

TECHNICAL ITEM II

Veterinary Services and food safety: challenges and perspectives for policy development in the context of market unification on a continental scale

Prof Malek Zrelli

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Prof Malek Zrelli University Professor Tunis University

Summary

The unification of African markets, driven by initiatives such as the African Continental Free Trade Area (AfCFTA), provides a unique opportunity to address the challenges relating to food safety and the Veterinary Services (VS). These two domains play a central role in promoting sustainable, fair trade and improving animal and human health.

In this context, the VS and food safety are crucial in ensuring smooth trade and protecting public health. This article examines the main challenges facing African countries in these domains and proposes policy recommendations aimed at strengthening the harmonisation of regulations and infrastructures.

The strategy set out in this presentation is based on several axes. It emphasises the importance of harmonising sanitary and phytosanitary (SPS) standards, notably based on international standards such as those of the Codex Alimentarius Commission (CAC) and those of the World Organisation for Animal Health (WOAH). The article also incorporates the conclusions of the WOAH tool for evaluating the performance of Veterinary Services (PVS Tool), which identifies critical competencies in terms of institutional and infrastructure capacities. The integration of appropriate technologies to improve quality and food safety controls and strengthening the capacities of the VS through partnerships and regional collaboration are also at the heart of the proposals. Lastly, emphasis is placed on the key role of international organisations, such as the Food and Agriculture Organization of the United Nations (FAO) and the African Union (AU) and their specialised agencies in facilitating the implementation of integrated, aligned policies.

The main objective of this analysis is two-fold: on the one hand to promote the convergence of regulatory and operational frameworks between African countries to ensure smooth and safe trade and, on the other hand, to propose concrete mechanisms designed to ensure that veterinary and sanitary policies are applied more effectively. By adopting these coordinated approaches based on international best practices, Members will not only be able to lift the technical barriers to trade but also improve the competitiveness of African products on regional and international markets, while ensuring optimal sanitary safety of traded products.

Key words: Veterinary Services (VS) – food safety – Africa – strategy - African Continental Free Trade Area (AfCFTA).

Introduction:

Africa, a continent undergoing strong demographic change, has the world's fastest growth rate, with a population estimated to reach 2.5 billion by 2050, compared to 1.3 billion in 2020 (25). This demographic dynamic, places considerable pressure on food systems, complicating the task of achieving food security. Indeed, in SubSaharan- Africa, around 22% of the population were suffering from severe food insecurity in 2021, a figure in stark contrast to the global average of 9.8% (31).

Africa's demographic growth is accompanied by a growing demand for food, accentuating the pressure on production systems and animal health services. In this context, the unification of markets, as exemplified by the African Continental Free Trade Area (AfCFTA), provides a strategic opportunity to stimulate intra-African trade, balance supply and demand and reduce vulnerabilities related to climatic, economic and political risks.

Despite these initiatives, Africa remains heavily dependent on food imports, notably for wheat, 85% of which was imported in 2020. The associated expenditure, estimated at 35 billion dollars in 2021, could double by 2030 if local production is not ramped up (29). This dependence also exposes the continent to fluctuations in global prices.

This dependence is compounded by the high frequency of foodborne and zoonotic diseases, which constitute a major challenge due to underfunding and the limited capacities of the Veterinary Services (VS) and health services. According to the World Health Organization (WHO), approximately 91 million cases of foodborne diseases are recorded each year in Africa, resulting in 137,000 deaths, the highest rate worldwide (56). Moreover, nearly 30% of the world's cases of zoonoses are recorded on the African continent, thus emphasising the increased risks of inter-species transmission (56).

Strengthening the VS is therefore essential to ensure food safety, safeguard public health and strengthen economic resilience. While combating major infectious diseases such as HIV, malaria and tuberculosis remains an indispensable priority, food security and safety must now be seen as a strategic concern for African States and their development partners. Food safety risks directly compromise essential foodstuffs such as fresh meat, milk, fish and fruit, which are recognised for their great nutritional value. According to WHO (55), these risks are responsible for 1,300 and 1,200 disability-adjusted life years (DALYs) per 100,000 people in Africa's regions E and D, respectively.

Furthermore, endemic poverty increases food insecurity, with about 40% of Africa's population living below the poverty line on less than 1.90 dollars a day (54). In Sub-Saharan Africa, nearly 280 million people were experiencing severe food insecurity in 2021, a situation exacerbated by persistent poverty and structural challenges (31).

To analyse these issues, it is crucial to define the concepts used. 'Food security' means an adequate, accessible and nutritious food supply for the whole population, in accordance with SDG 2, "Zero hunger" and the United Nations Sustainable Development Goals (SDG). 'Food safety', on the other hand, means ensuring that the foodstuffs consumed are free from contaminants, be they pathogenic microorganisms, parasites or chemical residues, and is therefore an essential component of global food security (25).

Lastly, according to the standards laid down in the latest version of the WOAH *Terrestrial Animal Health Code* (49), 'Veterinary Services' means the combination of governmental and non-governmental entities responsible for implementing sanitary measures aimed at protecting animal health and ensuring safe trade.

Faced with these unprecedented demographic, economic and sanitary challenges, Africa must imperatively strengthen its food and sanitary systems to ensure sustainable, resilient development. The following analysis is in two stages: first, it will focus on existing initiatives and the projects already underway aimed at the unification of markets; then, the aim will be to formulate a strategy designed to maximise the advantages of market unification while ensuring safe, equitable, sustainable trade.

