and re emerging diseases like Ebola, Highly Pathogenic Avian Influenza and Mad Cow Disease (BSE) are also becoming a serious public and animal health threat due to global trade, human activities, transport and travelling etc. The control strategies for these diseases are likely to benefit from a more targeted use of the limited available resources.

Tanzania requests STDF support to employ consultant(s) to review FMD status, develop a plan for creating a disease free zone, and conduct a benefit-cost analysis of the proposed plan.

MARKETS FOR LIVESTOCK AND LIVESTOCK PRODUCTS

The contribution of livestock sector in the national GDP is significant, and comes mainly from trade of live animals and sale of meat, milk, eggs, skins and hides as awell as of by-products. The Tanzania economy has been growing steadily at around 6-7% between 2010 and 2015.

A recent study by the National Bureau of Statistics, in 2012/2013 (NBS) has shown that as average income increases, the demand for livestock products also increases.

With an estimated population of about 45 million, Tanzania offers a huge domestic market for livestock and livestock products. In addition to the domestic market, Tanzania is a member of the East African Community and The Southern Africa Development Community (SADC) which increase potential markets

for investors. Other market opportunities include the European Union where Tanzania exports have access arrangement under EU's Everything But Arms (EEA) Initiative. The US AGOA (Africa Growth Opportunity Act) is yet another opportunity for Tanzanian goods to access the US market. Furthermore, the geographical location of Tanzania creates seaboard, inland water ports, land and air links which connect with reliable access to export markets.

The meat industry is one of the main components of the livestock sector. 98% of red meat products originate from indigenous breeds, with 80% produced by agro-pastoralists and 14% from pastoralists. Per capita meat consumption of 12 kg, is far below the FAO recommended rate of 50 kg. Average age of off-take for cattle is 8-10%, with animals harvested at an average of 6-7 years. Processing of beef is currently inadequate, with six abattoirs in the country operating at 50% capacity, although seven more abattoirs are being built. Only 2% of beef produced is processed, with remainder sold warm and undifferentiated. Most slaughter facilities in Tanzania operate using basic technology and lack tools and cooling facilities, and products carry potential health risks for consumers.

The leather industry is another important component of livestock sector. The industry relies on raw skins and hides obtained after slaughter of animals at abattoirs and slaughter slabs across the country. There is under-utilisation of hides and skins, but processing and marketing of these products has great potential to add value. The main markets for processed leather are Italy, China, and Turkey.

Currently Tanzania is exporting live animals and meat to external markets such as the Democratic Republic of Congo (DRC), Comoro and in the Middle East (Kuwait, United Arab Emirates and Oman). In 2011/2012 a total of 1,800,397 live animals were sold at local livestock markets out of which about 1,700 were exported (live) while a total 830 tons of meat was exported to external markets.

Investment opportunities in the meat industry exist in the following areas:

i. Forming joint venture with the national ranching company and other privately owned ranches to modernize ranches for both local and export markets.

ii. To invest in the establishment of new ranches (for cattle, sheep and goats) and farm (poultry and piggery). The established ranches and farms are suitable areas for establishing disease free zones where emphasis is put on the management system that favour and meet requirement for specific disease control systems.

iii. Feed lot /fattening programmes and commercial fodder production

iv. Slaughtering and processing – when coupled with approved disease control can meet requirement for commodity free trade, whereby produced products like deboned beef can access elite export markets.

FMD STATUS, EPIDEMIOLOGY AND CONTROL IN TANZANIA

Foot and Mouth Disease is endemic and widespread in Tanzania. It was first recorded in the country in 1927 and has since been reported every year, generally in all mainland regions.

Among the seven FMD serotypes, Tanzania experiences four: types O, A, SAT-1 and SAT-2. Recovery from one serotype results in no protection against another. Of the four serotypes, O is the most widespread; A occurs only sporadically and over relatively short period; SAT-2 outbreaks are marked by

cyclic incidence with periods of high epidemic incidence being interrupted by long periods (3-4 years) of low to nil incidences; SAT-I occurs less frequently and is believed to have been introduced into Tanzania from Malawi.

