APPLICATION FORM

PPG Title	**Project to support COMESA develop commodity based trade in beef**[1]
Budget requested from STDF	US$ 30,000
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[1] Basically the operationalization of Article 2 (3) 'to cooperate in promotion of commodity-based trade' in deboned beef of the Sanitary and Phytosanitary Annex to the Tripartite Agreement

I. Background and rationale

1. OVERVIEW

Through the Comprehensive Africa Agriculture Development Program (CAADP) unit, the Common Market for Eastern and Southern Africa (COMESA) engages member countries to review sector policies, programmes and investment plans in line with CAADP principles and targets, while COMESA's implementing agency, the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) implements technical support programmes at country level. It is necessary (a) to establish a clear regional SPS implementation plan, with focus on the "Green Pass Certification Scheme" and (b) to establish a long term fund for implementation of the "Green Pass Certification Scheme"

(i) The Comprehensive Africa Agriculture Development Program agenda and its objectives

CAADP is at the heart of efforts by African governments under the African Union (AU) New Partnership for Africa's Development (NEPAD), a program of the African Union to accelerate growth and eliminate poverty and hunger. As a common framework for agricultural development and growth for African countries, CAADP is based on the following:

- the principle of agriculture-led growth;
- the pursuit of a 6 percent average annual sector growth rate ;
- the allocation of 10 percent of national budgets to the agricultural sector;
- the exploitation of regional complementarities and cooperation to boost growth;
- the principles of policy efficiency, dialogue, review, and accountability;
- the principles of inclusive partnerships and alliances; and
- The implementation principles, which assign implementation to individual countries, coordination to designated REC's, and facilitation to the NEPAD Secretariat.

CAADP defines four major intervention areas, or pillars, to accelerate agricultural growth, reduce poverty, and achieve food and nutrition security in alignment with the above principles and targets:

- Pillar I. Extending areas under sustainable management and reliable water
- Pillar II. Improving rural infrastructure and trade related capacities for market access
- Pillar III. Increasing food supply, reducing hunger, improving responses to food-emergencies
- Pillar IV. Improving agriculture research and technology dissemination and adoption.

(ii) Pillar II Agenda and Objectives Framework for the Improvement of Rural Infrastructure and Trade-Related Capacities for Market Access (FIMA)

It is evident that cross border trade in SPS sensitive goods, i.e. food and agricultural products has underperformed most other trade sub-sectors. The specific objectives of the COMESA SPS interventions are based in large part on the proposed objectives and the implementation of the CAADP Pillar II; Agenda and Objectives Framework for the Improvement of Rural Infrastructure and Trade-Related Capacities for Market Access (FIMA).

The more operationally minded FIMA (Figure 1) focuses on how CAADP Pillar II is to be implemented and are:

Step 1: (a) identification of a range of strategic commodities and commercial products (b) organize country and regional resources around the selected commodities (Box A).
Step 2: review and align investment and trade policies so as to fully exploit demand trends in domestic and regional markets (Box B).
Step 3: Identify at country and sector level the needed regulatory and institutional changes together with the partnerships and alliances required to build the technical and commercial capacities so as to be responsive to markets. (Boxes C, D and E)
Step 4: Identification of strategic investments, models of public-private partnerships and business-to-business alliances necessary to overcome the limitations and necessary inputs in the development of smallholder-friendly value chains in the considered commodity sectors. (Box F)
Step 5: In parallel to national processes, interested country and regional bodies under the leadership of the REC's including COMESA, specify the necessary efforts and roles to (a) harmonize country strategies to facilitate the emergence of cross-border agricultural growth sectors and (b) link these sectors to the main transport/communications corridors within and across regions in order to create regional development spheres with more diversified growth patterns. (Boxes G, H & I)
Step 6: Based on the above, REC's and member governments design rural infrastructure strategies to develop the required complementary infrastructure and regulatory environment to link the above development domains with national consumption centres and exit points to foreign export markets. (Boxes J, K)

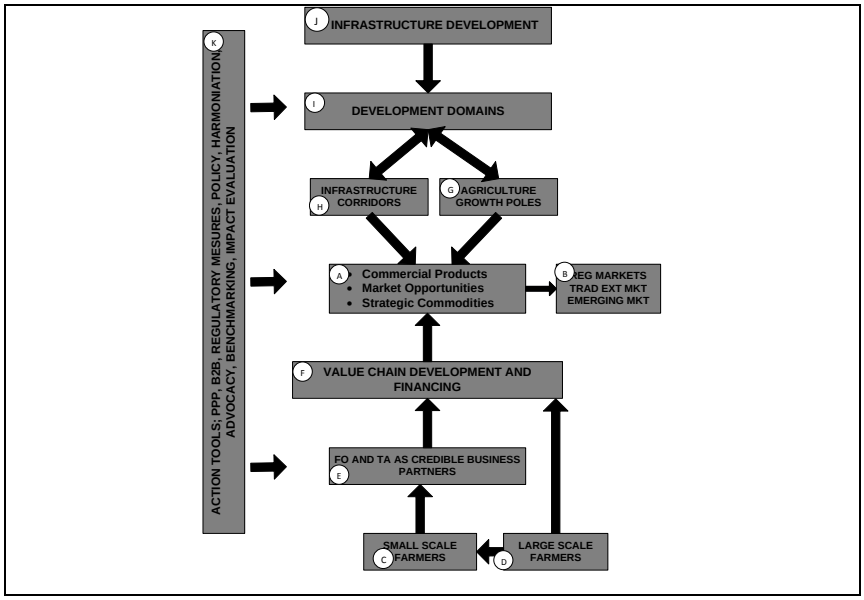

Figure 1; FIMA Conceptual Framework diagram (see text for explanation)

Strategic Area A aims at raising competitiveness and expanding trade in domestic and regional markets by eliminating regulatory, including SPS, and administrative barriers and disincentives impeding or raising the unit cost of the movement of goods across local and cross-border markets and by developing quality management and certification services

systems and harmonize standards, norms, and grades across national markets. Other related aims include the modernization of regional trading systems.

In strategic Area C 'Developing Value-Chains and Financial Services—Core Program Components' CADDP aims at building capacity to develop quality management and trade certification service systems to facilitate compliance with international trade agreements and overcome nontechnical barriers affecting the growth of African exports.

Developing Commodity Based Trade in beef

The PPG will be used to elaborate the ways in which COMESA will support the policy, and regulatory environment for the development of commodity based trade in beef and beef products piloted in the Kavango – Zambezi Trans-frontier Conservation Area (KAZA TFCA) Member countries. In respect of foot and mouth disease (FMD) a disease free commercial / small scale sector associated with a TFCA cannot be separated from high risk FMD areas because of the presence or closeness of wildlife (African buffalo in particular).

Balanced rural development needs to be based on both agriculture which in arid and semi arid areas equates to livestock production and, where possible, conservation and sustainable exploitation of wildlife. Wildlife constitutes a unique African resources and its potential contribution to the economies of countries in southern and eastern Africa through tourism and as a renewable source of high quality protein is increasingly apparent. Furthermore, tourism based to a large extent on wildlife conservation contributes more to the Gross Domestic Product (GDP) of many COMESA countries than livestock and this disparity is growing. So far, however, exploitation of both livestock and wildlife in the same areas has proven difficult because current systems for management of animal diseases, particularly FMD, are based on the need to separate wildlife and livestock populations.