1. Veterinary Services and food safety systems in Africa in the context of market unification on a continental scale: current situation and future perspectives

In the first section of Chapter 1, we will be examining and analysing African initiatives to promote regional integration and efforts to stimulate and facilitate intra-African trade in the context of the unification of markets on a continental scale, emphasising the role of the regional economic communities (RECs), the COMESA-EAC-SADC Tripartite Free Trade Area and the Agreement on AfCFTA, which covers the 55 Member States of the African Union (AU).

In the second section, we will examine the major trends that characterise trade on the African continent. Special attention will be given to the sectors of trade in animals and animal products, sectors of strategic importance within the framework of this regional integration.

Lastly, in the context of the gradual unification of African markets and the rapid evolution of trade dynamics under the impetus of regional integration, we will discuss the role played by the World Organisation for Animal Health (WOAH) in facilitating safe trade. There will also be a critical evaluation of the VS and food safety systems. These two components remain crucial, not only to ensure the smooth flow of intra-African trade, but also to protect public health and strengthen the continent's economic resilience.

This analysis will shed light on the major challenges and the persistent shortcomings, in order to identify the priority axes for strengthening and developing relevant public policies.

1.1. Unification of markets & regional integration in Africa

To tackle historical structural obstacles, including economic fragmentation, inadequate infrastructure and persistent trade barriers, African countries, under the aegis of the AU, have undertaken various initiatives designed to stimulate trade and promote regional integration. In particular, these efforts seek to reduce tariff and non-tariff barriers, modernise infrastructure, harmonise economic policies and strengthen inter-State cooperation, with the aim of creating a trade environment that is integrated, competitive and sustainable.

In this regard, the AU has the support of eight RECs to structure its integration programme: COMESA (Common Market for Eastern and Southern Africa), EAC (East African Community) and SADC (Southern African Development Community) for eastern and southern Africa; and ECCAS (Economic Community of Central African States), ECOWAS (Economic Community of West African States), IGAD (Intergovernmental Authority on Development), AMU (Arab Maghreb Union) and CEN-SAD (Community of Sahel–Saharan States), covering the central, western and northern regions of the continent. These RECs play an essential role in achieving the AU's continental integration objectives.

COMESA: Created in 1993, this common market brings together 21 countries of eastern and southern Africa and some parts of North Africa and Central Africa, such as Kenya and Egypt. It promotes the integration of markets, industrialisation and infrastructure with a view to an African economic union.

EAC: Founded in 2000, it covers eight States, such as Burundi and Rwanda, and seeks to foster well balanced economic integration through regional trade.

ECOWAS: A key institution in West Africa, created in 1975, it brings together 15 countries and covers such strategic areas as agriculture, energy and finance.

IGAD: Launched in 1986, this community of seven East African countries works to achieve regional stability and the establishment of a free trade area.

SADC: Created in 1992, it seeks to reduce poverty and promote economic growth in southern Africa, notably by means of a free trade area established in 2008.

CEN-SAD: Founded in 1998, it brings together 25 countries with the aim of achieving a global economic union by eliminating obstacles to integration.

Towards a continental free trade area: The gradual convergence of these initiatives has led to the emergence of the COMESA-EAC-SADC Tripartite Free Trade Area (TFTA), under negotiation since 2008, which seeks to harmonise the economic policies of these three blocks. This zone covers 26 countries, representing 53% of AU members, and has a combined GDP of over 1.4 billion dollars and a population of around 800 million.

In parallel, the signing in 2018 of the Agreement establishing the AfCFTA was an important milestone. This agreement, in force since 2019 and already ratified by 48 African countries, seeks to create a single market for goods and services at a continental scale (2) (18). By reducing customs duties on 90% of traded products and applying the international standards of the Codex Alimentarius, the International Plant Protection Convention (IPPC) and WOAH, the AfCFTA represents a strategic lever for the integration of African agricultural markets.

Impact of the AfCFTA on agricultural trade and sanitary safety: Intra-continental trade currently remains limited in Africa, and in 2019 accounted for only 17% of the continent's total trade, compared to 59% in Asia and 68% in Europe (13). The agricultural sector presents even weaker performances, hampered by tariff barriers and fragmented infrastructure. However, according to the United Nations Economic Commission for Africa (UNECA), the AfCFTA could increase intra-African trade in agricultural products by 20-30% by 2030 (2) (17).

By reducing dependence on food imports, which cost Africa around 35 billion dollars a year (42), AfCFTA could transform the agricultural sector, strengthen food security and boost regional value chains. In this respect, the World Bank estimates that, if fully implemented, agricultural GDP in Sub-Saharan Africa could be increased by 10% by 2035, thereby generating gains of 450 billion dollars (53).

The AfCFTA also offers major opportunities for modernising the VS and food safety systems, indispensable for food safety and safeguarding public health. These areas play a central role not only in the promotion of sustainable, fair trade, but also in improving both animal and human health. In this respect, it is imperative to improve the implementation of sanitary measures notably by harmonising the laws and regulations of AU Member States with international standards, in accordance with the SPS Agreement of the World Trade Organization (WTO).