Cross-sectional serological household surveys were conducted in 2011-2012 period in northern Tanzania in Serengeti, Ngorongoro, Tarangire and Arusha ecosystems, involving 10 villages per ecosystem and two livestock herds in each village. Wildlife sampling included 25 buffaloes in each ecosystem, but higher numbers of buffalo samples were available from some areas (e.g. Ngorongoro) as part of general disease surveillance operations. Livestock and buffalo seroprevalence determined by non structural proteins (NSP) ELISA was high in Serengeti, Ngorongoro and Tarangire (>60% and 70-90%, respectively) and lower in Arusha (>30% and >40%, respectively).

In another serological survey for FMD epidemiology, conducted by the SADC TADS project in Tanzania in 2010 –2011 involving 330 animals (121 buffaloes and 209 cattle) was carried out in Katavi, Mkomazi, Mikumi, and Ruaha ecosystems found higher seroprevalence in buffalo than in cattle in all ecosystems.. Overall seroprevalence was determined by non structural proteins (NSP) ELISA whereby FMD antibodies were detected in livestock and buffalo in all ecosystems, with the highest seroprevalence found in Katavi National Park (100%), especially in buffalo, followed by Mikumi and Ruaha (90-93%), and Mkomazi (56%).

These studies have helped to identify the most common circulating strains of FMDV in Tanzania and information on viruses isolated by the World Reference Laboratory (WRL), during the periods 2009–2012 indicates that:

- A virus belonged to Genotype 1 and were related to DRC, Kenya, and more generally East African region viruses.
- SAT-1 viruses belonged to Genotype 1 and were related to Kenyan viruses.
- SAT-2 viruses belonged to Topotype 4 and were related to Kenyan and Zambian viruses.
- O viruses were also related to East African viruses (Kenya, Zambia, Uganda, etc.)

The similarity of serotypes across eastern Africa regions suggests the need for collaboration to maximize vaccine matching efforts. It is positive that for each serotype there is only one topotype reported suggesting less intra-serotype diversity to worry about for vaccine strain selection.

Economic Importance of FMD in Tanzania

Foot-and-mouth disease has a very high impact in developing countries, including Tanzania. The disease causes serious production losses, particularly in dairy cattle, including small-scale dairy producers and bars trade of live animals, beef and other animal products due to imposed bans. Household surveys conducted recently as part of a study in Northern Tanzania indicate that FMD was second after East Coast Fever when households ranked livestock diseases in order of importance. According to Perry and Rich, 2002 FMD is ranked third (after gastro-intestinal helminths and neonatal mortality syndrome) amongst animal diseases having the greatest impact on overall poverty levels.

Economic losses attributable to FMD in the country are many fold and include losses through quarantine, export market loss, milk losses, weight losses, breeding losses (due to longer calving intervals, sterility, abortions) and deaths particularly among calves but also among the mature exotic cattle. Persistence of FMD in Tanzania has lead to a situation of almost non-existence of export trade in livestock commodities. Of these, the losses through quarantine are probably the most severe. Interruption of sale, interruption of delivery to the abattoirs, long delays on markets and holding

grounds, and a disruption of the meat trade are just a few of the more obvious losses through quarantines. The occurrence of FMD throughout Tanzania not only bars the country from international markets for fresh meat but prevents exports even to such otherwise readily accessible markets like Malawi, Zambia, the DRC, Burundi and Rwanda. This situation needs to be rectified if the animal industry is to develop in Tanzania.

Quarantine losses are not the only losses as other non quarantine losses include milk losses, weight losses, breeding losses (due to longer calving intervals, sterility, abortions) and deaths particularly among calves but also among the mature exotic cattle

Successful control of FMD with vaccination, from even a portion of the country, would enable;

- The beef industry to expand its export of fresh meat and increase its export of live cattle, goats and sheep
- The dairy industry to establish a nucleus herd of high genetic potential protected from FMD
- Imported stock to be raised and acclimatized in a FMD-free zone

The current approach is using the FAO Developed Progressive Control Pathway (PCP) tool for FMD control.

