Navigating the Maze: Phytosanitary Certificate Costs Create Uneven Playing Field for Agricultural Exporters Across East and Southern Africa

1. Introduction: The Indispensable Phytosanitary Certificate in African Agri-Trade

The Gatekeeper Document: Ensuring Biosecurity in Global Trade

In the intricate world of international agricultural trade, the phytosanitary certificate stands as a critical, non-negotiable document. It serves as a passport for plants and plant products, certifying to importing nations that consignments are free from regulated pests and diseases.[1] This certification is paramount for protecting the agricultural integrity and ecosystems of importing countries.[2] Mandated under international frameworks like the International Plant Protection Convention (IPPC) [6], and essential for meeting the specific Sanitary and Phytosanitary (SPS) requirements of destination markets, such as the European Union [5], these certificates are indispensable gatekeepers for market access. The process involves inspection and verification by a designated competent authority, typically the National Plant Protection Organisation (NPPO) of the exporting country.[3]

EAC & SADC: Hubs of Agricultural Activity

The East African Community (EAC) – comprising Burundi, the Democratic Republic of Congo (DRC), Kenya, Rwanda, Somalia, South Sudan, Tanzania, and Uganda [12] – and the Southern African Development Community (SADC) – encompassing 16 member states including Angola, Botswana, South Africa, Tanzania, and Zambia [14] – represent two of Africa's most significant regional economic blocs. Agriculture forms a cornerstone of their economies, contributing substantially to Gross Domestic Product (GDP), employment, and vital export earnings.[13] Notably, the DRC and Tanzania hold membership in both blocs, highlighting the interconnectedness of the regions.[12]

The Cost Conundrum: Variable Barriers to Trade

While essential for biosecurity, the process of obtaining phytosanitary certificates introduces a layer of complexity and cost for exporters. Crucially, the financial burden associated with these certificates varies dramatically across the member states of the EAC and SADC. This report delves into the specific costs – encompassing application fees, inspection charges, certificate issuance, and related expenses – comparing the fee structures within and between these two vital African trading blocs. It highlights

the significant disparities and explores the implications these differences hold for regional trade dynamics and the competitiveness of agricultural exporters.

The very requirement for such certification, although justified on grounds of plant health protection [5], inherently functions as a non-tariff barrier (NTB) by demanding compliance efforts from exporters. The significant variations in the *cost* and *administrative complexity* involved in securing these certificates across different nations amplify this NTB effect. This situation presents a potential contradiction to the explicit goals of regional economic communities like the EAC and SADC, which aim to deepen cooperation, establish common markets, and facilitate trade by reducing barriers.[13] High or inconsistent certification costs can undermine these integration objectives by maintaining substantial hurdles for agricultural producers seeking to trade across borders or internationally.

2. Spotlight on the East African Community (EAC): A Patchwork of Procedures and Prices

The East African Community (EAC), now an eight-member bloc following Somalia's recent accession [12], is a region where agriculture plays a pivotal role in the livelihoods of millions and contributes significantly to national economies.[13] However, when it comes to the cost of phytosanitary export certification – a prerequisite for tapping into international markets – the landscape within the EAC is far from uniform. Exporters face a patchwork of fee structures and processes, leading to considerable differences in the cost of compliance across member states.

Kenya (KEPHIS - Kenya Plant Health Inspectorate Service): A Complex and Evolving Fee Structure

Kenya, a major horticultural exporter, operates a multi-faceted fee system managed by the Kenya Plant Health Inspectorate Service (KEPHIS).[2] Recent revisions, reportedly effective from July or December 2024, have introduced significant changes, moving towards a per-kilogram charge for fresh produce exports.[23]

Under these newer regulations, exporters of fresh produce face a charge of KES 0.50 per kilogram, with a minimum fee of KES 100 per consignment. This is levied alongside a separate fee of KES 500 for the issuance of the phytosanitary certificate itself.[23] This marks a shift from previous structures which appeared to rely more on weight bands (e.g., KES 300 for 0-1,000 kgs, KES 500 for 1,001-5,000 kgs for fruits/vegetables) or potentially different flat fees for the certificate.[1]

Beyond the per-kilogram and certificate fees, Kenyan exporters may encounter a

range of other charges. Inspection fees can apply, varying based on the type of commodity or facility; for instance, dry commodity facility inspections were listed at KES 5,000.[1] Container inspection fees (KES 500 for 20ft, KES 1,000 for 40ft) and vessel/aircraft inspection fees have also been introduced or revised.[23] Additional costs can include farm inspection fees (KES 1,000 for the first acre, KES 250 per additional hectare [22]), travel costs for inspectors calculated per kilometer (KES 58.5/km [22]), and fees for certificate replacement or amendment (KES 1,000 each [22]).

The process requires exporter registration, often involving documentation like KRA PINs and Certificates of Incorporation [22], and interaction with KEPHIS's electronic certification system, known as the Integrated Export Import Certification System (IEICS).[1]

Tanzania (TPHPA - Tanzania Plant Health and Pesticides Authority): Facing a Steep Cost Increase

Tanzania's agricultural exporters have recently faced a dramatic escalation in phytosanitary certification costs. Reports indicate a staggering increase of approximately 460% imposed by the Tanzania Plant Health and Pesticides Authority (TPHPA).[18]

For containerized shipments exceeding 1,000 kilograms, the combined cost for inspection and certification reportedly surged from around TZS 58,347 to TZS 331,320. This new total comprises a TZS 201,320 inspection fee and a TZS 130,000 certification fee.[18] Non-containerized shipments, such as those processed at airports, also saw a significant hike, with fees for consignments over 1,000 kilograms rising from approximately TZS 45,900 to TZS 155,000.[18]

It is worth noting that official government trade portals sometimes present slightly different figures or breakdowns. For example, one portal lists a phytosanitary certificate fee of TZS 40,322.58 (approx. USD 15) alongside variable inspection fees based on tonnage bands (e.g., TZS 537.63/ton for 1-1000 tons), potentially leading to a total cost closer to TZS 309,139 (approx. USD 115) when including potential pest treatment costs.[30] These discrepancies highlight the challenge of obtaining precise, consistently reported figures. The Tanzania Plant Health Service (TPHS) was mentioned in older contexts [32], now superseded by TPHPA.

The TPHPA justifies the substantial fee increase by citing the need to fund service enhancements, such as acquiring high-performance liquid chromatography (HPLC) machines for testing, and arguing that the previous fee structure, dating back to 1996,

was inadequate.[29] However, exporters have voiced strong concerns, arguing that the "astronomical" increases threaten the competitiveness of Tanzanian agricultural products in the global marketplace, particularly impacting small and medium-sized enterprises (SMEs).[18]

Uganda (MAAIF - Ministry of Agriculture, Animal Industry and Fisheries): A Low-Cost, Simplified Approach

In stark contrast to Kenya and Tanzania, Uganda appears to offer a significantly simpler and lower-cost phytosanitary certification process, managed by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF).[3]

The standard official fee for a phytosanitary certificate is reported to be a flat UGX 5,000 (approximately USD 1.35) per consignment.[3] This applies to a wide range of plant and plant products, including fresh produce, grains, coffee, tea, tobacco, and cocoa.[3] An older source mentioned a fee of UGX 2,000 [36], suggesting the current UGX 5,000 fee might represent a modest increase over time but remains comparatively low.