The AfCFTA highlights the interdependence between veterinary governance, food safety and trade. The VS play a central role in the control of trade in live animals and products of animal origin. They must take advantage of the opportunities offered by the AfCFTA to strengthen the veterinary profession, improve the quality of their services and ensure effective supervision of agrifood chains.

Harmonisation of VS and food safety policies is crucial to be able to overcome the challenges posed by the fragmentation of regulations and deficiencies in infrastructure. The effective integration of these dimensions would enable Africa to strengthen its economic resilience, improve food safety and promote sustainable, inclusive development at a continental scale. By making markets more open, by promoting agricultural investments and by consolidating institutional capacities, the AfCFTA could not only transform the African agricultural landscape, but also generate up to 2 million jobs in the agricultural sectors by 2035 (43).

This framework for economic unification therefore offers a unique potential to ensure inclusive and resilient prosperity at continental level.

1.2. African trade and its perspectives

African trade is undergoing rapid transformation, catalysed by continental economic integration, notably under the impetus of the AfCFTA. Exports of agricultural and animal products figure prominently in this dynamic (10). In 2024, the market for animal protein in Africa was estimated to be worth 768.66 million dollars, with an annual growth rate of 4.26%, and is thus set to reach 946.92 million dollars by 2029. This increase illustrates the growing demand for animal and other food products, at both a continental and international level.

According to projections by the Organisation for Economic Co-operation and Development (OECD) and the Food and Agriculture Organization of the United Nations (FAO) (40) (41), meat consumption in Africa is set to grow at an annual rate of 0.1%, under the influence of a rapidly expanding population. Furthermore, trade in agricultural products is expected to increase annually by 1.3% during the coming decade.

According to the OECD and FAO (39), the net value of animal production in Africa is expected to increase by 28% over the next 10 years, mainly under the impetus of the poultry and milk sectors. African production is thus expected to increase by 10.5 million tonnes of milk and 2.9 million tonnes of meat by 2031. This growth notably includes 1 million tonnes of poultry, 894 kilo-tonnes of beef, 629 kilo-tonnes of sheep meat and 362 kilo-tonnes of pork.

Focus 1 - Sub-Saharan Africa

Sub-Saharan Africa, which between 2019 and 2021 accounted for nearly 7% of global bovine meat production, holds 17% of the world's cattle population, a proportion forecast to reach 19% by 2031. Yet bovine meat production will increase by only 0.5% compared to total global production. A similar situation exists in the sheep sector, where the region, which accounts for 14% of global sheep meat production and 25% of the global sheep population, should see its production increase by 29%, thus bringing its share of global sheep meat production to 15%, with 28% of the global sheep population (1) (39). The substantial growth in milk production, estimated at 33%, should mainly stem from an increase in the number of milk-producing animals, accompanied by modest improvements in yields.

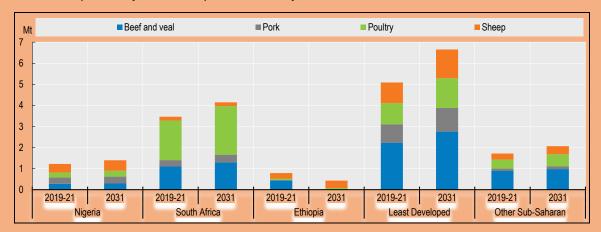


Figure: Meat production in Sub-Saharan Africa

Source: OECD/FAO (2022), "OECD-FAO Agricultural Outlook, OECD Agriculture statistics (database)

Focus 2 - North Africa

In North Africa, the situation is characterised by a heavy reliance on food imports due to limited levels of self-sufficiency. The agriculture, forestry and fisheries sector currently accounts for 5% of the region's GDP, a share that is likely to decline to 4% by 2031. Egypt dominates with nearly 30% of the net value of the region's agricultural, fisheries and aquaculture production. Furthermore, North Africa continues to be ranked among the leading global actors for trade in food products, in particular wheat (26%), sugar (22%) and maize (17%), while retaining a significant share in trade of sheep meat (33%), cheese (19%) and poultry (18%).

Despite the rise in regional initiatives, such as the AfCFTA, intra-African trade remains modest, representing about 16% of total trade, whereas exports to extra-continental markets, notably the European Union and Asia, continue to grow. According to the African Export-Import Bank (Afreximbank) (1), intra-African trade recorded a substantial growth of 18.6% in 2022, reaching 193.17 billion dollars. Nevertheless, this growth is still insufficient to significantly reduce external food dependence, whereas intra-African demand for food is expected to increase by 178% by 2050 (8).

An inherited trade structure and an unexploited potential: The African economy is still marked by a trade structure inherited from the colonial era, dominated by the export of raw materials and the import of manufactured products. Consequently, the continent is poorly integrated into world trade, with African exports accounting for only 2.2% in 2023, a slight increase on 2022, but in decline when compared to 2013 (16). Yet, in 2018, Afreximbank estimated the export potential of intra-African trade at more than 84 billion dollars (1), which, if exploited, would bring total intra-African trade up to 231 billion dollars.

This potential is particularly high in southern Africa (53 billion dollars), followed by North Africa (13.4 billion dollars), West Africa (9.5 billion dollars) and East Africa (7.8 billion dollars). Central Africa is in last place, with 840 million dollars in unexploited potential.