In respect of high impact trans-boundary animal diseases (TADs) the present international approach is to eliminate them from countries or, at least, zones within countries based on a strict geographic approach. Such an approach is the philosophy behind current international sanitary trade measures applied to animal commodities and products, i.e. the requirement that access to regulated markets is dependent upon the locality of production being recognised as free of high-impact TADs. However, where non-domestic animals (including arthropods) are instrumental in maintaining these infectious agents, elimination/eradication is often impossible, i.e. the technology simply does not exist. The inability to eradicate high impact TADs is the problem which faces the regional economic communities (REC's) when it comes to diseases such as SAT serotypes of FMD, Rift Valley Fever (a zoonosis), lumpy skin disease, African horse sickness, African swine fever and many others; the best that can be hoped for is their effective management. The consequence is that animal commodities and products derived from most localities in southern Africa are precluded access to regional and international markets and consequently has major impact on future rural development potential. It has resulted in attempts to exclude free-living hosts of infectious agents from countries and zones to enable export of livestock and their products. The classic example in southern Africa has been the effort to free large areas of southern Africa from FMD through elimination of buffalo from livestock producing areas and erection of thousands of kilometres of game fences which bisect ecosystems, block traditional wildlife migration routes and access to water. Devastating effects on wildlife populations have resulted but still enormous areas of southern Africa remain that are not free from FMD because free-living African buffalo occur there. With the growing realisation of the importance of healthy environments

and the major contributions to GDP of wildlife and wilderness areas, the wisdom of such historical actions becomes increasingly questionable.

At present there are 3 potential mechanisms, other than the status quo that can be used as the basis for management of infectious disease of animals that enable access to international markets for commodities and products derived from animals, *viz.* (1) achievement of area (country or zonal) freedom from particular TADs – accepted as the approach of choice currently, (2) 'compartmentalisation' that so far has proven apt for vertically integrated intensive livestock production (mainly poultry and pigs) or (3) a commodity-specific approach commonly referred to as commodity-based trade (Figure 2). Combinations between these three approaches are also potentially available. It is intuitively obvious that in the complex rural settings of sub-Saharan Africa it is not possible to simply impose livestock disease control systems that have proven effective in Europe or North America.

<table>
<tr><td colspan="3"></td><td colspan="2">High value forex
High risk
Narrow group benefits</td><td colspan="3">----------
Low value
Low risk
Wider group benefits</td></tr>
<tr><td colspan="3"></td><td>Direct export to large retailers</td><td>High value export (e.g. EU)</td><td>Export to emerging markets (Asia)</td><td>Regional trade in SADC / COMESA / EAC</td><td>Domestic urban markets</td><td>Local marketing</td></tr>
<tr><td rowspan="5">Disease control systems</td><td rowspan="5">High cost
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Low cost</td><td>Area based disease freedom</td><td colspan="2">The (high risk, high cost) status quo.</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Export zones with vaccination</td><td colspan="3">An existing option, comparable to South American competition</td><td></td><td></td><td></td></tr>
<tr><td>Compartmentalization</td><td colspan="3">An option to explore for high value exports, although technical questions and distributional consequences</td><td></td><td></td><td></td></tr>
<tr><td>Commodity based trade</td><td colspan="4">A key option for a broad set of high-medium value markets - as yet not fully exploited, but requiring investment in product safety, testing and certification. Overall lower cost and risk spread</td><td></td></tr>
<tr><td>Managing FMD</td><td></td><td></td><td></td><td></td><td colspan="2">The default - high volumes, but lower unit values. An important element of the overall picture</td></tr>
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Figure 2. Market access and disease control: future opportunities?[2]

While the technical requirements of the three alternatives are broadly available from the literature and publications of international standard-setting bodies that operate on behalf of the World Trade Organisation's SPS (Sanitary and Phytosanitary) Committee, practical guidance on the circumstances which would favour one approach over another or a combination of approaches are currently unavailable. There is also lack of clarity concerning the necessary pre-requisites and financial, ecological and logistical implications of alternative approaches that could be adopted. In short, the idea is to make the present maze of issues surrounding livestock, wildlife conservation and trade more navigable to decision-makers in COMESA countries. In this way practical guidance will be provided that take broader rural development imperatives into account when it comes to initiatives directed towards gaining access to international markets for beef and its derivatives. The concept of Commodity Based Trade (CBT) in fresh de-boned beef is one model that has gained a measure of support in Africa as a way forward out of the dilemma (Figure 2)

[2] Adapted from - Scoones, I., et al, (2010), Foot-and-mouth disease and market access: challenges for the beef industry in southern Africa. Pastoralism Vol. 1 No. 2 July 2010

The expected role of COMESA

In respect of the SPS enabling environment the role of COMESA as defined by the SPS Annex to the Tripartite Agreement explicitly mandates the three RECs' (i.e. the EAC and SADC in addition to COMESA) and their Member States to promote commodity based trade in beef as a working aim. In potentially choosing KAZA as the area for the first steps in developing CBT there will need to be close collaboration between COMESA and SADC in that two of the target countries are only members of SADC and the initial 'proof of concept' work will be done in Namibia. However the likely main beneficiary in terms of meat imports will be Angola and once the concept has been established there would exist the immediate to mid-term possibility of extending the concept to Zambia, and Zimbabwe.

Conceptually the area of intervention by COMESA (and SADC) is summarized in Figure 3 which shows simplified generic value chains for livestock / meat production in the context of the Trans Frontier Conservation Areas. The project must define needed activities in the form of further analytical work, the setting up of working groups on policy, legislation and regulations, the interaction between CODEX and OIE in areas of overlapping interest, the role of third party standards and certification and capacity gaps at national and regional level. There are also gaps in the sense that some of the interventions are being undertaken piecemeal and there is a significant need to set up an information clearing house and / or coordination point. In terms of the SPS Annex to the Tripartite Agreement the following three sub activity areas are identified;

a) **Setting commodity-specific standards in liaison with the World Organization for Animal Health**

Assistance and leadership in initiating the process of standard setting among Member States is a core COMESA function as it concerns both trade and multilateral issues. Furthermore the location of the COMESA designated Regional Reference Laboratory i.e. the Central Veterinary Research Institute (CVRI) Laboratory in Zambia, for Animal Health which is a country directly affected by KAZA. Member States have the requisite technical knowledge and engagement with their own domestic livestock sector, though not necessarily the resources to engage with the OIE on their own.

b) **Participating in defining an agreement of internationally acceptable levels of protection (ALOP) for particular or specific commodities.**

The development of an agreed set of acceptable levels of protection needs to be facilitated for commodity based trade. Merely defining a standard is not enough and the necessary enforcement and certification of compliance will need to be examined in some forum. The appropriateness of existing traceability and compliance systems in both the public and private sector needs to be examined and an agreed standard fixed so as to deliver on concerns of the various stakeholders (Figure 3).