FMD CONTROL IN TANZANIA.

The multiple and constantly changing strains of FMD viruses, multiple livestock and wildlife species of animals affected by FMD and presence of the buffalo reservoir of the disease present a huge problem for the control of the disease in Tanzania and areas with similar ecological conditions. Studies conducted to establish prevalence and characterize circulating FMD viruses at wildlife and livestock interface areas during FMD outbreaks have increased the understanding of the epidemiology of the disease. To control FMD currently, three control options are applied

- Voluntary vaccination on government parastatal farms and some large private farms;
- Movement limitations on livestock into or out of an infected area. Quarantine usually extends to a radius of at least 8-10 km from the focus or to the whole district in the case of widespread infection
- Compulsory vaccination of all cattle being transported from one district to another by road, rail and on all imported stock

These measures have been of limited effectiveness in controlling the disease. Only with systematic area and ring vaccination will more concrete results be achieved. Tanzania urgently need to start systematic control of FMD.

Tanzania has developed a strategic control plan for FMD. The effectiveness of the strategic plan is clearly hinged on serological surveys to assess vaccination coverage, by analysis of surveillance data to establish disease prevalence, by epidemiological investigation of outbreaks, and by laboratory confirmation that the vaccines used are appropriate for the strains of FMD present in Tanzania (MLDF,2012). The proposed FMD control is an export oriented measure which will contribute to boost foreign exchange earnings. The main challenges facing effective control of FMD in the country are:

- Disease is endemic and widely spread among multiple domestic and wildlife species
- Rampant uncontrolled animal movement (of livestock and wildlife)

- not clearly known dynamic and changing epidemiology of the disease
- Definitive diagnosis limited by low laboratory diagnostic capacity and low level of specimen submission.
- Multiple virus serotypes and topotypes result in varying outbreaks which complicate control by vaccination
- Presence of diverse and huge wildlife (that mingle with livestock) population occupying vast lands with species capable of harboring the causative virus.
- Price of vaccine is prohibitively high and its availability erratic.
    - The importation and use of the vaccine has been dismal (e.g. 240,000 doses in the year 2006 *vis-à-vis* 18.5 million cattle at high risk) because most livestock keepers cannot afford.[1]
- Livestock keepers are reluctant and not enthusiastic to control the disease because it does not cause high mortalities
- Its economic impact has not been scientifically quantified and as such there are no hard facts with which to convince policy and decisions makers to allocate adequate resources for its control.

ESTABLISHING DISEASE FREE ZONE

The OIE and FAO have developed a tool, known as Progressive Control Pathway for FMD (PCP-FMD) for controlling endemic FMD where it occurs by implementing a series of related measures, called Stages 1-5. At stage 1 a deliberate effort was taken to comprehensively study the epidemiology of the disease before embarking on implementation of risk based control measures (for the whole country or selected zone/farms within the country). Tanzania has implemented all required activities for stage 1. What is currently lacking is the resources for procurement of FMD vaccines for mounting vaccination campaigns for the whole country or in the proposed disease free zones. Tanzania proposes a feasibility study to evaluate:

1. The compliance for achieving stage 1 criteria;
2. A benefit cost analysis for establishing a disease free zone using the PCP tool

Establishment of DFZs is a measure applied in identified area within a country to eliminate the risk of disease and enable production of quality animals using the limited resources available. Options to establish DFZ are recommended by the OIE and WTO's Sanitary and SPS Agreement to assist resource-poor countries to access markets for their livestock and livestock commodities.

The DFZ, if implemented, will enable allocating resources for implementation of sanitary measures for exporting livestock and livestock commodities. Most DFZs start with FMD control and progressively and gradually include /address other diseases.

Tanzania has several areas suitable for establishing DFZs. Areas that have been proposed for establishing DFZ (see map below) include the Rukwa–Katavi area in the south western part (bordering Zambia and Democratic Republic of the Congo), the Kagera region in north western Tanzania bordering Uganda and Rwanda, and the eastern zone comprised of Morogoro and Coast regions (near Dar es Salaam, the sea and air gateway). These areas have adequate transport infrastructure, easy access to external markets (border areas), abundant rains on fertile soils, and a sound livestock resource base.