A special Memorandum of Understanding (MOU) exists for exporters of roses, fruits, and vegetables, setting a total fee of UGX 55,000. This bundled rate covers a UGX 50,000 charge for farm pre-inspection activities and the standard UGX 5,000 certificate fee.[33]

The process involves exporter registration [3], application for inspection, physical inspection of the consignment, and certificate issuance.[3] Uganda has also embraced digitalization, utilizing an ePhyto portal (accessible via ug.ephytoexchange.org or the ministry's website) to streamline the application and issuance process.[4] The typical timeline for inspection is relatively swift, often completed within a day, depending on exporter readiness.[3]

Rwanda (RALIS - Rwanda Agriculture and Livestock Inspection and Certification Services): Leading with Digitalization and Low Costs

Rwanda stands out within the EAC for its remarkably low reported phytosanitary certificate costs and its advanced level of digitalization, managed by the Rwanda Agriculture and Livestock Inspection and Certification Services (RALIS).[40]

Comparative data suggests an exceptionally low fee of just 200 Rwandan Francs (RWF), equivalent to approximately TZS 364 or USD 0.16.[18] While the specific breakdown isn't detailed in the available materials, reports associated with the

implementation of Rwanda's electronic system highlight significant cost reductions. The launch of the eRalis online portal was projected to cut transaction and administrative costs for permits and certificates by up to 45%, potentially lowering the cost per transaction from around USD 5.67 to less than USD 3.00.[40]

The cornerstone of Rwanda's system is the eRalis portal (w.w.w.eralis.minagri.gov.rw).[40] This platform allows traders to apply for and receive permits and certificates online, eliminating the need for physical visits to ministry offices.[40] The system is integrated with the Rwanda Electronic Single Window, enabling data sharing with the Rwanda Revenue Authority (RRA) [40], and aims to support the national vision of a paperless economy.[40] This digital approach is intended to improve service delivery, enhance transparency, and reduce processing times, particularly benefiting exporters of time-sensitive goods like horticulture.[40]

Acknowledging Data Gaps in the EAC

It is crucial to acknowledge that specific, verifiable cost data for obtaining export phytosanitary certificates was not available in the reviewed sources for several EAC member states: **Burundi, the Democratic Republic of Congo (DRC), Somalia, and South Sudan**. Therefore, a complete cost comparison across all eight members is not currently possible based on this research.

EAC Cost Comparison and Competitive Implications

The available data reveals an extreme disparity in phytosanitary certification costs within the EAC bloc. Rwanda and Uganda stand out as exceptionally low-cost jurisdictions, charging nominal fees compared to the more complex and significantly higher costs encountered in Kenya and, particularly, Tanzania following its recent drastic fee hikes.

This wide variance creates substantial competitive imbalances among exporters within the community. An exporter of avocados or coffee in Uganda or Rwanda, for instance, faces a negligible certification fee compared to their counterpart in Tanzania, who must now absorb a cost potentially exceeding USD 130 per container.[18] Such differences directly impact the final cost of goods and the ability of exporters to compete on price in international markets. This situation appears counterintuitive to the EAC's objectives of establishing a common market and promoting seamless trade [13], as it fails to provide a level playing field for agricultural producers across the partner states.

Furthermore, the contrast between Tanzania's justification for its fee hike (claiming

necessity for service improvement [29]) and the low costs achieved in Rwanda through digitalization [40] raises pertinent questions about the efficiency and cost-recovery models employed by different NPPOs. While TPHPA invested in equipment like HPLC machines [29], Rwanda's focus on streamlining processes via the eRalis portal led to reported *cost reductions*.[40] Uganda also maintains low fees despite implementing ePhyto.[3] This suggests that high fees are not an inevitable consequence of modernization or compliance with international standards. Technological adoption and process efficiency can potentially decouple service quality from high user charges, challenging the notion that exporters must bear significantly increased costs for improved phytosanitary systems. The Tanzanian case might reflect broader governmental revenue pressures or underlying inefficiencies not solely addressed by equipment upgrades.

Table 1: Estimated Phytosanitary Export Certificate Costs in Select EAC Countries

Country	Issuing Authority	Estimated Core Certificate Cost (per consignment, approx. USD)	Key Fee Structure Components	Notes
Kenya	KEPHIS	Variable (e.g., ~$3.30 cert fee + $0.003/kg for fresh produce)	Per-kg charge (fresh produce), Certificate fee, Inspection fees (weight/facility/container), Travel costs, Other fees (farm inspection, replacement) [22]	Recent (2024) revisions implemented. Total cost highly dependent on consignment size/type and specific services required.
Tanzania	TPHPA	High (e.g., ~$130+ for container >1000kg)	High inspection fee + Certificate fee (for >1000kg).[18] Portal data suggests slightly different breakdown/total	Dramatic fee increase (~460%) reported recently (Feb 2025 source date).[29] Exporter competitiveness

			.[30]	concerns raised.[18]
Uganda	MAAIF	~$1.35 (standard)	Flat fee per certificate.[3] Special MOU rate (~$14.80) includes pre-inspection for certain sectors.[33]	Low, simple fee structure. Utilizes ePhyto system.[4]
Rwanda	RALIS	~$0.16	Very low flat fee reported.[18] Digitalization via eRalis aimed at cost reduction.[40]	Highly digitized process integrated with single window.[40]
Burundi	N/A	Data Not Available	-	-
DRC	N/A	Data Not Available	-	-
Somalia	N/A	Data Not Available	-	-
South Sudan	N/A	Data Not Available	-	-

Note: USD conversions are approximate and based on exchange rates around the time of the source data; actual costs in local currency apply. Fees may be subject to change.