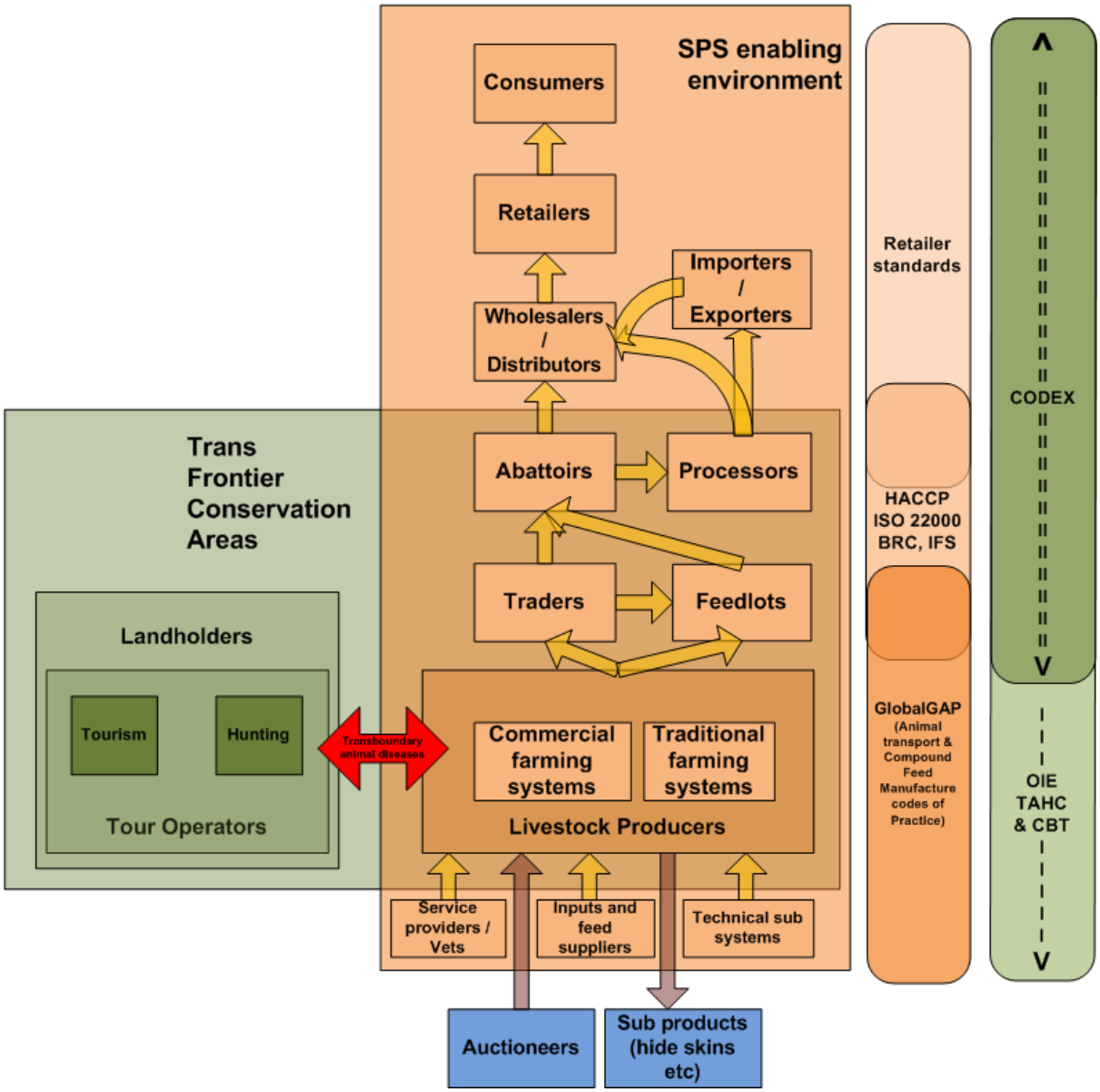

Figure 3; The SPS enabling environment for animal and animal products in the context of the tourism and animal products value chains

c) Spearheading the promotion of the commodity-based trade approach at all international fora such as OIE meetings (at regional and global), and WTO meetings and collaborating in lobbying for access to international markets of the region's food and agricultural products

COMESA can spearhead the zoosanitary case made for commodity based trade by facilitating the SPS regulatory environment with Member States (in cooperation with Member States from other REC's in the Tripartite Agreement). The basis for this would be coordinating a response from Member States to answer the following questions raised by the OIE in respect of commodity based trade.

"More specific guidance should be developed on mitigation measures that will provide adequate assurance that [foot and mouth disease virus] FMDV infected animals, particularly those in the early stages of infection and possibly incubating the disease, are not presented

for slaughter at export abattoirs in regions that are not officially FMD-free.3&1. More specific guidance should be developed on mitigation measures required at export abattoirs in regions that are not FMD-free. ..... guidance should encompass both procedures to be followed and measures by which their implementation can be monitored.

- *The behaviour and survival of FMD in bovine fat tissues.*
- *The amounts of residual bone marrow, lymph node and blood clot in deboned beef DB.*
- *The effective oral dose of FMD for pigs.*

The relative contribution of "pre-slaughter" versus "at-abattoir" control measures aimed at reducing the likelihood of FMDV contamination of DB exported from zones that were not OIE free. A more detailed retrospective study from one or more countries where detailed records are available might be developed to analyze the likelihood that DB from infected animals was actually exported." 2

Other diseases of interest to the OIE on which they believe need more clarity are listed in Table 1

Table 1; Other diseases besides FMD in beef that require research before the OIE will accept their elimination in traceability and slaughter procedures

Disease (Article)	**Issue**
Rift Valley Fever (Article 8.11.11.)	risk associated with viraemic animals
bovine brucellosis (Article 11.3.6.)	beef as a safe commodity, trade of cattle for slaughter
Crimean-Congo Hemorrhagic fever (CCHF)	chapter development

3 FIT/COORDINATION WITH OTHER PLANNED ACTIONS.

Earlier European Union (EU) programs include the Natural Resource Utilisation and Conservation Wildlife Conservation and Management Programme (8ACP BT10). The objective of the programme was the conservation of wildlife and protected areas and promotion of the sustainable use of these resources to improve employment and income opportunities for the local communities and provided support to the Okavango Delta Management Plan and the KAZA - TFCA. There is general support mentioned in the Southern African Development Community European Community Regional Strategy Paper for the period 2008 - 2013.

The Wildlife Conservation Society (WCS) supported by the United States Agency for International Development (USAID) EGAT SCAPES Program together with USAID's Africa Bureau and the United States Department of Agriculture - Foreign Agriculture Service USDA FAS/OCBD/Trade & Scientific Capacity Building Division confirm an ongoing focus on expanding international trade in livestock-derived products from the COMESA/SADC region is an area of ongoing interest.

[3] There are several reasons cited for restricting export from countries using FMD vaccines. The most important is probably that routine blood tests, relying on antibodies, cannot distinguish between an infected and a vaccinated animal.

The World Bank is actively considering a program to support veterinary services in Zambia – the Zambia: Livestock Development and Animal Health Project. The project is still in a developmental stage and would be of interest to COMESA in that it seeks to strengthen the Veterinary Services of the Ministry of Livestock and Fisheries Development in Zambia.[4] Given that the Central Veterinary Research Laboratory in Zambia is the designated COMESA Regional Reference Laboratory for Animal Health this program could complement the ultimate development of commodity based trade (CBT) in deboned beef in the KAZA countries.

A longer term project is the development of efforts to develop worked examples of commodity based trade in beef in the KAZA region. There are necessary complementary steps that need to be taken at a national and regional level including developing compatible legislation, regulations as well as informed and appropriate advocacy in the correct international forums including the World Trade organization (WTO) and World Organization for Animal Health (OIE) as outlined in the SPS Annex to the Tripartite Agreement (see footnote 2 above). A key economic driver behind the KAZA – TFCA and similar programs is eco-tourism in otherwise marginal lands Africa enjoys a global comparative advantage. Nature-based tourism now contributes about as much to the gross domestic product of southern Africa (data for East Africa is not readily available to the author but is not likely to be different) as agriculture, forestry, and fisheries combined. Unfortunately the necessary management of wildlife and livestock diseases and zoonoses within the planned larger TFCA's remains unanswered and an emerging policy issue of major concern to livestock producers in terms of access to export markets, and regional public health. Essentially, the TFCA concept and current internationally accepted approaches to the management of transboundary animal diseases (TADs) are largely incompatible. The TFCA model promotes free movement of wildlife over large geographic areas, whereas the present approach to the management of TADs is to prevent susceptible animal movement between areas where TADs occur and areas where they do not, with similar restrictions for trade in commodities derived from animals.

Namibia; Meatco (the company that operates Namibia's abattoirs and markets its meat products), supported by that country's official veterinary service, has explicitly expressed the need to develop an approach for the northern areas of the country where it is difficult to prove freedom from foot and mouth disease (FMD) and thereby enable beef export to high value markets. Apart from the technical challenge, this issue has an important and long-standing political element because more than half the cattle and associated producers of Namibia are located in this area which also has high levels of poverty. Fortunately, assistance in managing this complex issue is being provided in respect of the Northern Communal Area (NCA) of Namibia by the Millennium Challenge Account (MCA). However, the Caprivi is not covered by the MCA and presents an even more challenging situation than the NCA because it is located at the heart of the KAZA-TFCA and the only realistic program for that area would be one *perhaps* based on option 3 (see Figure 3). However Meatco has recently received support from the MCA to pilot a CBT program in the Caprivi Strip.