A report in 2022 by the World Bank in association with the AfCFTA Secretariat (54) indicated that the full implementation of the AfCFTA scenario could increase intra-African exports by up to 109% and global exports by 32% by 2035. This transformation could lift 50 million people out of poverty and increase global revenue by 8% by 2035. In the same report (54) it was estimated that foreign direct investment (FDE) should inject new capital, technologies and competencies, to raise the standard of living and reduce Africa's dependence on commodity exports. Female qualified workers should benefit from the highest wage gains thanks to AfCFTA. The salaries of female workers should increase by 11.2% by 2035 and those of their male counterparts by 9.8% (32).

Informal trade, an underestimated reality: Intra-African trade remains very weak, not exceeding 14.8% of total trade, compared to 54.5% for Asia and 68.4% for Europe in 2021. A major proportion of internal trade in Africa is conducted by the SADC and the EAC, which have the highest levels of internal trade of all the regional groups.

То										
		AMU	CEN- SAD	COMESA	EAC	EC- CAS	ECO- WAS	IGAD	SADC	World
From	AMU	3.9	6.4	3.4	0.1	0.5	2.4	0.4	0.3	121.8
	CEN- SAD	5.1	18.3	7.2	0.7	1.9	12.9	3.7	7.1	234.2
	COMESA	4.4	6.8	13.3	5.0	2.8	1.2	6.8	14.5	151.6
	EAC	0.5	0.6	4.7	4.0	1.7	0.1	3.1	2.1	20.4
	ECCAS	0.1	0.7	0.9	0.8	1.0	0.3	0.2	5.2	79.9
	ECO- WAS	0.3	11.0	0.3	0.0	1.3	10.8	0.1	6.4	112.3
	IGAD	0.3	1.7	5.9	2.8	1.0	0.1	0.7	1.2	25.6
	SADC	0.3	0.9	6.8	3.7	2.5	0.7	2.0	20.2	227.7

Table 1: Intra-African Exports (2021, USD billion)

Source: African Centre for Statistics, Economic Commission for Africa (2023): Africa Statistics Flash, December 2023. (19)

However, these figures mask the dynamic reality of informal trade. A study conducted in 2018 by the International Food Policy Research Institute (IFPRI) (35) revealed that, for a single border post between Zambia and Malawi, the value of informal trade stood at 2.9 million dollars per month, compared with only 1.6 million dollars for the formal trade registered at the same crossing point.

Similarly, in Benin, a study showed that informal trade with Nigeria was five times higher than officially registered exports. Another study, carried out in 2010 by the African Resource Centre, estimated that the value of informal exports from Uganda to neighbouring countries exceeded the official figures by nearly 83%. Consequently, if one were to add together the formal and informal trade flows, the share of intra-African trade could double or even triple.

The reason for the development of informal trade in Africa lies principally in the prohibitive costs associated with formal trade. These costs include not only the high customs duties on imports and exports, but also the significant fees charged for administrative processing and customs clearance of goods. In addition to these financial expenses there are considerable time costs, linked to inadequate infrastructure at the border and lengthy waiting times at official border posts, for instance.

Despite the progress already achieved, intra-African trade remains confronted by significant structural and institutional challenges. However, the AfCFTA offers a promising platform for overcoming these obstacles, harmonising regulations and stimulating investments. By mobilising the necessary resources and strengthening key sectors, such as the VS, Africa can fully exploit its economic potential, reduce its food dependence and accelerate its transition towards sustainable and inclusive development.

1.3. Veterinary Services in Africa

The rapid intensification of trade, whether intra-African or international, offers major economic perspectives. Yet, at the same time, it imposes increasingly strict demands in terms of sanitary safety, especially regarding animals and animal products. In this context, putting in place VS that are effective and in accordance with international standards is a strategic imperative to ensure the competitiveness of African products while safeguarding both public health and animal health.

National VS are based on the standards issued by WOAH, standards recognised as the reference in the field of animal health, management of zoonoses and facilitation of safe, fair trade. These standards were strengthened by the adoption, in 1995, of the WTO SPS Agreement. This Agreement explicitly invites Member States to apply WOAH standards and recommendations, in particular with regard to animal health and zoonoses, with the aim of reducing animal disease risks in international trade and guaranteeing the sanitary safety of products of animal origin (75).

According to WOAH (48), the strict application of SPS standards can lead to a 60% reduction in cases of transboundary animal diseases. This finding underlines the crucial role of the VS in safeguarding trade and promoting safe regional and international trade.

The VS are not limited to this key role for trade, however. They also conduct epidemiological surveillance, perform sanitary checks at borders, and educate producers in good production practices, thereby helping to manage risks all along the food value chain. By combining these different activities, they strengthen the resilience of the agrifood sector in the face of growing sanitary challenges (46) (64). They have a direct influence on the capacity of producers to comply with export standards, ensure animal health and supply quality products.

Lack of means and economic impact: Despite their strategic role, African VS have to contend with significant structural obstacles. Inadequate infrastructure, inadequate management of animal diseases and an uneven application of quality standards limit their effectiveness, hampering trade at both national and international level. These challenges are exacerbated by budgetary constraints and insufficient funding, thereby reducing their operational capacities. This situation is a particular concern in regions where up to 80% of the population depend on agriculture for their livelihoods.