3. Dissecting the Southern African Development Community (SADC): Diverse Structures, Variable Costs

The Southern African Development Community (SADC), a bloc of 16 nations [14], boasts significant agricultural diversity and potential, ranging from large commercial farming sectors to smallholder-dominated systems.[17] Its membership includes Least Developed Countries (LDCs) alongside upper-middle-income economies.[47] Similar to

the EAC, obtaining phytosanitary certificates is a mandatory step for agricultural exporters. However, the cost and complexity associated with this process vary considerably across the SADC region, reflecting diverse national approaches to regulation and cost recovery. DRC and Tanzania are also members of SADC.[14]

South Africa (DALRRD - Department of Agriculture, Land Reform, and Rural Development): A Complex, Multi-Stage System

South Africa, a dominant agricultural exporter in the region, utilizes a complex, multi-stage fee structure for phytosanitary certification, managed by the Department of Agriculture, Land Reform, and Rural Development (DALRRD).[48] Based on tariffs effective from April 2022 [49], the system involves distinct charges at different stages:

- **Application Fee:** A non-refundable fee of ZAR 170 is charged upon submission of the application via the eCert system.[48] This fee is payable regardless of whether the application is ultimately approved or rejected. (Note: One source [49] mentions ZAR 190, but the official gazette [48] states ZAR 170).
- **Approval Fee:** If the application is reviewed and approved, an additional fee of ZAR 210 is levied for the issuance of the certificate.[48]
- **Standard Cost:** Therefore, a standard, successful application processed without rejection incurs a total cost of ZAR 380 (ZAR 170 + ZAR 210).[49]
- **Replacements:** Obtaining a replacement certificate is significantly more expensive, requiring an application fee of ZAR 340 and an approval fee of ZAR 420, totaling ZAR 760.[48]
- **Inspection Fees:** A major variable cost component involves inspection fees. These are charged based on time (per 30-minute interval) and vary depending on when and where the inspection occurs. Inspections conducted during official hours cost ZAR 250 per 30 minutes. Overtime rates apply for weekdays/Saturdays outside standard hours (ZAR 380 per 30 minutes), and even higher rates for late nights, Sundays, and public holidays (ZAR 490 per 30 minutes).[48] For inspections conducted away from the Directorate's station, travel time is included in the chargeable time.[48] DALRRD also lists separate fees for various laboratory tests (e.g., for bacteria, fungi) which may be incurred depending on import requirements.[48]

The process relies heavily on the electronic eCert platform for application submission and processing.[49] Exporters must typically provide an import permit or official import requirements from the destination country along with their application.[54]

Botswana (Ministry of Agriculture - Division of Plant Protection): Simple and

Fixed

Botswana employs a straightforward, fixed-fee system for phytosanitary certification, administered by the Ministry of Agriculture's Division of Plant Protection.[55]

- **Certificate Fee:** The cost for obtaining a phytosanitary certificate for export is a flat BWP 300 (approximately USD 22-23).[55]
- **Import Permit Fee (Context):** For comparison, the fee for obtaining a permit to *import* plants/plant products is BWP 150.[55]

The export process requires the exporter to provide the import permit from the destination country, apply for the phytosanitary certificate, have the consignment inspected to ensure compliance with the importing country's requirements, and provide proof of payment.[55] The issued certificate is valid for two weeks and for a single entry only.[55] The Division of Plant Protection acts as the NPPO.[6]

Namibia (MAWLR - Ministry of Agriculture, Water and Land Reform): Fixed Application Fee with Potential Extras

Namibia uses a system centered around a fixed application fee, with the possibility of additional costs for inspection, managed by the Ministry of Agriculture, Water and Land Reform (MAWLR).[58]

- **Application Fee:** The fee for applying for a phytosanitary certificate is NAD 200 (approximately USD 11), according to the most recent public notice from April 2021.[58] Older regulations cited lower fees of NAD 150 [61] or even NAD 100 [62], indicating periodic adjustments.
- **Inspection Costs:** Regulations allow for an additional charge of NAD 100 per hour (or part thereof) for examinations carried out during the inspection process.[59]
- **Replacement Fee:** The fee for replacing a lost or damaged certificate is NAD 250.[59]

Exporters typically need to submit the official application form (Form AP 4 [61]), provide the import permit from the destination country (if required), potentially show harvesting or marketing permits from the Ministry of Environment for certain products (like wood [58]), and present proof of payment.[58] Applications are advised to be submitted at least 14 days prior to export.[61] The phytosanitary certificate is valid for 14 days.[58] MAWLR (previously MAWF) fulfills the NPPO role.[63] Note that separate permits from the Namibian Agronomic Board (NAB) are required for trading controlled agronomic and horticultural products, distinct from the phytosanitary certificate.[63]

Zambia (PQPS - Plant Quarantine and Phytosanitary Services): A Fee Unit System

Zambia's phytosanitary certification costs are determined by a system based on 'Fee Units', as outlined in the Plant Pests and Diseases (Plant Quarantine and Phytosanitary Service Fees) Regulations, 2020.[66] The Plant Quarantine and Phytosanitary Services (PQPS) unit, under the Ministry of Agriculture (potentially linked with ZARI - Zambia Agricultural Research Institute [67]), acts as the NPPO.[7]

- **Certificate Fees (in Fee Units):** The cost varies by consignment type:
  - Commercial consignments: 400 Fee Units
  - Fresh Produce (fruits, vegetables, cut flowers): 200 Fee Units
  - Non-commercial consignments: 200 Fee Units.[66] *(Note: The exact monetary value of one Fee Unit was not specified in the provided documents, making direct comparison difficult without external data. An older source [68] mentioned ZMK 120 for commercial and ZMK 60 for non-commercial, but this likely predates the 2020 Fee Unit regulations or refers to a different charge).*
- **Inspection Fees (in Fee Units):** Separate fees apply for various inspection services:
  - Premises, Export, Import, or Fumigation Inspection: 650 Fee Units base charge.[66]
  - Variable Add-ons: Additional fees apply per metric ton for consignments exceeding 30 tons (0.015 fee units/ton up to 1000 tons; 0.0075 fee units/ton above 1000 tons). A travel charge per kilometer (653.33 fee units) applies for inspections more than 5 km from a phytosanitary office. Farm inspections/audits also have specific per-hectare fees (1,000 fee units for the first hectare, 166 fee units per additional hectare), plus transport costs calculated using a government formula.[66]
- **Other Fees:** The regulations also list fees for fumigation licenses, treatment facility licenses, nursery registrations, and various laboratory tests (e.g., for bacteria, fungi, viruses, PCR tests).[66]

The process involves applying (potentially via the Zambia Electronic Single Window [67]), undergoing inspection [69], potentially requiring fumigation [68], and obtaining the certificate. An import permit from the destination country is typically required.[68] Zambia launched a dedicated back-end system for PQPS in 2021 to improve efficiency.[71]

Acknowledging Data Gaps in SADC

Comprehensive, specific cost data for export phytosanitary certificates was not found

within the provided research for a significant number of SADC member states: **Angola, Comoros, Eswatini, Lesotho** (though sample testing fees were noted [72]), **Madagascar, Malawi, Mauritius, Mozambique, Seychelles, and Zimbabwe**. As with the EAC, this limits a full regional comparison. The details for **DRC** and **Tanzania** can be referenced from the EAC section.

SADC Cost Comparison and Structural Diversity

The available data for SADC reveals a marked diversity in how member states approach the costing of phytosanitary certification. South Africa employs a highly detailed, multi-stage structure with significant variable components based on time and service level.[48] In contrast, Botswana and Namibia utilize much simpler, predictable flat-fee systems for the application or certificate itself, although Namibia includes potential hourly charges for inspection.[55] Zambia uses a unique Fee Unit system, differentiating costs by trade type but also incorporating variable inspection charges based on tonnage, distance, and farm size.[66]

This lack of uniformity likely reflects differing national priorities regarding cost recovery versus trade facilitation, varying levels of administrative capacity, and potentially different philosophies on whether phytosanitary services should be fully funded by users or subsidized by the state. South Africa's model appears strongly oriented towards recovering costs based on the specific resources utilized for each consignment. The simpler systems in Botswana and Namibia prioritize predictability for exporters. Zambia's approach attempts to tailor fees somewhat to the nature of the trade while still capturing variable costs. This divergence suggests limited regional harmonization in fee-setting practices within SADC.