The project to be developed will fit in with other initiatives at EAC and SADC level - for example, there is a SADC SPS framework (i.e. SPS Annex to the SADC Protocol on Trade,

[4] Defined in the World Bank Concept Note as the OIE contact point

2008), and a draft EAC SPS Protocol. The COMESA project will build on these protocols and project activities in these regions (e.g. United Nations Industrial Development Organization [UNIDO] trade capacity building project in EAC).

2. WHAT KEY SPS PROBLEMS AND/OR OPPORTUNITIES WOULD THIS PROJECT PREPARATION GRANT ADDRESS?

Under the Market Access Pillar 2 of the CAADP framework several COMESA member countries that are signatory to CAADP Compacts have identified plant pests/diseases and animal diseases as a major hindrance to regional food security and trade. In 2000, COMESA established the FTA, requiring elimination of all duties on imports originating from other member states. In June 2009, COMESA established a Customs Union further reinforcing the objective of regional integration and free trade through harmonisation of tariffs. In order to work towards the ultimate goal of attaining continental integration, COMESA, EAC and SADC have cooperated in the harmonisation of these efforts through a tripartite arrangement. Through tripartite cooperation, work has begun towards harmonisation of tariffs, customs protocols and procedures. The Kampala Tripartite Summit of 22nd October 2008 reached agreement on key areas of collaboration, including the agreement on the establishment of a FTA with the ultimate goal of a customs union that involves tripartite member states. Article 29 of the Tripartite FTA Agreement (draft) recognizes the importance of regional harmonization of SPS measures for a fully functional and effective FTA. Annex 9 of the Tripartite Agreement provides more specific guidelines for harmonization of SPS measures in the single FTA.

Since the establishment of the COMESA FTA in 2000, the secretariat has undertaken several initiatives to support implementation of SPS measures amongst its Member States. The drawing up of COMESA SPS regulations and designation of reference laboratories, together with the development of a "Green Pass" certification scheme are some of the Secretariat's efforts to harmonize SPS measures in the region. Strengthening countries capacities to implement the COMESA SPS regulations and benefit from the reference laboratories remains very crucial.

The lack of a harmonized approach to SPS issues hinders trade and differing regulations in various member countries continues to increase transaction and trading costs, reducing the benefits and so acting as a disincentive to trade. Therefore, alongside initiatives to establish FTAs, uneven trade relationships will tend to widen if SPS barriers are not addressed. It is important to note that while tariff barriers are quantifiable targets, and therefore easily addressed, SPS measures are in many cases more qualitative and difficult to address. Therefore harmonisation of SPS measures is thus necessary to take full advantage of the gains made by COMESA on tariff reduction and/or harmonisation. It should be noted that the lack of SPS capacity that restricts intra-regional trade similarly affects international trade. Thus the development of SPS capacity in COMESA will benefit both intra-regional and external trade.

At the 3rd Joint meeting for Ministers of Agriculture and the Environment a decision was taken to 'domesticate'[3] COMESA SPS Regulations. ACTESA, as the COMESA's specialized implementing agency has the primary responsibility of implementing this decision. COMESA's SPS regulations as they stand currently are general in nature; laying out principles and concepts that need to be translated into systems applicable at country level to

eliminate SPS barriers constraining regional trade. *For example, the "Green Pass" is a commodity based approach to trade. It is a system of certification designed to support trade in agricultural commodities by resolving outstanding SPS issues and opening the way to high value markets by guaranteeing the safety and quality of the commodity. In terms of domestication it requires the following:*

a) Understanding commodities and the SPS issues that need to be addressed.
b) Understanding SPS systems of countries that are trading in the commodity
c) Understanding what needs to be addressed so as to establish a level of confidence between trade partners that the issue has been dealt with, i.e. is it legislation, regulation, standard, post harvest management protocols, surveillance, traceability and laboratory systems that need to be fixed / addressed
d) Understanding that whatever needs to be fixed to address the specific SPS issue is in fact the basis for Green Pass criteria and is an integral part of the "Green Pass Certification System."

The key problem to be addressed by the action to be funded by this PPG is the move from policies to actions (operationalization). Therefore the PPG should be understood in the context of the other three accompanying applications which are the intended focus / action areas of the SPS unit at COMESA. Mobilizing national support in a regional SPS support program will require the identification of key intervention areas and mobilization of appropriate resources to address the relevant issues. The intention would be that national governments would second key persons to the SPS Unit to carry out the analytical and background work and devise the necessary supporting interventions to develop CBT at regional and national level.

3. WHICH GOVERNMENT AGENCIES, PRIVATE SECTOR, ACADEMIC OR OTHER ORGANIZATIONS SUPPORT THIS PPG REQUEST?

COMESA's mandate is drawn from its 19 Member States and decisions are made through relevant policy organs including Ministers meetings. The decision to adopt and implement COMESA SPS regulations was endorsed by the meeting of COMESA Ministers of Agriculture, March 2008. The decision to implement a wider capacity development strategy was endorsed by the 3rd Joint meeting of Minister of Agriculture and the Environment held July 15th 2010. The proposals in this PPG closely follow the guidelines agreed on between COMESA, the EAC and SADC – more specifically Annex 9 (Annex on SPS Measures) Under Article 29(3) of the Tripartite Agreement which proposes a Tripartite approach to the issues of transboundary animal diseases and commodity based trade.[5] The PPA also has

[5] Annex 9; Annex on SPS Measures Under Article 29(3) of the (Tripartite) Agreement
Part One
Animal Health
Article 2
General Principles
Member States shall abide by the following principles:
(3) to cooperate in promotion of commodity-based trade in combination with zoning and compartmentalisation by:
(a) Initiating setting of commodity-specific standards in liaison with World Organisation for Animal Health (OIE);
(b) Participating in defining an agreement of internationally acceptable levels of protection (ALOP) for particular or specific commodities.

taken full account of the objectives and means outline in Pillar II of CADDP as discussed in the introduction. More specifically there have been several discussions around the practical implementation ('operationalization') of the 'Green Pass' where it comes to trade in SPS sensitive goods. Finally COMESA has mandated its Secretariat in Legal Notice Number 310 of 2009 to establish an SPS Unit within the Secretariat.

4 COMPLEMENTARY AND PREVIOUS ACTIVITIES IN THE SECTOR; HOW THE PPG WILL COMPLEMENT AND BUILD ON THEM

COMESA is working towards its vision for a fully integrated, internationally competitive regional economic community, several strategic programmes/interventions were initiated to harmonise tariffs and non tariff barriers. These have included;

- Customs Union in 2009
- Establishment of the FTA, in 2000.
- Tripartite Agreement with the EAC and SADC on 22nd October 2008
- EAC Common Market started in July 2010

Alongside initiatives to establish FTAs COMESA has worked on harmonisation of SPS measures so as to take full advantage of the gains made by COMESA on tariff reduction and/or harmonisation. In this area since 2006, COMESA has successfully implemented AMPRIP. The project has largely focused on the following activities:

a) **Development of SPS Regulations.** Key amongst the constraints facing African countries in relation to SPS and trade is the competence of the scientific bodies (Competent Authorities) for food safety, animal health and plant health coupled with fragmented national SPS systems and an institutional framework that is not harmonised with trade partners' requirements. COMESA SPS regulations provide a framework for member states to establish "equivalence" and not necessarily "sameness", i.e., to enable Mutual Recognition Agreements (MRA); that in fact, though we are different, we will achieve the same SPS objective.