The WOAH Observatory Annual Report of 2022 (47), covering the PVS missions conducted between 2016 and 2021, highlights the critical lack of human resources, including community animal health workers. The analysis of two key indicators — <u>ratio of workforce against VLUs</u> (veterinary livestock units) that a veterinarian or paraprofessional is required to manage, and the <u>ratio of workforce against biomass</u> (average animal biomass in tonnes per person) — reveals a significant regional disparity. For example, in Africa, one person (veterinarian or paraprofessional) is responsible for 3,530 VLUs or 112 tonnes of animal biomass, compared to an average of 612 VLUs or 25 tonnes of biomass in Europe.

Limited access to markets, attributable to inadequate VS, has major economic repercussions, especially for rural communities whose livelihoods depend largely on livestock farming. Unable to export or market their livestock at competitive prices, farmers suffer a significant reduction in their income, which has the effect of weakening the food security and economic stability of households. In this connection, FAO has estimated that incomes of African livestock farmers could increase by 20-50% if efficient VS enabled them to comply with international standards and take advantage of new market opportunities (26).

Deficiencies in terms of tools and traceability: Deficient management of veterinary products, and especially medicines and vaccines, as well as the low availability of rapid pathogen detection technology, limit the capacity to effectively manage epidemics and guarantee the safety of animal products. According to a study by WHO, less than 30% of African countries have suitable surveillance systems in place for the rapid detection of zoonotic pathogens, for diseases such as avian influenza and Rift Valley fever (57). The example of the Rift Valley fever epidemic in 2018, where the detection and management of the crisis was delayed due to the lack of rapid diagnostic tools, caused substantial economic losses in several East African countries, severely impacting food security and the economic resilience of the affected populations (9).

Traceability and transparency are fundamental requirements for access to international markets, since they make it possible to certify the origin of livestock products and assure their compliance with the sanitary standards in force. Yet less than 10% of African countries have traceability systems that comply with international standards. This deficiency limits the competitiveness of African exports, where transparency in terms of food safety is paramount.

Harmonisation of standards, a challenge: The fragmentation of regulations and food safety standards is another major obstacle to the harmonisation of VS and the effective implementation of the AfCFTA. FAO has reported that only 18% of African countries apply SPS standards harmonised at regional level (27). The Economic Community of West African States (ECOWAS) has endeavoured to promote common standards for the surveillance and control of animal diseases. Nevertheless, major disparities persist between Member States. For example, animal products that comply with Nigeria's SPS standards may not necessarily meet the requirements of Senegal, thereby restricting intra-community trade and impeding regional economic integration (15).

Investing in strengthening the VS is indispensable and would help not only to safeguard trade but also to strengthen food security and ensure inclusive economic development.

1.4. WOAH, a tool and standards for safe trade in animals and animal products

1.4.1. The PVS (Performance of Veterinary Services) Pathway

The PVS Pathway is based on a methodical approach aimed at strengthening VS and consists of several complementary missions: the initial evaluation of the Services, a gap analysis for the purpose of strategic planning, follow-up missions and targeted support programmes, such as the Veterinary Legislation Support Programme (VLSP) and PVS laboratory missions. This process promotes continuous improvement and alignment with WOAH standards, while encouraging sustainable investments adapted to the specific needs of each Member Country (69).

The PVS Pathway evaluates the performance of VS in four basic areas: 1) human, physical and financial resources; 2) technical authority and capability; 3) interaction with stakeholders; and 4) access to markets. This evaluation is based on Critical Competencies (CCs), each one measured against a scale comprising five levels of advancement. This tool covers the veterinary domain, including animal health, animal welfare, veterinary public health and food safety, as well as various associated activities (70).

The introduction of the PVS Information System (PVS IS) has modernised the process by exploiting the data in the reports in order to strengthen advocacy efforts to secure sustainable investments. This system facilitates the analysis of trends, the evaluation of progress and enhanced strategic decision-making to ensure compliance with international standards.

PVS, a diagnostic tool for Africa: African countries' engagement in the PVS Pathway demonstrates their determination to strengthen their VS. Since 2006, WOAH's 54 African Members have actively participated in the programme, with 276 PVS missions conducted, out of a total of 609 missions conducted in 146 of the Organisation's Member Countries (63). This dynamism reflects a shared desire to modernise the VS, improve their performance and ensure greater compliance with international standards, with a view to facilitating trade and ensuring food safety.

In a study carried out in 2019 under the aegis of WOAH and performed by a consortium of consultants from the firms Weaver Consulting International, Intiga and Colibri Consulting (62), the state of the VS in Africa and the progress that countries had achieved were examined based on 142 reports produced for African countries during the period December 2006 to February 2019. The sixth edition (2013) of the PVS Tool served as the main reference for this analysis, as this was the version most frequently used in the reports consulted (58). The study revealed major deficiencies, including a chronic lack of veterinarians in African VS, excessive recourse to veterinary paraprofessionals (VPPs), often poorly supervised, and inadequate infrastructure for ensuring effective sanitary inspections. Over 85% of the countries evaluated were classed at level 1 or 2 on the PVS evaluation scale, evidencing their incapacity to comply with international standards, especially with regard to food safety.

In many countries, the VS were only intervening effectively in the field of food safety in export abattoirs. In contrast, in abattoirs used for national or local consumption, meat inspection was often lacking or entrusted to VPPs with limited training, inadequate instructions and operating without proper data reporting or veterinary supervision. Moreover, the study emphasised that the infrastructure of abattoirs at national and local level presented major deficiencies, particularly for poultry and small ruminants. This situation amplifies the sanitary risks to consumers and hinders the improvement of food safety on the African continent.