The inclusion of detailed, time-based inspection fees in South Africa, and potentially in Namibia and Zambia, introduces a significant element of cost uncertainty for exporters compared to the flat-fee systems found elsewhere (like Botswana within SADC, or Uganda and Rwanda in the EAC). The final cost in these countries is not fixed upfront but depends heavily on the duration and complexity of the inspection process. Factors such as the efficiency of the inspection service, the preparedness of the exporter, the nature of the consignment, and potential bureaucratic hurdles can all influence the time taken and, consequently, the final bill.[48] This unpredictability can be particularly challenging for SMEs attempting to budget accurately for export operations.

Table 2: Estimated Phytosanitary Export Certificate Costs in Select SADC

Countries

Country	Issuing Authority	Estimated Core Certificate Cost (per consignment, approx. USD)	Key Fee Structure Components	Notes
South Africa	DALRRD	~$20.50 (base) + Variable Inspection Costs	Application fee (ZAR 170) + Approval fee (ZAR 210).[48] Plus time-based inspection fees (ZAR 250-490 / 30 min).[48] Replacement fees higher. Lab tests separate.[48]	Complex, multi-stage system via eCert.[49] Total cost highly variable depending on inspection time/overtime.
Botswana	Ministry of Agriculture (Plant Prot.)	~$22-23	Flat fee per certificate (BWP 300).[55]	Simple, predictable cost structure. Certificate valid 2 weeks.[55]
Namibia	MAWLR	~$11 (application) + Potential Inspection Costs	Flat application fee (NAD 200).[58] Potential hourly inspection charge (NAD 100/hr).[59] Replacement fee NAD 250.[59]	Relatively simple base cost, but inspection adds variability. Certificate valid 14 days.[58]
Zambia	PQPS (Min. of Agriculture / ZARI)	Variable (Fee Units)	Certificate fee based on Fee Units (Commercial: 400, Fresh Produce: 200).[66]	Fee Unit system makes direct USD comparison difficult without unit value. Significant

			Plus Inspection fees (650 units base + variable per ton/km/ha).[66] Lab tests separate.[66]	variable costs for inspection based on scale/location. Digital systems implemented.[67]
Tanzania	TPHPA	High (e.g., ~$130+ for container >1000kg)	*See EAC Section*	Member of both EAC and SADC. Recent large fee increase.[29]
DRC	N/A	Data Not Available	-	Member of both EAC and SADC.
Angola	N/A	Data Not Available	-	-
Comoros	N/A	Data Not Available	-	-
Eswatini	N/A	Data Not Available	-	-
Lesotho	N/A	Data Not Available (Cert Fee)	Sample testing fees noted (LSL 80/30).[72]	-
Madagascar	N/A	Data Not Available	-	-
Malawi	N/A	Data Not Available	-	-
Mauritius	N/A	Data Not Available	-	-
Mozambique	N/A	Data Not Available	-	-

Seychelles	N/A	Data Not Available	-	-
Zimbabwe	N/A	Data Not Available	-	-

Note: USD conversions are approximate and based on exchange rates around the time of the source data; actual costs in local currency apply. Fees may be subject to change. Fee Unit value for Zambia requires external confirmation.

4. EAC vs. SADC: A Cross-Regional Cost Analysis

Comparing the available phytosanitary certification cost data between the East African Community (EAC) and the Southern African Development Community (SADC) reveals striking differences, not only in the absolute cost levels but also in the complexity of fee structures and the apparent progress of digitalization.

Cost Levels: EAC Nations Lead on Affordability

Based on the documented fees, certain EAC member states emerge as clear low-cost leaders. Rwanda (approx. USD 0.16) and Uganda (approx. USD 1.35 standard fee) offer phytosanitary certification at nominal costs that are significantly lower than any documented SADC country.[3]

Within SADC, Botswana (approx. USD 22-23) and Namibia (approx. USD 11 application fee, plus potential inspection) represent a mid-range cost level.[55] Kenya (EAC) likely falls into this mid-range as well, although its per-kilogram charges mean the total cost is highly dependent on consignment size.[23]

The higher cost brackets appear populated by South Africa (SADC), where the base fee is moderate (approx. USD 20.50) but time-based inspection charges can substantially increase the total [48], and Tanzania (EAC/SADC), especially following its recent dramatic fee increase pushing container certification costs potentially well above USD 130.[18] Zambia's (SADC) position is harder to pinpoint without the monetary value of its Fee Units, but its structure includes a base certificate fee plus potentially significant variable inspection costs, suggesting it could also fall into the higher range depending on the consignment specifics.[66]

Structural Differences: Simplicity vs. Complexity

A notable contrast exists in the prevailing fee structures. Key EAC economies like

Uganda and Rwanda favor simple, predictable flat fees per certificate.[3] While Kenya recently introduced per-kg charges, adding complexity [23], the approach in Uganda and Rwanda stands out for its straightforwardness.

Conversely, major SADC economies exhibit more complex or variable structures. South Africa's multi-stage application, approval, and time-based inspection fees represent a highly detailed cost-recovery model.[48] Zambia's Fee Unit system combined with variable add-ons for tonnage, distance, and farm size also introduces complexity and potential unpredictability.[66] While Botswana and Namibia offer simpler base fees, the potential for hourly inspection charges in Namibia adds a variable element.[59]

Potential Influence on Trade and Investment Flows

These significant cost differences, both within and particularly between the blocs, are unlikely to be neutral in their economic effects. For importers sourcing agricultural products from the region, the lower certification costs in countries like Uganda and Rwanda could make their products marginally more price-competitive, influencing purchasing decisions, all else being equal. For exporters, particularly those operating with thin margins common in agriculture, the difference between paying less than USD 2 (Uganda/Rwanda) versus potentially over USD 100 (Tanzania) or a variable amount subject to inspection time (South Africa/Zambia) for the same essential document represents a substantial competitive factor.

Beyond immediate trade flows, these disparities could exert a subtle but meaningful influence on longer-term investment decisions. Phytosanitary certification is a recurring operational expense. Businesses considering investments in agricultural export infrastructure – such as packhouses, processing facilities, or large-scale farming operations – factor such ongoing regulatory costs into their financial models. A significantly lower and more predictable cost base for essential certifications in certain EAC countries could make them more attractive investment destinations compared to higher-cost or less predictable SADC environments, assuming other critical factors like logistics, raw material availability, labor costs, and market access agreements are comparable. Over time, this could potentially steer investment towards the lower-cost regulatory environments, impacting the long-term growth trajectories of the agricultural export sectors in both regions.