[1] Annual Report, Director of Veterinary Services, 2006

These areas have established livestock farms and ranches for starting DFZs or areas for commodity based trade.

Rukwa region in south western Tanzania has been selected to pilot the establishment of FMD free zone in Tanzania because it offers many advantages. The proposed area for DFZ has been selected based on the following criteria:-

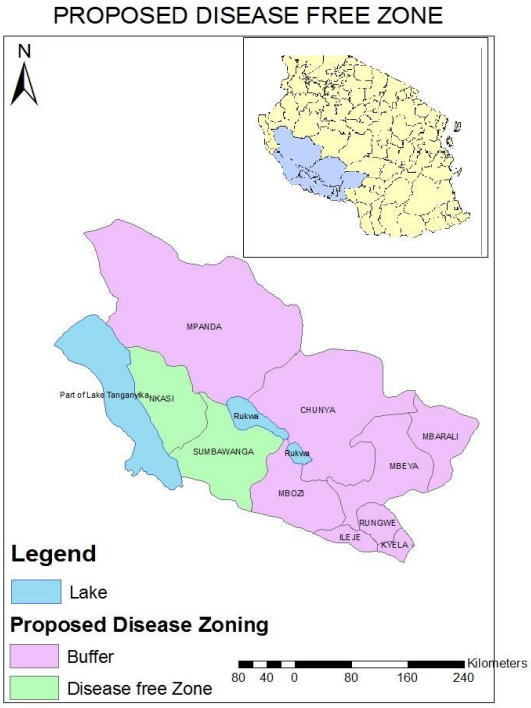
(i) **Geographical location:** the area is well demarcated from other areas by natural barriers which are formed by the Lake Tanganyika on the south west, Lake Rukwa in the north east and the Katavi national park in the north-west. These natural barriers can be strengthened by electric fences, if necessary. The border with Zambia to the south is a shared international border between Tanzania and Zambia

(ii) **Potential for livestock production:** The area has indigenous animals of good genetic merit (Ufipa zebu), suitable climatic conditions, adequate rain, and fertile land.

(iii) **Infrastructure for livestock production:** The area has existing ranches and livestock multiplication units, processing plants and marketing facilities, roads, and communication networks.

(iv) **Public/private partnership**: The area has large commercial ranches belonging to the national ranching company (NARCO) with established management systems.

Implementation of the DFZ will target interventions that aim to declare the selected area by defining its boundaries, implementing disease control and prevention measures to free the area from FMD and utilizing existing facilities and infrastructure for promoting livestock production for international trade.
To reach a decision on a DFZ, a benefit-cost analysis is necessary to guide policy makers on the merits of the program taking into account synergistic wildlife and livestock production aspects. The proposed benefit-cost analysis will assess the economic merits of establishing FMD-free zone in Tanzania. It will analyse target products and export markets to determine if the FMD free zone would relieve export related constraints. The analysis will evaluate the impact of DFZ on access to international markets, and prices for beef, hides and live animals. The analysis will also evaluate the cost of establishing DFZ, including measures to eradicate FMD with vaccination, to maintain the disease free status, and to implement disease surveillance mechanisms including animal identification and trace-back schemes.
The benefit cost analysis will also assess the impact of establishing DFZ on other livestock owners, particularly pastoralists. The analysis will include environmental impact and implications on natural ecosystems, recognizing that wildlife tourism and conservation are extremely important in Tanzania.