Institutional coordination, the legislative framework and access to markets identified as key issues: In higher achieving countries, the mandate of the VS was often limited to specific missions, such as meat safety and food inspection in facilities processing animal products for export. However, non-export processing facilities were frequently under the mandate of another competent authority, commonly the health agency. This division of responsibilities, while functional in some contexts, raises questions regarding inter-institutional coordination and the overall efficacy of the food safety system.

The analysis of PVS reports also revealed that numerous African countries have veterinary legislation that is obsolete and ill-adapted to current and future challenges. The perspectives for a growing participation of Africa in the global trade of animals and animal products, together with changes in the evolution of diseases and the emergence or re-emergence of transboundary animal diseases, mean that there is an urgent need to bring the VS thoroughly into line with standards so as to ensure the sanitary safety and sustainable development of the sector.

The Critical Competency "International certification", essential for access to global markets, revealed significant disparities among the countries studied. While some countries had put in place certification programmes for certain animals, only three countries had robust, fully functional certification programmes. One of the explanations frequently put forward for this situation was that weak surveillance programmes compromised the authorities' capacity to certify animals or animal products with sufficient confidence, thus exposing the sector to significant sanitary and trade risks.

1.4.2. The importance of WOAH standards for safe trade in animals and animal products

Animals and animal products represent a strategic resource that is crucial for the economic development of numerous African countries. In rural and coastal regions especially, this sector constitutes a major source of income, while improving the livelihoods of the local populations. Indeed, animal production contributes directly to food security, poverty alleviation, and the self-sufficiency of rural communities (6). Nevertheless, trade in these products faces numerous challenges, notably from animal diseases, which do not respect borders and pose a threat to local economies and public health. These diseases may also lead to restrictions on international trade, thus limiting access to global markets and reducing the potential benefits of the sector.

Another major obstacle lies in the weakness of national animal health systems in a number of developing countries. These deficiencies, combined with non-compliance with animal health and welfare standards, often prevent producers from reaching the necessary international standards to access lucrative markets. In this context, WOAH plays a pivotal role. By elaborating and promoting international standards, WOAH provides an essential framework for ensuring safe, equitable and sustainable trade in animals and animal products (46).

Applying WOAH's international standards offers numerous advantages, but, despite these advantages, the application of international standards remains a challenge for many countries, and especially for low-income countries. Limited infrastructure, lack of qualified human resources and insufficient funding often hamper the implementation of WOAH standards. These challenges are exacerbated by poor coordination between public and private actors, and by the absence of a solid regulatory framework.

Effective implementation of standards therefore requires close cooperation between governments, animal producers, veterinarians and international partners. The integration of standards in animal production value chains is essential in order to ensure sustainable results. Furthermore, the entry into force of the AfCFTA obliges countries to comply with strict sanitary requirements to access the common market, a situation that reinforces the importance of WOAH's standards.

1.5. Food safety in Africa

Africa is facing a multitude of sanitary challenges, notably foodborne diseases and food safety risks, which stem from a variety of factors, including the weakness of its SPS systems and its incapacity to comply with international SPS standards and measures. Consequently, the failures of food safety systems have led to highly significant public health problems, with Africa recording the world's highest burden of foodborne diseases per capita. According to WHO, risks relating to food safety are responsible for roughly 91 million disease cases and 137,000 deaths each year on the continent, mostly affecting children under 5 years of age (55), pregnant women, elderly people and immunocompromised individuals. In addition to their direct health consequences, these diseases lead to a marked reduction in productivity, as well as disabilities and premature deaths, thus affecting household incomes.

Moreover, foodborne and zoonotic diseases are common in Africa, where the VS remain frequently underfunded and inadequately equipped to address these issues. According to WHO, approximately 30% of the world's zoonosis cases are recorded in Africa, thereby increasing the risk of diseases being transmitted from animals to humans (56).

A study carried out by the World Bank in 2019 (52) estimated that the costs associated with the consumption of unsafe food represent around 110 billion dollars a year for low- and middle-income countries, with a particularly high incidence in Sub-Saharan Africa and South-East Asia.

Challenges related to SPS standards and food safety, and their impacts: Africa is facing a series of challenges relating to SPS standards, as described by the AU (11). These challenges notably include: lack of uniformity and efficacy in applying these standards for the control of animal and plant diseases and for food safety; the low level of compliance with international standards relating to animal and plant health and food safety; the lack of incentives sufficient to engage the private sector in formal, regulated trade; the limited ca-pacity of government authorities to ensure effective monitoring and proper application of SPS standards; the lack of transparency of SPS standards and regulations; the inadequacy of scientific systems to collect, analyse and disseminate information on diseases, pests or food-related hazards within the region; the difficulty of retaining trained SPS personnel; and, lastly, the lack of capacity of the private sector to comply with SPS measures or actively participate in the development of new regulations.