Table 3: Comparative Overview of Phytosanitary Costs and Digitalization in Select EAC/SADC Countries

Country	Region(s)	Approx. Core Cert Cost (USD)	Fee Structure Complexity	Key Variable Costs?	Digital System Mentioned?
Rwanda	EAC	~$0.16	Low (Flat Fee)	No (Implied)	Yes (eRalis) [40]
Uganda	EAC	~$1.35 (Standard)	Low (Flat Fee)	No (Standard Fee)	Yes (ePhyto) [4]
Botswana	SADC	~$22-23	Low (Flat Fee)	No	Not Explicitly for Phyto Export
Namibia	SADC	~$11 (App Fee) + Inspection	Moderate	Yes (Hourly Inspection)	Not Explicitly for Phyto Export
Kenya	EAC	Variable	High	Yes (Per Kg, Inspection)	Yes (IEICS) [1]
South Africa	SADC	~$20.50 (Base) + Inspection	High	Yes (Time-based Inspection)	Yes (eCert) [49]
Zambia	SADC	Variable (Fee Units)	High	Yes (Inspection Add-ons)	Yes (ZeSW / PQPS System) [67]
Tanzania	EAC/SADC	~$130+ (Container >1k kg)	Moderate (Post-Hike)	Yes (Inspection Add-ons)	Not Explicitly for Phyto Export

Note: Cost estimates are indicative. Complexity rating is relative based on available data.

5. Behind the Numbers: Unpacking the Drivers of Cost Variation

The wide gulf in phytosanitary certification costs across East and Southern Africa is driven by a confluence of factors, ranging from how national regulatory bodies are

funded to the efficiency of their operations and underlying policy objectives. Understanding these drivers is key to appreciating why exporters face such different financial hurdles.

NPPO Funding Models: Cost Recovery vs. Public Service

A primary driver of fee levels is the funding model of the National Plant Protection Organisation (NPPO) – bodies like KEPHIS in Kenya [2], TPHPA in Tanzania [18], MAAIF in Uganda [3], RALIS in Rwanda [40], DALRRD in South Africa [50], and PQPS in Zambia.[7] Some NPPOs may be mandated to operate on a full cost-recovery basis, meaning their operational expenses must be covered entirely by the fees charged to users (exporters and importers). Others might receive partial government subsidies, viewing phytosanitary services as a mix of regulatory necessity and trade facilitation support. In some cases, these services might be largely funded from the national budget as a public good. Tanzania's recent justification for its significant fee hike explicitly linked the increase to the need to fund operational enhancements and cover costs, suggesting a strong push towards cost recovery or perhaps even revenue generation.[29] Conversely, the extremely low fees in Uganda and Rwanda might indicate a greater degree of public funding or a policy decision to minimize direct costs to exporters to boost competitiveness.

Scope of Services Covered by Fees

The range of activities bundled into the phytosanitary fee also contributes to cost variations. In some countries, the stated fee might cover only the final issuance of the certificate. In others, it might be an all-inclusive charge covering application processing, physical inspection of the consignment, potential laboratory testing, and even contributions to broader surveillance programs. South Africa, for example, clearly separates the application and approval fees from time-based inspection charges and lists distinct fees for various laboratory tests.[48] Zambia similarly itemizes fees for certificates, different types of inspections (premises, export, import, fumigation), licenses (fumigation, nursery), and laboratory diagnostics.[66] Systems with more unbundled charges may appear cheaper initially but can accumulate higher total costs depending on the specific requirements of a consignment.

Digitalization: Investment, Efficiency, and Cost Impact

The adoption of digital platforms for phytosanitary certification is a significant trend across the region, with systems like Kenya's IEICS [1], Uganda's ePhyto [4], Rwanda's eRalis [40], South Africa's eCert [49], and Zambia's integration with the Electronic Single

Window.[67] Theoretically, digitalization should enhance efficiency, reduce paperwork, improve transparency, and potentially lower transaction costs. Rwanda's experience, where the eRalis portal launch was associated with reported cost reductions of up to 45% [40], supports this potential. However, the link isn't always direct or immediate. Implementing and maintaining sophisticated electronic systems requires significant upfront investment and ongoing technical support. These costs might initially be passed on to users or offset expected savings. South Africa, despite having the eCert platform, maintains a complex and relatively high fee structure.[49] This suggests that technology alone isn't a panacea; realizing cost benefits also requires effective process re-engineering, efficient administration, and policy choices that prioritize passing savings onto users.

Policy Objectives and Political Economy

Phytosanitary fees might sometimes be influenced by broader government policy objectives beyond plant health and trade facilitation. In contexts where governments face fiscal pressures, regulatory agencies might be encouraged or mandated to maximize non-tax revenue generation. Fees could be set above pure cost-recovery levels to contribute to the national treasury. The sheer magnitude of Tanzania's reported 460% fee increase [18] raises questions about whether factors beyond operational needs, such as broader revenue targets, might have played a role. Political considerations and lobbying by different stakeholder groups can also potentially influence fee setting and regulatory decisions.

Lack of Transparency and Accountability

A significant underlying issue is the frequent lack of transparency regarding how fees are calculated and precisely what services they cover. When the basis for charges is unclear, it becomes difficult for exporters to assess fairness, benchmark costs, or hold NPPOs accountable for the value delivered. Complex fee structures, particularly those involving variable elements like time-based inspection charges (as seen in South Africa and potentially Zambia [48]), can exacerbate this. Such systems depend heavily on the efficiency and integrity of the officials involved. Without clear standards and transparent reporting, these models can create uncertainty and potentially open avenues for inefficiency or even rent-seeking behavior, where delays or unnecessary procedures could inflate costs. This opacity can erode trust between the trading community and regulatory bodies, hindering collaborative efforts towards smoother trade.

6. The Exporter Experience: Bearing the Burden of Costs and

Complexity

For agricultural exporters across East and Southern Africa, the costs and administrative hurdles associated with obtaining phytosanitary certificates are not abstract figures but tangible factors impacting their bottom line and market reach.

Impact on Competitiveness

High certification fees directly translate into higher operational costs, which must either be absorbed by the exporter, reducing profit margins, or passed on to the buyer, potentially making the product less competitive in the destination market. Exporters in Tanzania explicitly voiced concerns that the recent fee hikes directly affect their product prices and ability to compete globally.[18] In markets where buyers have multiple sourcing options, even seemingly small cost differences in regulatory compliance can be decisive.

SMEs Disproportionately Affected

While all exporters face these costs, Small and Medium Enterprises (SMEs) are often disproportionately affected.[18] SMEs typically operate with tighter financial margins and possess fewer administrative resources compared to larger corporations. They may struggle to absorb sudden or significant fee increases, like those seen in Tanzania.[29] Navigating complex application procedures, understanding intricate fee structures with multiple components (like South Africa's [48]), and managing the logistics of inspections can represent a substantial burden for smaller teams. High upfront costs or unpredictable charges can pose significant cash flow challenges for these businesses.