3. *Which government agencies, private sector, academic or other organizations support this PPG request? Letters of support from each of these organizations would be advantageous (Appendix 1). See Qn. 7. (e) of the Guidance Note.*

-Ministry of Livestock and Fisheries Development
-Rukwa Regional Commissioner`s Office, Sumbawanga
- Zonal Veterinary Centre, Sumbawanga
-Tanzania Meat Board
-Ranchers: National Ranching Company,(NARCO)

4. *How does this PPG complement and/or build on past, ongoing and/or planned national programmes and/or donor-supported projects? See Qn. 7. (f) of the Guidance Note.*

In the 1990s, East African countries jointly implemented Rinderpest control under the EU-supported PARC Program that was succeeded by the PACE program (DVS Annual report, 2003) in late 1990s to 2005. Between 2007 and 2013, SADC countries had a project for control of TADs in majority of SADC member states, namely Tanzania, Zambia, Malawi, Mozambique, and Angola. The targeted diseases included CBPP, PPR and FMD, The project contributed immensely through supporting epidemiological studies of FMD in wildlife – livestock interface areas in Mkomazi, Mikumi, Ruaha, Katavi ecosystems
Currently EAC countries and other IGAD countries are implementing a USAID funded project titled Standard Methods and Procedures in Animal Health (SMP-AH). The four-year project (2012-2016) seeks to control nine prioritized TADs by harmonisation and coordination of surveillance, diagnosis, and control activities in the horn of Africa region (SMP-AH project progress report, 2014).

The FAO tool/framework endorsed by the OIE for FMD control, popularly known as FMD Progressive Control Roadmap or the progressive control pathway for the control of FMD (PCP-FMD, 2012), is being used by both EAC and SADC countries for dealing with endemic FMD in their countries (Wekesa, 2012; King, 2014). Tanzania is currently at stage 2 of the FMD Control Roadmap (MLDF, 2014), and ready to

progress to stage 3. As required for stage 2, Tanzania has ongoing monitoring of FMD strains and risk in both fixed and pastoral production systems. This monitoring includes serological monitoring of livestock populations, active surveillance, and epidemiological analysis of outbreaks.
Tanzania has a legal, economic, and political environment enabling progressive FMD control. The legal framework ensures that given resources, disease control and surveillance activities can be implemented smoothly. The government is committed to developing an effective and sustainable control program.

Development of a private animal health delivery model in the country started after the government restructured public veterinary services.

The private sector has been allowed to operate as a partner in the delivery of services particularly in the areas of supply and distribution of inputs such as drugs and vaccines. Private veterinarians have a particularly important role in disease reporting, advisory and provision of curative services and taking appropriate control measures that significantly include vaccinations.

The Public service role is to formulate policies and regulate and control quality and standard of services and products delivered by the private sector. In addition, the public veterinary service monitors the disease trends and makes informed decisions on changing disease landscapes. Institutions have been legally set up to oversee and promote provision of services in collaboration with the private sectors. These include the Tanzania Food Drugs and Cosmetics Authority, the Pharmacy Board, the Veterinary Council of Tanzania, the Tanzania Meat Board and the Dairy Board.

Tanzania Livestock Identification and Traceability System (TANLITS) is another national program that seeks to operationalize the Livestock Identification, Registration and Traceability Act CAP 184 and its Regulations of 2011 Government Notes No. 362. The main purpose is controlling animal diseases for enhancing food safety assurances as well as to regulate movement of livestock, improve livestock products and production of animal genetic resources, promote access to market, and to impede livestock theft.

The system operates through registration of stakeholders, animal identification, and registration of movements. Stakeholders are categorized into two main groups – establishments and persons. The TANLITS has been developed and fortified with a legal and regulatory framework in the enactment of the Livestock Identification, Registration and Traceability Act No 12 of 2010(Cap 184). Besides the legal and regulatory framework, a database IT Solution has been developed and pilot tested through the FAO Support (2012-2014). Primary or basic identification using brands has been well adopted in the Lake Victoria Zone Regions while the contemporary technology adopted Combo ear tags has been used in dairy cattle in the pilot testing districts of some districts. In the course of assessing feasibility of establishing DFZ, the opportunity of extending TANLITS to DFZ will be explored.