   Though there are delays in gazetting the regulations, a decision was made at the 2nd joint meeting for ministers of agriculture and the environment to ensure SPS legal/ regulatory frameworks at national level are harmonised accordingly. The Regulations on application of SPS measures in the COMESA region were adopted by the COMESA Council of Ministers in December 2009. The challenge now is to work with member states in the implementation of the regulations.

b) **Establishment of COMESA regional reference laboratories** for animal health. Under the project, three Regional Reference Laboratories including a Central Veterinary Research Laboratory in Zambia, for Animal Health. In addition, the

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(c) Spearheading the promotion of the commodity-based trade approach at all international fora such as OIE meetings (at regional and global), and WTO meetings.
(d) Collaborating in lobbying for access to international markets of the region's food and agricultural products

(4) to explore innovative ways of ensuring that traditional livestock production systems comply with minimum international SPS requirements, with a view to enabling them to participate in regional and international trade.

project trained laboratory analysts from satellite national laboratories to reinforce skills and knowledge on the application of international standards in analytical work. Work is now needed to establish operations so that the designated laboratories can serve the region as envisaged.

c) **Establishing a network for SPS resources and expertise** that can be shared by COMESA member states. Information will be shared by these experts through the SPS Discussion Forum and through the SPS Pillar of the COMESA- wide Food and Agricultural Marketing Information System, which will contain, among others information on SPS requirement for major tradable commodities produced in the region for trade facilitation.

d) **Integrating the existing / proposed work on Commodity Based Trade in chilled de-boned beef into COMESA - wide SPS initiatives.** The proposed activity would link COMESA Member States (Zimbabwe, Zambia and Angola) and the COMESA Regional Reference Laboratory in Zambia to the planned activity in Namibia through the mechanism of the Tripartite Agreement bringing in other participating countries of the KAZA - TFCA (Botswana together with Namibia) who are SADC Member States only (Figure 4).

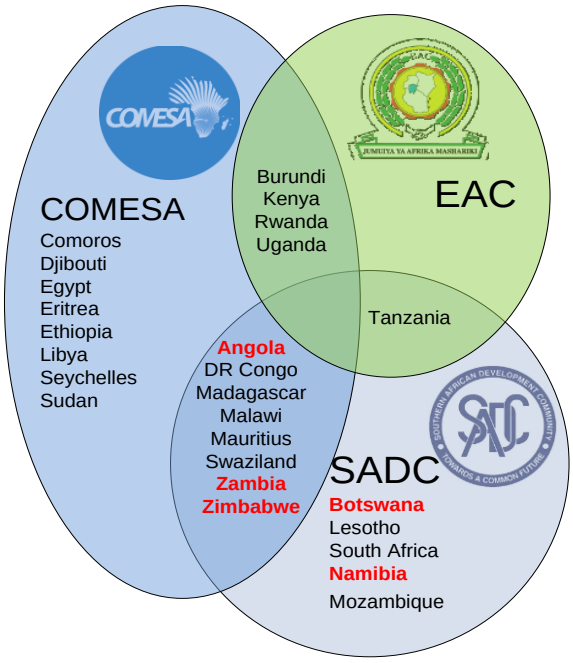

Figure 4 Relationship of target activity countries (Kavango – Zambezi Trans-frontier Conservation Area Member States in bold red) to the Regional Economic Communities in the Tripartite Agreement

Discussions with potential donors

Project concepts were shared with the Commonwealth Agriculture Bureau International (CABI), the World Trade Organization (WTO) Standards and Trade development Facility (STDF). Subsequent discussions led to the convening of a SPS proposal development workshop in Lusaka on the 26th and 28th of October in 2010 with key stakeholders, who included Development Partners and Member States hosting the COMESA designated SPS reference laboratories. Attendees included CABI, the STDF and the United States Agency for International Development (USAID) / United States Department of Agriculture (USDA), the United Kingdom Department for International Development (DFID) funded TradeMark Southern Africa (TMSA), the African Development Bank (AfDB), European Union (EU), the International Institute for Tropical Agriculture (IITA), the Kenya Plant Health Inspection Service (KEPHIS), African Union – InterAfrican Bureau for Animal Resources (AU/IBAR) and USAID in East Africa. Other donors with a specific interest in developing CBT are the DFID funded Natural Resources Institute (NRI) at the University of Greenwich who have a joint committee with the OIE on CBT. Actual field work in the form of a trial program on CBT will commence later in 2011 to be implemented by MEATCO in Namibia with funding from the MCA.

The problems of transboundary animal diseases will require consultation with wildlife experts such as the Wildlife Conservation Society as well as national and international stakeholders in the development of transfrontier conservation areas where there is considerable donor activity.

II. Implementation

6. EXPECTED START AND END DATES FOR THE PPG

The expected start date is the beginning of May 2011 and the expected date of completion will be August 31st 2011.

Table. Activities to be carried out under this PPG.

Activity	**Responsible**	**Completion date**	**Expected output**
Draw up detailed Terms of Reference for Consultant (s)	Stephen R. Karangizi	May 2011	Document; Terms of Reference
Selection of Consultant (s)	Stephen R. Karangizi	May 2011	Consultant selected
Period of analysis, consultation and information gathering	Consultant / Stephen R. Karangizi	June – July 2011	Consultant in Zambia and other concerned countries (Namibia and Botswana)
Presentation of Draft Project proposal	Consultant / Stephen R. Karangizi	July 2011	Document and supporting documents; Draft grant application
Review	Stephen R. Karangizi	July – August 2011	
Presentation of final Project proposal	Consultant / Stephen R. Karangizi	August 2011	Document and supporting documents; Final grant application

7. LEAD ROLE IN THE DEVELOPMENT OF THE PROJECT PROPOSAL UNDER THIS PPG.

Direction of the process of the PPG will be under the Programmes Section of COMESA under the direction of Stephen R. Karangizi, Assistant Secretary General (Programmes), and more specifically the CAADP Regional Process and Partnerships section. However the actual work of research, data collation and project writing will be carried out by a consultant specifically brought in and hired for the purpose. ACTESA as the proposed Implementing Agency will work closely with the consultant.

COMESA will facilitate and host the process of preparing the PPG. A suitable consultant will be engaged to consult with concerned parties at COMESA and the fit with existing programs especially as SPS related interventions must support existing policy and operational trade facilitation programs. Three other PPG's will be undertaken to develop sub-programs within each of the three SPS areas (plant and animal health and food safety). The sub programs are intended to focus on areas of significant SPS concern where groups of countries need to develop coordinated actions to resolve the problem. Since there are issues where countries are members of several or one or other of the REC's in the Tripartite Agreement the SPS Unit will be involved in coordinating actions at several levels including with other REC's, and country groupings as well as with continental, regional and national SPS structures such as the regional reference laboratory system.

Stakeholders (government, private sector, academia, etc.) that may have an interest in this PPG and the resultant project and will need to be consulted during the PP phase. There are been a significant number of stakeholders consulted with a direct interest on the PPG. Many, but not all, the stakeholders with an interest in the PPG are listed in Section 1, 4 (DISCUSSIONS WITH POTENTIAL DONORS) and these will be consulted during the course of the Grant Preparation.

III. Budget

The total estimated budget (in US$) required for this PPG is US$30,000 which is broken down in the table below. This amount is requested from the STDF. Other contributions in kind will be in the form of additional time from COMESA donor partners including the assistance of USDA personnel working in the region. COMESA will provide office and secretarial services as well as direct assistance in developing the grant proposal.

Table 2; Indicative budget for the Project Preparation Activities at COMESA in Lusaka, Zambia

Detailed Budget breakdown

Expenditure Category	Person days	Budget	Total Budget
Expertise and consultants			**16,000**
National consultants			
Project Coordinator (supplied by COMESA)	15	0	0
International consultant			
Specialist in trans-boundary diseases	23	12,000	12,000
Other wild life disease specialist (Wildlife Conservation Society personnel on secondment)		3,900	4000
Contracts			**0**
None			
Casual labour			**0**
None			
Travel			**11,500**
Air travel to Windhoek (Namibia), Lusaka (Zambia) and Gaborone (Botswana)		2,000	2,000
Local travel		1,000	1,000
DSA for Lusaka/Gaborone/Windhoek (approx US$ 350 day for hotels, M&IE)			8,500
Workshop			**3,000**
Validation workshop (Lusaka)	1	2,000	2,000
Prepare materials	1	1,000	1,000
Expendable equipment			**0**
Training materials and office supplies (COMESA)	0	0	0
Grand Total			**30,500**

Appendixes

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

Appendix 2: Curriculum Vitae of proposed consultants.