The Challenge of Cost Predictability

The structure of the fee system itself significantly impacts exporters' ability to plan and budget. Simple, fixed fees per certificate, as seen in Uganda, Rwanda, and Botswana [3], offer high predictability. Exporters know the cost upfront, simplifying financial planning. Conversely, systems involving variable costs, such as time-based inspection fees in South Africa and Zambia [48], introduce uncertainty. The final cost depends on factors often outside the exporter's direct control, such as inspector availability and efficiency, making accurate budgeting more difficult. This lack of predictability can be a significant deterrent, especially for businesses considering entering the export market for the first time.

Administrative Burden: Beyond the Fees

The burden on exporters extends beyond the direct financial cost of the fees. Significant time and effort are required to comply with the administrative procedures. This includes understanding the specific phytosanitary requirements of the importing country, often necessitating obtaining an import permit from the destination market beforehand.[54] Exporters must then complete application forms (increasingly online [38]), gather supporting documentation, schedule and facilitate physical inspections of their consignments [3], potentially arrange for required treatments like fumigation [3], and follow up to receive the certificate. While digitalization aims to streamline these processes [40], exporters still face initial registration requirements [37], learning curves for new systems, and the need to ensure reliable internet connectivity.[39]

The cumulative impact of these factors – high direct costs, complex procedures, unpredictable charges, and significant administrative effort – can act as a powerful disincentive, particularly for SMEs. Faced with these hurdles, many potential exporters may choose to remain focused on the domestic market or engage in informal cross-border trade, thereby limiting the growth potential of the formal agricultural export sector. This outcome restricts diversification, reduces potential foreign exchange earnings, and hinders the broader economic development that vibrant agricultural trade can foster, potentially undermining the goals of trade capacity building initiatives.[73]

7. Conclusion: Harmonization, Digitalization, and the Path Forward

This analysis reveals a complex and highly fragmented landscape for phytosanitary export certification costs across the East African Community (EAC) and the Southern African Development Community (SADC). While these certificates are indispensable for ensuring biosecurity and facilitating international trade, the significant variations in fees and procedures create an uneven playing field for agricultural exporters within and between these vital regional blocs.

Recap of Key Findings

The core findings underscore the dramatic disparities:

- **Wide Cost Variations:** Costs range from nominal fees (under USD 2) in Rwanda and Uganda to potentially well over USD 100 per consignment in Tanzania, with complex variable costs adding further expense in countries like South Africa and Zambia.

- **Diverse Fee Structures:** Approaches vary from simple flat fees to intricate multi-stage systems with numerous add-ons for inspection and other services.
- **Significant Exporter Impact:** High costs, complexity, and unpredictability disproportionately affect SMEs and directly impact the competitiveness of agricultural products in global markets.
- **Mixed Role of Digitalization:** While electronic systems (ePhyto, eCert, eRalis) are being adopted, their implementation has not uniformly translated into lower or simpler fee structures across all nations.
- **Data Gaps:** A significant limitation is the lack of readily available, comparable cost data for numerous member states in both regions, hindering a fully comprehensive analysis.

The Harmonization Imperative

The stark cost differences observed, particularly within blocs like the EAC aiming for common market principles [13], highlight a need for greater dialogue and potential harmonization. While full standardization might be challenging given differing national contexts, increased transparency in how fees are set and what they cover is essential. Benchmarking fees and processes against regional best practices could help identify opportunities for efficiency gains and fairer cost structures. Initiatives aimed at building SPS capacity and facilitating trade, such as the SADC Trade Related Facility [71] or projects supported by the Standards and Trade Development Facility (STDF) [73], provide platforms for such discussions and could support moves towards greater convergence or mutual recognition efforts. The current situation, where regulatory costs act as significant non-tariff barriers, risks undermining the broader trade facilitation goals of both the EAC and SADC.[14]

Digitalization's Double Edge

The ongoing shift towards digital certification platforms [38] holds immense promise for improving efficiency, reducing processing times, and enhancing transparency. Rwanda's experience suggests it can also contribute to lower transaction costs.[40] However, realizing these benefits requires more than just technological implementation. It necessitates parallel efforts in process re-engineering, ensuring systems are user-friendly (especially for SMEs), integrating them effectively with national single windows [40], and adopting policies that prioritize passing efficiency gains onto exporters rather than solely focusing on cost recovery or revenue generation from the system itself.

Recommendations and Outlook

Moving forward, several actions could help address the challenges identified:

1. **Enhance Transparency:** NPPOs should strive for greater clarity in their fee structures, publishing detailed breakdowns of costs and explaining the basis for their calculations (e.g., cost recovery, subsidy levels).
2. **Promote Regional Dialogue:** EAC and SADC should facilitate structured dialogues among member states to benchmark phytosanitary fees and procedures, share best practices (particularly around efficient digitalization), and explore potential frameworks for harmonization or mutual recognition where feasible.
3. **Optimize Digitalization:** Continued investment in ePhyto and related systems is crucial, but the focus should be on maximizing user benefits – simplifying processes, reducing turnaround times, and ensuring systems are accessible and affordable for all exporters, including SMEs.
4. **Strengthen Exporter Engagement:** Exporters and their representative associations should actively engage with NPPOs and policymakers to provide feedback on the challenges faced and advocate for fair, transparent, and efficient certification processes that support rather than hinder trade.

Final Thought

The cost associated with a phytosanitary certificate might appear as a minor administrative detail in the grand scheme of international trade. Yet, for the thousands of farmers, traders, and agribusinesses across East and Southern Africa striving to connect with global markets, it represents a critical gateway. The current inconsistencies and, in some cases, prohibitive costs, act as significant hurdles. Addressing these disparities through greater transparency, regional cooperation, and optimized digitalization is not merely an administrative task; it is fundamental to unlocking the immense potential of African agricultural trade and fostering more inclusive economic growth across the continent. Failure to do so risks entrenching a system where only the largest players can effectively navigate the complexities of export regulations, potentially leading to increased market concentration and incentivizing informal trade channels that bypass essential biosecurity controls, ultimately undermining both economic and safety objectives.