Having met all the requirements in the FAO/OIE Progressive Control Pathway for FMD for Stage 1, Tanzania is ready to advance to Stage 2 by developing a Risk Based control of FMD with the aim of eliminating FMD from at least one zone of the country using vaccination as the main tool. Tanzania requests STDF assistance to employ consultant(s) to guide the country's progression to stage 2 and gradually to Stage 3, with ultimate aim oa achiving FMD control with vaccination. The consultant(s) will work side-by-side with staff in the DVS to review and confirm the country's compliance with stage 1 criteria, develop a plan for creating a disease free zone, and conduct benefit-cost analysis of the proposed plan. Appendix X is Terms of Reference for the consultant(s).

5. *Have you discussed this PPG request – or funding for the project proposal which would result from it – with any potential donors (bilateral, multilateral, Enhanced Integrated Framework, etc.)? If so, provide details below and indicate potential sources of funding for the resulting project. See Qn. 7. (g) of the Guidance Note.*

No, the plan is to submit the PPG request and project proposal for STDF support.

II. IMPLEMENTATION & BUDGET

6. *Who will take the lead in implementing this PPG? If particular national experts and/or international consultants are proposed, attach a copy of their Curriculum Vitae and record of achievements (Appendix 2). If no names are provided, the STDF will provide a shortlist of consultants if the PPG request is approved.*

The Tanzanian Directorate of Veterinary Services will be leading the implementation of this project. The DVS will utilize consultants from Tuskegee University of School of Veterinary Medicine and others as suggested by FAO.

7. *In the table below, briefly describe the main activities to be carried out under this PPG and specify who would be responsible. Provide an estimate of the budget required (e.g. for national/international expertise, travel and DSA of consultants, stakeholder meetings or workshops, general operating expenses, etc.).*

Activity	Responsible	Estimated Budget (US$)
Consultant Salary	STDF	21,000
Consultant Foreign Travel	STDF	8,000
Domestic Travel (DVS Staff and Consultants)	STDF	4,000
	GoT	4,000
Supplies	STDF	2,000
Tanzania Staff Salary	STDF	10,000
	GoT	10,000
Community Outreach and Workshops	STDF	5,000
Total Budget		**65,000**
Total by GoT		**15,000**
Total Requested from STDF		**50,000**

Appendixes

Appendix 1: *Letters of support from each of the organizations supporting this proposal.*

Appendix 2: *Curriculum Vitae and record of achievements for any consultants proposed to implement this PPG.*

Appendix 3: *Terms of Reference for Consultancy Service by Tuskegee University:*

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The consultant will:

1). Review the status of FMD in Tanzania and contribute to the development of a national FMD control strategy;

2). Confirm Tanzania's compliance with FAO/OIE criteria for PCP stage-1

3). Guide the country's progression to stage 2.

4). Evaluate alternate geographic areas for potential FMD free zones for commodity-based trade;

5). Assist the DVS on consulting the local community regarding the plan for establishing DFZ;

6). Assist DVS staff to build capacity on SPS issues and develop a plan for creating a DFZ;

7). Collaborate with DVS staff to conduct the Benefit-cost analysis of the proposed DFZ;

8). Assist DVS to write a project grant proposal to submit to STDF for establishing FMD free zone;

9). Assist DVS to develop a plan for enabling Tanzania livestock sectors access international markets for livestock and livestock products.

References

1. Various Ministry of Livestock and Fisheries Development documents on
    - Directorate of Veterinary Services (DVS), Annual report,2003
    - Livestock Policy,2006;
    - Agricultural Sector Development Program, Livestock Component (ASDP,2003);
    - Basic Data for Livestock and Fisheries Sectors 2013
    - The Pan African Control of Epizootics (PACE) Program, 2003
    - Annual Budget Speech of the Minister for Livestock and Fisheries Development in the Parliament(for 2012/13, 2013/14 and 2014/15)
    - Draft FMD National Control Strategy, MLFD, 2012
    - Country Presentation to the FAO PCP-FMD Meeting for Eastern Africa, Kigali Rwanda, 20-23 October, 2014
    - The Tanzania Livestock Modernization Initiative (TLMI), July 2015
    - Interviews with various stake holders with interest in livestock sector development, VIC staff, poultry farmers and traders.
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