Two consultants are put forward for this study. They are Drs. Gavin Thompson and Mary Louise Penrith. Both are specialists in domesticated large animals and more specifically have wide experience in foot and mouth disease. However bot have indicated that due to the nature of the grant proposal they will need to consult with wildlife experts and more specifically - specialists in wildlife animal diseases. While the Wildlife Conservation Society have indicated that they will help they have other obligations to meet and therefore a US$4000 provision has been made for the temporary secondment of a wildlife disease specialist to help with developing the Project Proposal.

GAVIN R THOMSON

1. ***NATIONALITY/CITIZENSHIP*:** South African

2. ***PLACE & DATE OF BIRTH:*** Johannesburg 03/02/43

3. ***CONTACT DETAILS:***

Address: P O Box 1607, Brooklyn Square, Pretoria 0075. South Africa

E-mail: gavin@tadscientific.co.za

Tel: +27 12 751 1083 or (cell) +27 82 3366088

4. ***LANGUAGES;***

English (home language)
Afrikaans – can speak, read & write
Dutch – can read & understand
French – can read with electronic assistance
Some knowledge of Nguni languages

5. ***FIELDS OF EXPERTISE****:*

- Acknowledged internationally as an authority on epidemic diseases of animals (see honours, scientific appointments & list of publications).

- International standards and norms for international trade in livestock commodities and good knowledge of international bodies that influence such trade (e.g. WTO, OIE, FAO, EFSA).

- Management of bio-secure facilities and research-based organizations.

- Vaccine development and manufacture.

- Intimate knowledge of the animal health situations and organization of livestock and animal health systems in southern, eastern, western and central Africa.

6. ***QUALIFICATIONS*:**

i)	BVSc	University of Pretoria, SA - 1966 (ICI Prize for the best student in medicine and infectious diseases)
ii)	MSc (Immunology)	University of Birmingham, UK - 1970
iii)	PhD (Virology)	University of London, UK - 1978

7. ***REGISTRATIONS*:**

- Member of the Royal College of Veterinary Surgeons, UK

8. ***MEMBERSHIPS OF PROFESSIONAL ORGANIZATIONS*:**

- "Life member" of the SA Veterinary Association
- Member of the South African Society for Veterinary Epidemiology and Preventive Medicine
- Member of the Pig Veterinary Society, South African Veterinary Association

9. ***HONOURS/ AWARDS:***

- 2004 Meritorious Award - *Office International des Epizooties* (OIE), World Organization for Animal Health.

- South African Veterinary Association Gold Medal for outstanding scientific achievement and the advancement of veterinary science, 1999.

II.

- TOGETHER WITH THE THREE OTHER EDITORS OF "INFECTIOUS DISEASES OF LIVESTOCK

III. WITH SPECIAL REFERENCE TO SOUTHERN AFRICA" (SEE PUBLICATION LIST) AWARDED THE BILL VENTER LITERARY AWARD FOR 1996 - BEST ACADEMIC BOOK PUBLISHED BY PERSONNEL OF A SOUTH AFRICAN UNIVERSITY. THE PRIZE MONEY THAT YEAR WAS INCREASED FROM R25000 TO R40000 BECAUSE THE BOOK WAS JUDGED THE BEST IN THE 10 YEARS OF THE AWARD UP TO THAT TIME.

IV.

- IN 1998 THE EDITORS OF THE SAME BOOK WERE AWARDED THE MALBRAUT-FENTEN PRIZE BY THE "ACADÉMIE VÉTÉRINAIRIE DE FRANCE".

- The Exotic Diseases Division of the ARC-Onderstepoort Veterinary Institute (formerly an independent institute), which I headed from 1988-1999, received an award in 2003 from the National Research Foundation of South Africa for consistent high performance over the last 10 years. [Since I headed that Division/Institute for most of that time it can be accepted as an indirect pesonal honour.]

10. *EXPERIENCE*:

Present:	Director: Verified Technologies (Pty) Ltd, food technology company registered in South Africa
	Co-director: TAD Scientific CC, registered consulting company in South Africa
April 2007 – November 2009	Employed on a contact to GRM International to serve as the foot and mouth disease expert for an EC-funded project assisting SADC countries with the control of FMD (SADC FMD Project)
November 2004 - April 2005	Consultant to the design phase of the Global Alliance for Livestock Vaccines (GALV), based at the International Livestock Research Institute (ILRI), Nairobi
December 2000 - October	2004 Employed by the Food & Agriculture Organization [FAO] of the UN and seconded to the Pan-African Programme for

	the Control of Epizootics (PACE) as the Main Epidemiologist to the Programme.
April 2000 - February 2001	Appointed to the Board of Onderstepoort Biological Products Ltd., the largest manufacturer of animal vaccines in Africa. I resigned this position on leaving South Africa to take up a long-term contract in East Africa.
April 1999 - November 2000	Director, ARC-Onderstepoort Veterinary Institute (South Africa's premier livestock research institute)
1988 - March 1999	Head (later Director), ARC-Onderstepoort Institute for Exotic Diseases (specializing in research into epizootic viral diseases of animals, particularly foot and mouth disease)
1977 - 1988	Various research positions within the Onderstepoort Veterinary Institute, involving research into pig diseases, especially African swine fever & FMD
1972 - 1977	Virologist, Royal Veterinary College, London working on respiratory diseases of thoroughbreds

11. ***OTHER ACADEMIC AND SCIENCE-BASED APPOINTMENTS:***

- Appointed to the Technical Advisory Committee of the Global Alliance for Livestock Vaccines (GALV), December 2005 – April 2006.
- Appointed to the Working Group of the Scientific Panel on Biological Hazards of the European Food Safety Authority to review GBR assessment methodology for bovine spongiform encephalopathy (mad cow disease), September 2005.
- Elected as a member of the "Scientific Commission for Animal Diseases" of the OIE, 2003-2006.
- Elected as President of the Foot and Mouth Disease and Other Epizootics Commission of the OIE, 2000-2003.
- Elected as Vice President of the Foot and Mouth Disease and Other

Epizootics Commission of the OIE 1994-1997; re-elected for 1997-2000.

- Appointed as an Honorary Professor in the Department of Veterinary Tropical Medicine of the University of Pretoria, RSA. 1998-2001.

- Awarded a C1 scientific grading in 2000 by the National Research Foundation, South Africa. Ratings are usually only awarded to full-time university personnel.

- Member of the Working Group on Commercialization, Beneficiation and Trade. Transformation Committee for the Agricultural Research Council, South Africa. Appointed by the Minister of Agriculture - 1998.

12. MEMBERSHIP OF EDITORIAL BOARDS/COMMITTEES

- Transboundary & Emerging Diseases (associate editor); 2007- present
- Onderstepoort Journal of Veterinary Research: 2001-present
- Review Scientifique et Technique (OIE): 2000-2006
- Veterinaria Italiana : 2004-present
- Bulletin of Animal Health & Production in Africa : 2005-2007

13. PUBLICATIONS

Books

J.A.W. Coetzer, G.R. Thomson & R.C. Tustin (eds.), 1994. *"The Infectious Diseases of Livestock with Special Reference to Southern Africa"*. Vol. 1, pp 1605. Oxford University Press: Cape Town, Oxford.

Chapters in books:

Author or co-author of 12 chapters in "The Infectious Diseases of Livestock with special reference to Southern Africa", 1st Edition – see above.

Co-author of 6 chapters in the 2nd edition of "Infectious Diseases of Livestock", 2004 edited by JAW Coetzer & RC Tustin. Oxford University Press: Cape Town.

Thomson, G.R., Bengis, R.G. & Brown, C., (2001). Picornaviruses. *In*: Infectious Diseases of Wild Mammals, 3rd Edn., E.S. Williams & I.K. Barker (eds.), pp 119-130, Iowa University Press: Ames, USA.

Thomson, G.R., Vosloo, W. & Bastos A.D.S., 2003. Foot and mouth disease in wildlife. *In*: Foot and Mouth Disease. D.W. Rowlands (ed.). Elsevier: Amsterdam, Paris.