Works cited

1. Phytosanitary certificate (for dry produce) - InfoTrade Kenya, accessed April 22, 2025,

https://infotradekenya.go.ke/procedure/4739?l=sw&embed=true&includeSearch=false
2. Phytosanitary Services | Kenya Plant Health Inspectorate Service (KEPHIS), accessed April 22, 2025, https://kephis.go.ke/phytosanitary-services
3. Obtaining a Phytosanitary Certificate - Uganda Export Promotions Board, accessed April 22, 2025, https://ugandaexports.go.ug/pages/3/obtaining-a-phytosanitary-certificate
4. Electronic Phytosanitary Certificates: ePhyto, accessed April 22, 2025, https://www.agriculture.go.ug/ephyto/
5. Understanding SPS Requirements for Rwanda's Exports on the EU Market, accessed April 22, 2025, https://afpq.de/wp-content/uploads/SPS-Study-Rwanda.pdf
6. PLANT PROTECTION CHAPTER 3502.pdf - Government of Botswana, accessed April 22, 2025, http://www.gov.bw:8041/sites/default/files/2021-07/PLANT%20PROTECTION%20CHAPTER%203502.pdf
7. Plant Quarantine & Phytosanitary Service - Ministry of Agriculture, accessed April 22, 2025, https://www.agriculture.gov.zm/landing-page/pqps/
8. The Plant Pests and Diseases (Phytosanitary Certification) (General) Regulations, 2020, accessed April 22, 2025, http://www.pqps.gov.zm/wp-content/uploads/2024/10/Phytosanitary-Certification-General-Regulations-2020-S.I-No.-68.pdf
9. SPS requirements for Rwanda's Exports in the EU market, accessed April 22, 2025, https://afpq.de/wp-content/uploads/SPS-Manual-Rwanda.pdf
10. SPS requirements for Rwanda's Exports in the EU market - CUTS International, Geneva, accessed April 22, 2025, https://www.cuts-geneva.org/wp-content/uploads/2023/09/SPS-Manual-Rwanda-1.pdf
11. Apply for a plant import permit | South African Government, accessed April 22, 2025, https://www.gov.za/services/export-permits-import/phytosanitary-permit
12. East African Community, accessed April 22, 2025, https://www.eac.int/
13. East African Community - Wikipedia, accessed April 22, 2025, https://en.wikipedia.org/wiki/East_African_Community
14. Member States - SADC, accessed April 22, 2025, https://www.sadc.int/member-states
15. Southern African Development Community - Wikipedia, accessed April 22, 2025, https://en.wikipedia.org/wiki/Southern_African_Development_Community
16. East Africa Regional Overview | African Development Bank Group, accessed April 22, 2025, https://www.afdb.org/en/countries/east-africa/east-africa-overview
17. Members of the SADC - Southern African Development Community - Worlddata.info, accessed April 22, 2025, https://www.worlddata.info/trade-agreements/sadc-southafrica.php
18. Tanzania's Agricultural Export Sector Faces Challenge: Phytosanitary Certificate Fee Hike Impact on Competitiveness - - Farmonaut, accessed April 22, 2025, https://farmonaut.com/africa/tanzanias-agricultural-export-sector-faces-challen

ge-phytosanitary-certificate-fee-hike-impact-on-competitiveness/
19. Overview of EAC - East African Community, accessed April 22, 2025, https://www.eac.int/overview-of-eac
20. Southern African Development Community (SADC), accessed April 22, 2025, https://au.int/en/recs/sadc
21. East African Community (EAC) | Members, Countries, Organs, & Facts | Britannica, accessed April 22, 2025, https://www.britannica.com/topic/East-African-Community
22. Revision 08 Issue 01 - Kephis, accessed April 22, 2025, https://www.kephis.go.ke/sites/default/files/2025-01/Service%20Charter_reviewed%202024.pdf
23. KEPHIS Announces Revised Inspection and Phytosanitary Fees for Agricultural Products, accessed April 22, 2025, https://floriculture.co.ke/kephis-announces-revised-inspection-and-phytosanitary-fees-for-agricultural-products/
24. Government introduces new fees for importers and exporters of agricultural products, accessed April 22, 2025, https://eastleighvoice.co.ke/Phytosanitary%20services/54330/government-introduces-new-fees-for-importers-and-exporters-of-agricultural-products
25. Kephis introduces new inspection, phytosanitary fees for agricultural products, accessed April 22, 2025, https://www.capitalfm.co.ke/business/2024/12/kephis-introduces-new-inspection-phytosanitary-fees-for-agricultural-products/
26. Govt Introduces New Fees for Exporters and Importers of Agricultural Products Effective July 15 - Kenyans, accessed April 22, 2025, https://www.kenyans.co.ke/news/101979-govt-introduces-new-fees-exporters-and-importers-agricultural-products-effective-july
27. KENYA: New Fees For Phytosanitary Checks | The Exporter Magazine, accessed April 22, 2025, https://www.the-exporter.com/ne-Kenya-New-Fees-For-Phytosanitary-Checks
28. Phytosanitary certificate - InfoTrade Kenya, accessed April 22, 2025, https://infotradekenya.go.ke/procedure/599/393?l=sw&embed=true&includeSearch=false
29. As horticultural exports rise, regulators hike fees by 460pc | The Guardian - IPPmedia, accessed April 22, 2025, https://ippmedia.com/the-guardian/news/read/as-horticultural-exports-rise-regulators-hike-fees-by-460pc-2025-02-23-211310
30. Phytosanitary certificate - Tanzania Trade Portal, accessed April 22, 2025, https://trade.tanzania.go.tz/procedure/638/step/2651
31. Phytosanitary certificate - Tanzania Trade Portal, accessed April 22, 2025, https://trade.tanzania.go.tz/procedure/639?l=en
32. THE TRADE IN FOREST PRODUCTS BETWEEN KENYA AND TANZANIA 23 JUNE 2012, accessed April 22, 2025, http://awsassets.panda.org/downloads/tnrf_eawls_the_trade_in_forest_products_between_kenya_and_tanzania_2012_1.pdf

33. Obtain electronic phytosanitary certificate - Uganda Trade Portal, accessed April 22, 2025, https://ugandatrades.go.ug/procedure/244?l=en&includeSearch=true
34. Obtain electronic phytosanitary certificate - Uganda Trade Portal, accessed April 22, 2025, https://ugandatrades.go.ug/procedure/244?l=en
35. EXPORT DOCUMENTATION GUIDE, accessed April 22, 2025, https://ugandaexports.go.ug/downloads/UEPB-Export-Documentation-Guide_l0azlkfe.pdf
36. IMPORTS/EXPORTS PROCEDURES – UGANDA Import Procedure, accessed April 22, 2025, https://iscosafricashipping.org/wp-content/uploads/2020/02/IMPORTS-AND-EXPORTS-UGANDA.pdf
37. Fruits and Vegetables Export - Ministry of Agriculture, Animal Industry and Fisheries, accessed April 22, 2025, https://www.agriculture.go.ug/fruits-and-vegetables-export/
38. How to obtain a phytosanitary certificate in Uganda - YouTube, accessed April 22, 2025, https://www.youtube.com/watch?v=r5D0aOR3WWk
39. UGANDA GeNS (e-Phyto) IMPLEMENTATION - International Plant Protection Convention, accessed April 22, 2025, https://assets.ippc.int/static/media/files/publication/en/2022/03/Implementation_of_ePhyto_in_Uganda_Remico_Kibago1.pdf
40. The Rwanda Agriculture Livestock Inspection and Certification Services (RALIS) goes Digital - TradeMark Africa, accessed April 22, 2025, https://www.trademarkafrica.com/news/the-rwanda-agriculture-livestock-inspection-and-certification-services-ralis-goes-digital-2/
41. Phytosanitary certificate - Rwanda Trade Portal, accessed April 22, 2025, https://rwandatrade.rw/procedure/367?l=en&includeSearch=false
42. Rwanda: What New Online Portal Means for Agric Export-Import Enterprises - allAfrica.com, accessed April 22, 2025, https://allafrica.com/stories/201608230008.html
43. Reduction in the cost and time of doing business through the automation of the systems and process at Rwanda Agricultural Livestock Inspection and Certification Services (RALIS) - TradeMark Africa, accessed April 22, 2025, https://www.trademarkafrica.com/stories/reduction-in-the-cost-and-time-of-doing-business-through-the-automation-of-the-systems-and-processes-at-rwanda-agricultural-livestock-inspection-and-certification-services-ralis/
44. Message from Rwanda to IPPC and NPPOs, accessed April 22, 2025, https://www.ippc.int/static/media/uploads/message_rwanda_to_ippc_%26_nppos.pdf
45. Rwanda launches online portal for agri-produce trade - African Farming, accessed April 22, 2025, https://africanfarming.net/technology/infrastructure/rwanda-launches-online-portal-for-agri-produce-trade
46. Sub-Regional Report - Southern African Development Community - the United Nations, accessed April 22, 2025, https://www.un.org/esa/earthsummit/sadc-cp.htm