These challenges hinder the growth and modernisation of internal market economies, while at the same time reducing the capacity of countries to generate income and employment, resulting in a loss of productivity (36). Furthermore, the inadequacy of food safety systems in Africa limits access to international markets, leading to numerous export rejections. Between 2008 and 2020, nearly 3,248 African agrifood exports were rejected by the European Union and 3,870 by the United States of America due to noncompliance with their respective food safety standards. Rejections of this kind result in significant financial losses (charges for freight, return or destruction of products) and reputational damage for exporters and the exporting countries (36). This situation highlights problems of noncompliance, ineffective management of food systems and obstacles to economic development and poverty reduction in Africa.

Structural determinants and their challenges: According to a study published by the World Bank in 2019 (52) four main sets of determinants structure the food safety landscape and influence its management in Sub-Saharan Africa, namely:

Governance: • Organisational fragmentation (agriculture, health, trade, State/local authority) • Complex and unsustainable funding for food safety agencies • Misalignment of standards, lack of surveillance, no private liability • Complexity of regional governance and harmonisation (RECs, AUC).

Physical infrastructure: • Clean water • Effective processing equipment • Safe storage • Laboratory capacity • Cold chain • Food service facilities • Sanitary installations • Electrical power/transport.

Food systems and markets: Smallholder farmers and informal local markets, street vendors • Formal urban convenience stores and supermarkets • Formal and informal regional trade • Formal trade outside the continent.

Eco-biological: • Food types and environmental conditions (moisture, temperature) • Bacterial, viral and parasitic hazards (Salmonella, E. coli, norovirus) • Natural chemical hazards (aflatoxin, ochratoxin, cyanide) • chemical hazards of human origin (pesticides, dioxins).

The analysis conducted in 2024 by Kareem et al. (36) highlighted major structural challenges hindering the effective implementation of SPS measures in Africa. These obstacles include the lack of a coherent institutional framework for the continent and the inadequate exchange of scientific data needed to develop suitably adapted policies, compounded by insufficient awareness of SPS issues among public and private sector stakeholders, the low priority given to these issues by political decision-makers and the inadequacy of financial resources allocated to the implementation of SPS measures. These problems are also aggravated by the slow pace of ratification of regional SPS protocols, the duplication of mandates between various national bodies and the limited capacity of public institutions to apply SPS-compliant measures. In addition, the inadequacy or absence of critical infrastructure, such as laboratories and technical capacities, accentuate these difficulties. Lastly, national and regional coordination mechanisms are often found to be ineffective, compromising cooperation and the harmonisation of efforts across the continent.

Historical management and future perspectives: Historically, food safety was mainly approached through the prism of international trade, encouraging the expansion of markets and agrifood exports. However, this approach neglected a crucial fact: around 96% of agricultural production marketed in Africa is destined for internal markets. This fact highlights the crucial importance of national food supply chains, both for African producers and for consumers. According to World Bank estimates, the economic and productivity losses resulting from the sale of unsafe food on domestic – often informal – markets are 40 to 50 times greater than those occurring in international trade.

Public authorities therefore have the responsibility of ensuring that the food products available on their markets are in strict compliance with the food safety standards in force, thereby protecting the health of their populations and contributing to more resilient, equitable economic growth.

Numerous national, regional and continental initiatives and projects have been deployed with the aim of strengthening and harmonising SPS systems between the RECs and Member States. These efforts seek to maximise the efficiency and efficacy of SPS systems, protect human health and facilitate intra-African trade in agricultural and food commodities. Several projects and initiatives have been implemented to strengthen SPS capacities in Africa, aimed at improving food safety, facilitating trade and reducing risks associated with animal and plant diseases, such as PAN-SPSO¹, BTSF², STSD³ and the current WOAH project to support the implementation of Annex 7 SPS of the Protocol on Trade of Goods in the AfCFTA agreement across the COMESA region.

Although these efforts have enabled significant progress to be made, gaps still remain. The proliferation of SPS frameworks and action plans has given rise to requirements that are often redundant or contradictory between the RECs, inducing restrictive effects on trade. Furthermore, some regional SPS documents have received only limited acceptance due, among other factors, to internal inconsistences, the lack of rigorous risk evaluation requirements, failure to include the principle of non-discrimination and failure to apply the principle of equivalence (10). Furthermore, regional SPS instruments have produced mixed results, due to various structural and operational issues. These obstacles include divergences in the formulation of objectives and priorities between the different regions, varying levels of implementation of the provisions of the WTO SPS Agreement, which has on occasion inadvertently led to the fundamental principles of SPS being called into question. Additional problems include a limited and variable understanding of the notion of regional harmonisation, as well as divergences in the establishment of priorities and the necessary actions to achieve it. Disparities in the responsibilities assigned to the institutions in charge of applying SPS measures, inconsistencies in dispute settlement mechanisms, and the lack of effective harmonisation of the regional instruments by the sectoral bodies have also been limiting factors, despite the progress achieved within the framework of the initiatives driven by the RECs (11).

¹ PAN-SPSO: Participation of African Nations in Sanitary and Phytosanitary Standard Setting Organizations

² BTSF: Better Training for Safer Food

³ STSD: Surveillance of Trade Sensitive Diseases

Building on the development priorities defined in the AU Agenda 2063, which identifies agricultural development as a strategic priority, notably within the framework of the Comprehensive Africa Agriculture Development Programme (CAADP), and taking into account the Malabo Declaration of June 2014 (7) which formulated seven key commitments, including the promotion of Intra-African trade in agricultural products and services, considerable progress has been achieved. Indeed, in the wake of the launch of the AfCFTA in March 2018, the AU Commission, in partnership with Member States, the RECs and technical and financial partners, developed in 2019 an AU SPS policy framework (10). This initiative was followed in 2020 by the adoption of the Food Safety Strategy for Africa (FSSA) 2020-2036 (12) and the Animal Health Strategy for Africa (AHSA) (2019-2035). The AU undertook to strengthen the SPS systems in order to promote food safety, boost intra-African agricultural trade and strengthen the resilience of the continent's agrifood systems.