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Editorship of special editions:

Proceedings of the Workshop on Rabies in Southern and Eastern Africa. **G.R. Thomson & A.A. King (Eds.)**. *Onderstepoort Journal of Veterinary Research*, 60 (4), 1994.

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PhD thesis:

Thomson, G.R. (1978). The role of equid herpesvirus 1 in acute respiratory disease of horses and the use of inactivated antigens to immunize against the infection. Faculty of Medicine, University of London.

Reviewed papers:

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4 **THOMSON, G.R., MUMFORD, J.A., CAMPBELL, J., GRIFFITHS, I. & CLAPHAM, P., (1976)**. Serological detection of equid herpesvirus 1 infections of the respiratory tract. *Equine Veterinary Journal*, 8, 58-65.

5 **THOMSON, G.R. & MUMFORD, J.A., (1976)**. In vitro stimulation of foal lymphocytes with equid herpesvirus 1. *Research in Veterinary Science,* 22, 347-352.

6 **POWELL, D.G., BURROWS, R., SPOONER, P., MUMFORD, J.A. & THOMSON G.R., (1977)**. Field observations on influenza vaccination among horses in Great Britain, 1971-1976. *Developments in Biological Standardization,* 39, 347-352.

7 **THOMSON, G.R. MUMFORD, J.A., SPOONER, P., BURROWS, R. & POWELL, D.G., (1977).** The outbreak of equine influenza in England, January, 1976. *Veterinary Record*, 100, 465-468.

8 **THOMSON, G.R., GAINARU, M.D. & VAN DELLEN, A.F., (1979)**. African swine fever: pathogenicity and immunogenicity of two non-haemadsorbing viruses. *Onderstepoort Journal of Veterinary Research,* 46, 149-154.

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13 **ESTERHUYSEN, J.J., THOMSON, G.R., FLAMMAND, J.R.B. & BENGIS, R.G., (1985)** - Buffalo in the northern Natal game parks show no serological evidence of infection with foot-and-mouth disease virus. *Onderstepoort Journal of Veterinary Research*, 52, 63-66.

14 **THOMSON, G.R., (1985)** - The epidemiology of African swine fever: The role of free-living hosts in Africa. *Onderstepoort Journal of Veterinary Research,* 52, 201-209.

15 **BENGIS, R.G., THOMSON, G.R., HEDGER, R.S., DE VOS, V. & PINI, A., (1986)** Foot-and-mouth disease and the African buffalo (*Syncerus caffer*). 1. Carriers as a source of infection for cattle. *Onderstepoort Journal of Veterinary Research*, 53**,** 69-73.

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19 **ESTERHUYSEN, J.J., THOMSON, G.R., SASHFORD, W.A., LENTZ, D.W., GAINARU, M.D., SAYER, A.A., MEREDITH, C.D., JANSE VAN RENSBURG, D. & PINI, A., (1988)**. The suitability of a rolled BHK monolayer system for the production of vaccines against the SAT types of foot-and-mouth disease virus. I. Adaptation of virus isolates to the system, immunogen yields achieved and assessment of subtype cross reactivity. *Onderstepoort Journal of Veterinary Research,* 55, 77-84.

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BASTOS, A.D.S., BOSHOFF, C.I., KEET, D.F., BENGIS, R.G. & THOMSON,G.R., (2000). Natural transmission of foot-and-mouth disease virus between African buffalo (*Syncerus caffer*) and impala (*Aepyceros melampus*) in the Kruger National Park, South Africa. *Epidemiology & Infection,* 124, 591-598.

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September 2000.

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within wildlife conservancies on behalf of the European Union. DFID.

THOMSON, G.R., (2005). Document in support of the application by Karoo Cuisine for approval to export processed ostrich meat to customers in the European Union. Commissioned qualitative risk assessment for Sun Cuisine (Pty) Ltd, Midrand, South Africa

Thomson, G.R. (2005). Contagious bovine pleuropneumonia and poverty: A strategy for addressing the effects of the disease in sub-Saharan Africa. Research report, DFID Animal Health Programme, Centre for Tropical Veterinary Medicine, University of Edinburgh, UK.

Thomson, G.R. (2008). A Short Overview of Regional Positions on Foot and Mouth Disease Control in Southern Africa. *Transboundary animal disease and market access: future options for the beef industry in southern Africa, Working Paper 2,* Brighton: Institute of Development Studies. http://www.steps-centre.org/PDFs/VetScience_Working%20Paper%202.pd

Thomson, G.R., 2009. Qualitative risk assessment on:
(1) Animal health implications of translocating selected plains game from specific locations in KwaZulu-Natal (South Africa) to the Jozini Big 6 Game Reserve in Swaziland and
(2) Transfrontier integration of the Pongola Game Reserve (South Africa) and the Royal Jozini Big 6 Game Reserve (Swaziland).
Study commissioned by Royal Jozini Big 6 (commercial company).

Thomson G.R. (2010). Analysis of the animal health hazards posed by the proposed importation into South Africa of a group of sable antelope from Zambia. Report for the Directorate of Animal Health, South Africa. National Directorate of Veterinary Services, South Africa.

DR MARY-LOUISE PENRITH

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2. QUALIFICATIONS

Bachelor of Science, University of Cape Town, 1961
Bachelor of Science (Hons, First Class, Zoology), University of Cape Town, 1962
Doctor of Philosophy (Zoology), University of Cape Town, 1965
Doctor of Science (Entomology), University of Pretoria, 1980

Bachelor of Veterinary Science (with 4 distinctions, Clinical Medal, and prizes for the best student in Pathology and in Herd Health/Poultry diseases), University of Pretoria, 1991
Bachelor of Veterinary Science (Hons), University of Pretoria, 1994

3. EXPERIENCE

5 years private consultancy, mainly for control of transboundary animal diseases + post-graduate course development and teaching in animal health management
4 years advisor, management of veterinary diagnostic and research laboratory
10 years laboratory diagnostic investigation and research
4 years management of pro-poor animal health programme (concurrent with above)
23 years biological research
22 years editor of scientific journals including the *Journal of the South African Veterinary Association* (1995 – 2002), and currently a member of the editorial committees of the *Journal of Transboundary Diseases*, the *Onderstepoort Journal of Veterinary Research* and the *Journal of the South African Veterinary Association*

4. INTERNATIONAL INVOLVEMENT

4 years resident laboratory management advisor Mozambique from 2002 to 2006
16 months aggregate short-term consultancies in Africa, Georgia and Armenia since 1995

5. PROFESSIONAL MEMBERSHIPS

South African Veterinary Association (Vice Chairperson, Education Committee)
Entomological Society of Southern Africa

6. MANAGEMENT ROLES

Assistant Director, Onderstepoort Veterinary Institute, 2000 to 2002 (programme manager for animal health programmes in the developing agriculture sector and coordinator of the diagnostic programme)
Chief Professional Officer and Head, Entomology Department, State Museum, Windhoek 1970 to 1983
Chief Professional Officer and Head, Marine Biology Department, South African Museum, Cape Town, 1968 to 1970

7. SPECIALIST FIELDS

Pig health and production
Emergency and longer term control and prevention of African swine fever
Animal health control programmes for developing countries
Veterinary diagnostic pathology including zoo animals and wildlife
Veterinary laboratory management, biosecurity and quality systems
Scientific editing

Publications
Author/ co-author of 87 scientific articles in peer-reviewed journals (81) and conference proceedings (6), 6 letters to the editor, 20 invited book chapters, and seven manuals (five for the Food & Agriculture of the United Nations and one commissioned by the SA Pork

Producers' Association for emerging pig farmers). The manuals for FAO include manuals on contingency planning for African swine fever (2001 and 2009).

Brief Biography

After 23 years in zoological research, Mary-Louise was able to realise a lifelong ambition to study veterinary science after a move to Pretoria, completing the course with distinctions in Pathology, Veterinary Public Health, Herd Health, and Poultry Diseases. She joined the Pathology Section of the Onderstepoort Veterinary Institute after graduation and developed a special interest in pig diseases, but gained wide experience in the diagnosis and management of diseases, with particular reference to diseases of cattle, small ruminants, farmed ostriches and crocodiles, as well as in captive reptiles and other exotics owing to a personal interest in the diseases of zoo animals.