47. EU trade relations with Southern African Development Community (SADC), accessed April 22, 2025, https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/southern-african-development-community-sadc_en
48. Export Control tariffs for 2022-2023, accessed April 22, 2025, https://old.dalrrd.gov.za/doaDev/sideMenu/plantHealth/docs/Export%20Control%20tariffs%20for%202022-2023.pdf
49. Tariffs - eCert - eCertification Platform, accessed April 22, 2025, https://ecert.co.za/tariffs/
50. Food and Agricultural Import Regulations and Standards Export Certificate Report, accessed April 22, 2025, https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Food%20and%20Agricultural%20Import%20Regulations%20and%20Standards%20Export%20Certificate%20Report_Pretoria_South%20Africa%20-%20Republic%20of_09-30-2021.pdf
51. Food and Agricultural Import Regulations and Standards Export Certificate Report, accessed April 22, 2025, https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Food%20and%20Agricultural%20Import%20Regulations%20and%20Standards%20Export%20Certificate%20Report_Pretoria_South%20Africa%20-%20Republic%20of_09-30-2020
52. eCertification (ecert) | South African Government, accessed April 22, 2025, https://www.gov.za/services/services-organisations/export-permits/ecertification-ecert
53. eCert: The Electrontic Certificate for Export in South Africa | 2025 - Goglobal.group, accessed April 22, 2025, https://goglobal.group/e-certification/
54. Application for the issuing of a phytosanitary certificate, accessed April 22, 2025, https://www.dalrrd.gov.za/images/Branches/AgricProducHealthFoodSafety/PlantProductionHealth/PlantHealth/export-from-sa/Export-Certification/Application%20for%20Phytosanitary%20Certificate.pdf
55. Ministry of Agriculture | Government of Botswana, accessed April 22, 2025, https://covid19admin.gov.bw/taxonomy/term/85
56. Issuance of Plant, Plant products Import Permit/Phytosanitary Certificate, accessed April 22, 2025, https://www.gov.bw/crop-production/issuance-plant-plant-products-import-permitphytosanitary-certificate
57. Plants and plant products - Import Licensing Procedures - World Trade Organization, accessed April 22, 2025, https://importlicensing.wto.org/content/plants-and-plant-products-12
58. Procedure for applying for a Phytosanitary certificate - Namibia Trade Information Portal, accessed April 22, 2025, https://namibiatradeportal.gov.na/trade-goods/procedure-details/view_express_entity/794
59. New Fees - MAWLR, accessed April 22, 2025, https://mawlr.gov.na/documents/268157/1314045/New+fees+.pdf/48eead14-c536-

4941-8b05-630b6077e7f5?t=1668594461600&download=true
60. Plant Production Import Permit - Ministry of Agriculture, Water and Land Reform Namibia, accessed April 22, 2025, https://mawf.gov.na/plant-plant-production-import-permit
61. Namibia , Plant Health regulations, accessed April 22, 2025, https://pflanzengesundheit.julius-kuehn.de/dokumente/upload/na3-2012pqreg_en.pdf
62. 3812.pdf, accessed April 22, 2025, https://www.lac.org.na/laws/2007/3812.pdf
63. Namibia - Import Requirements and Documentations - International Trade Administration, accessed April 22, 2025, https://www.trade.gov/country-commercial-guides/namibia-import-requirements-and-documentations
64. Namibia - Import Requirements and Documentation - Data Privacy Framework, accessed April 22, 2025, https://www.privacyshield.gov/article?id=Namibia-Import-Requirements-and-Documentation
65. guidelines for agronomic and horticultural trade permits | nab, accessed April 22, 2025, https://www.nab.com.na/wp-content/uploads/2020/11/Guidelines_for_Agronomic_and_Horticultural_Trade_Permits_FINAL.pdf
66. Zambia, S. I. No. 70 of 2020, The Plant Pests and Diseases (Plant Quarantine and Phytosanitary Service Fees), accessed April 22, 2025, https://pflanzengesundheit.julius-kuehn.de/dokumente/upload/zm3-2020-70fees_en.pdf
67. Zambia Import Procedures - African Seed Trade Association (AFSTA), accessed April 22, 2025, https://afsta.org/zambia-import-procedures/
68. Zambia Export Procedures - African Seed Trade Association (AFSTA), accessed April 22, 2025, https://afsta.org/zambia-export-procedures/
69. PQPS Bulletin - The Plant Quarantine and Phytosanitary Service, accessed April 22, 2025, http://www.pqps.gov.zm/wp-content/uploads/2022/01/PUBLISHED-BULLETIN-COPY1-compressed-1-3-2-compressed.pdf
70. QUICK GUIDE FOR NON-TRADITIONAL EXPORTS - Ministry of Commerce, Trade and Industry, accessed April 22, 2025, https://www.mcti.gov.zm/wp-content/uploads/2024/10/QUICK-GUIDE-FOR-NON-TRADITIONAL-EXPORTS-BOOKLET-2.pdf
71. Press-Release-Launch-of-the-two-systems-for-ZRA-and-PQPS.docx - Ministry of Commerce, Trade and Industry, accessed April 22, 2025, https://www.mcti.gov.zm/wp-content/uploads/2023/02/Press-Release-Launch-of-the-two-systems-for-ZRA-and-PQPS.docx
72. Obtain phytosanitary certificate - eRegulations Lesotho, accessed April 22, 2025, https://lesotho.eregulations.org/procedure/150?l=en
73. 1 STDF PROJECT GRANT APPLICATION FORM STDF/PG/481 Project Title Strengthening the Phytosanitary Capacity of Zambia's Plant-ba, accessed April 22, 2025,

https://standardsfacility.org/sites/default/files/STDF_PG_481_Application_Sept-17_0.pdf