Since 1995, Mary-Louise has performed expert consultancies for the Food & Agriculture Organization of the United Nations on the epidemiology and control of African swine fever in 11 countries (Mozambique, Kenya, Côte d'Ivoire, Benin, Cabo Verde, Ghana, Gambia, Georgia, Armenia, Mauritius and Togo), including training local veterinary staff and pig farmers in field diagnosis, laboratory sampling, and prevention and control of African swine fever. She has gained wide experience in pig production systems in developing countries, complemented by her experience of disease management in the commercial pig industry in South Africa. From April 2004 to December 2005 she coordinated a Danida-funded project entitled "Improving smallholder pig health and production in Mozambique". She has also advised the South African Department of Agriculture and the SA Pork Producers Association on Classical swine fever prevention and control.

In 1998 Mary-Louise was invited to initiate and manage a programme at the Onderstepoort Veterinary Institute with a focus on assisting developing farmers in the livestock sector. The programme generated a wide range of multi-media information material to assist field veterinary staff, extension officers, and developing farmers in the recognition and management of animal diseases in cattle, small ruminants, pigs, and poultry, as well as identifying and managing research projects aimed at solving problems in the small-scale livestock farming sector.

Mary-Louise was contracted under the ProAgri Family Sector Livestock Development Programme in Mozambique as Laboratory Management Advisor to the veterinary research institute, with the emphasis on establishing a quality management system at the central veterinary laboratory and improving the service of the 9 provincial laboratories, from 1 March 2002 to 28 February 2006. The initial contract for one year was extended for a further three years by request of the Directorate of the research institute. Previous experience in this field includes a feasibility study for the establishment of a veterinary diagnostic laboratory in Madagascar in 1997 for the Government of Madagascar and coordination of the diagnostic programme at the Onderstepoort Veterinary Institute from 2000 to 2002.

During her scientific career Mary-Louise has edited three scientific journals of international standing and is the author of over 80 scientific publications. She is currently contracted to assist members of staff of the Department of Paraclinical Studies, Faculty of Veterinary Science, University of Pretoria, in the preparation of scientific publications. In addition to English and Afrikaans, Mary-Louise is fluent in Portuguese, can communicate in French, and has a working knowledge of German.

She is currently working as a private consultant. She has been appointed Extraordinary Professor in the Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria where she is involved mainly in developing and coordinating online postgraduate courses. She also served as locum pathologist at the National Zoological Gardens, Pretoria, from January 2007 to December 2008.

Recent and current consultancies and activities (since March 2006):

- Development and coordination of a module on Animal Health Management, and collaboration in the development of a module on Pig Diseases for the on-line Masters Degree in Infectious Diseases offered by the Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria, South Africa;
- Development, coordination and presentation of training material for Animal Health Management for the EU-funded PRINT Programme for integrated livestock resources in the SADC region (for Institute of Tropical Medicine, Antwerp, Belgium and Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria);
- Support for the South African Pork Producers Organisation's programme for uplifting small scale pig farmers, including production of a manual for emerging pig farmers, training of trainers and other *ad hoc* assistance;
- Member of an OIE *ad hoc* working group on compartmentalisation as a control measure for classical and African swine fever (Paris, November 2007);
- Preparation of training manual for and presentation of two training workshops, one for animal health focal points and the other for laboratory specialists of COMESA countries, on the World Trade Organisation Sanitary and Phytosanitary (SPS) Measures for trade in livestock commodities (for CAB International);
- Study on sow welfare for the South African Pork Producers Organisation;
- Expert consultancy on diagnosis, epidemiology and control of African swine fever in Mozambique for the FAO, including a training-of-trainers workshop for animal health focal points from each of the 10 provinces in disease recognition, epidemiology, sampling for diagnostic confirmation, and control;
- Development of a new strategy document for Gauteng Veterinary Services, including facilitation of a series of stakeholder workshops to determine their needs;
- Feasibility study for the establishment of a foot-and-mouth disease free zone in Mozambique;
- Expert consultancy for emergency control of African swine fever in Georgia for FAO (July 2007, July 2008 and June 2009);
- Livestock/veterinary expert for an IFAD supervisory mission, Agricultural Sector Support Programme and Agricultural Sector Development Programme – Livestock, Zanzibar Sub-programme (August 2007);
- Provision of training on ASF for veterinarians and laboratory personnel in Georgia under the TADR Programme of the US Department of Homeland Security (November 2007)
- Organisation of a workshop on foot and mouth disease in the SADC region, Wellcome Project, International Development Studies, University of Sussex, including editing of working papers, production of policy briefings and workshop report (April 2008);

- Consultant for livestock development, USAID RFA Pastoral Areas Coordination, Analysis and Policy Support Activity - PACAPS (Regional Enhanced Livelihoods for Pastoral Areas);
- Preparation of training material on classical swine fever, foot and mouth disease, glanders, sheep and goat pox, and camel pox for the TADR programme of the US Department of Homeland Security (December 2007 – June 2008);
- Member of the Scientific Committee for the International Pig Veterinary Society Congress, 2008 (Durban, South Africa);
- Updating/re-writing of FAO manuals for recognition and contingency planning for African swine fever (December 2007 – January 2008);
- Three expert consultancies for emergency control of African swine fever in Armenia for FAO (February, May and September 2008);
- Two expert consultancies for emergency and longer term control of African swine fever in Mauritius: evaluation of emergency control measures and progress in eradication and development of proposal for an FAO Technical Cooperation Project (April 2008); training of veterinary personnel and pig farmers in biosecurity on pig farms for disease prevention (May – July 2010);
- Epidemiology and communications consultant for International Livestock Research Institute (ILRI) for USAID-funded project to develop a surveillance toolkit for field veterinary staff in sub-Saharan Africa (August – December 2008).
- Review and analysis of livestock databases in the SADC region for the project "Livestock and Poverty Reduction in Africa: Exploring new horizons in data-driven decision-making" funded by the Bill and Melissa Gates Foundation (January 2009).
- Development of a specialist training course in wildlife pathology at the National Zoological Gardens (December – May 2009).
- Expert consultancy for emergency control of African swine fever in Togo, FAO-CMC-AH (February 2009).
- Technical advisor, audit of systems for control and prevention of animal diseases by the Chief Directorate for Veterinary Services and Sustainable Resources, Gauteng Province, South Africa, Gauteng Shared Services Centre (March – April 2009).
- Advisor to a DANIDA-funded project "Securing rural Livelihoods through Improved smallholder Pig Production in Mozambique and Tanzania (SLIPP)" initiated in February 2010.
- Coordination and development of educational material for the OIE Collaborating Centre for veterinary training in integrated livestock and wildlife health and production led by the Department of Veterinary Tropical Diseases, University of Pretoria.
- One of two consultants contracted by Wildlife Conservation Society to assemble and evaluate legislation and policy documents relating to animal health and international trade in meat in the five countries participating in the Kavango-Zambezi Transfrontier Conservation Area (KAZA).
- Market survey for contagious bovine pleuropneumonia and *peste des petits ruminants* vaccines in the SADC region for the AU-IBAR VACNADA Project.

[1] Canadian Food Inspection Agency Q&A, question 20.
http://www.inspection.gc.ca/english/anima/heasan/disemala/fmdfie/questionse.shtml

[2] OIE, 2009, The outcome of the discussion OIE ad hoc Group on Trade in Animal Products (commodities), Powerpoint presentation by ad hoc group, Paris. 23 May 2009

[3] The word domestication is used in the sense that REC's can agree policy and general objectives but the actual laws, regulations and their implementation is a national i.e. sovereign issue. Here the role of COMESA and ACTESA is seen as one of facilitation using clear goals as outlined in this document i.e. the development of 'Green Passes' for specific commodities of strategic short and long term importance in regional trade.