- The AU SPS Policy Framework for Africa is a policy document aimed at guiding the implementation of modern SPS systems aligned with the WTO SPS Agreement. It is targeted both at RECs and Member States, providing them with the necessary tools to ensure agricultural transformation, strengthen food safety, improve public health and boost intra-African and international trade.
- The Food Safety Strategy for Africa (FSSA) 2022-2036, in conjunction with animal health and plant health strategies, is one of the key instruments for the implementation of the AU SPS Policy Framework. It proposes practical solutions for setting up robust food safety systems, reducing the impact of foodborne diseases, facilitating intra-African and global trade and harmonising existing policies between the regions.
- The Animal Health Strategy for Africa (2019-2035) proposes a coherent, sustainable framework for strengthening the continent's animal health systems, in accordance with the standards established by WOAH and other sets of international reference standards.
- The Livestock Development Strategy for Africa (LiDeSA) 2015-2035 aims to transform the livestock sector in Africa by enhancing Animal Health and improving market access.

2. Strategy for the harmonisation of policies on food safety and Veterinary Services in the Member States of the African Union to facilitate cross-border trade in animals and animal products

Within the framework of implementation of the AfCFTA, the development of intra-African trade, in particular in the 'live animals' and 'products of animal origin' sectors, is a strategic priority for Member States. Yet this trade remains hampered by multiple challenges, including disparities in food safety policies and in the VS. These discrepancies reduce market access, increase trade costs and compromise the safety of traded products.

To address these challenges, it is now imperative to devise and implement a strategy harmonised at a continental level. The proposal put forward in this document is in line with this aim, building on existing, widely recognised pan-African strategic frameworks, such as the FSSA, the Animal Health Strategy for Africa and the SPS Policy Framework, all three developed under the aegis of the AU. These continental frameworks serve as the basis for the proposed strategic directions, which place the harmonisation of policies on food safety and VS at the heart of the priorities.

The main objective of the proposed strategy is two-fold:

- Promote the convergence of regulatory and operational frameworks between African countries, to ensure smooth and safe trade:
- ✓ To propose concrete mechanisms designed to ensure that veterinary and sanitary policies are applied more effectively.

This harmonisation is also aimed at strengthening Member States' institutional and technical capacities and building mutual trust between African trading partners.

By developing common, well-aligned policies, Member States will be better placed to remove technical barriers to trade, improve the competitiveness of African products on regional and international markets and ensure optimum safety of traded products. The strategy proposed in this document is thus intended to make a significant contribution to the economic integration of the African continent while ensuring sustainable and effective management of sanitary and veterinary risks.

2.1. Strategic approach:

The strategy proposed in this presentation will focus on exploring pragmatic approaches to harmonise veterinary and food policies within the framework of the AfCFTA and other regional initiatives. It will place the emphasis on the harmonisation of SPS standards across the African continent, the use of technologies to strengthen food quality and safety checks and the promotion of partnerships and regional collaborations designed to consolidate the capacities of Veterinary Services (VS). This strategy will also underline the central role of international organisations, such as FAO and WOAH, and that of the African Union (AU) and its specialised agencies, to facilitate the implementation of integrated, coherent policies.

The strategic approach adopted will therefore be based on rigorous and harmonious alignment with international, continental and regional reference frameworks, to ensure global consistency and optimal efficacy. It will be in line with the guidelines and objectives of the main initiatives underway, thereby promoting synergy between the different actors involved so as to maximise the results regarding food safety and agrifood trade.

Reference initiatives

- Agenda 2063 of the AU, an ambitious roadmap for the sustainable, inclusive and prosperous development of Africa towards the year 2063.
- The Sustainable Development Goals (SDG) of the United Nations, which present a universal vision of inclusive economic growth and environmental sustainability.
- The Results Framework of the Comprehensive Africa Agriculture Development Programme (CAADP), which promotes the structural transformation of the African agriculture sector.
- The Feed Africa Strategy, based on achieving food security and reducing social inequality.
- The global action plan on antimicrobial resistance (AMR), developed to counter threats linked to the emergence of antimicrobial resistance.
- The International Health Regulations (IHR) of WHO, which provide global standards aimed at strengthening public health worldwide.
- The standards of WOAH and of the Codex Alimentarius Commission (CAC), the organisations establishing recognised reference standards on food safety and animal health.
- The Livestock Development Strategy for Africa (LiDeSA), aimed at promoting sustainable and inclusive growth in the livestock sector.
- The Animal Welfare Strategy for Africa (AWSA), which seeks to promote animal welfare standards throughout the continent.
- The Food Safety Strategy for Africa (FSSA), the Animal Health Strategy for Africa, and the SPS Policy Framework, each developed under the aegis of the AU.
- The Science, Technology and Innovation Strategy for Africa (STISA), focussed on the use of scientific and technological knowledge for sustainable development.
- The Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS), designed to ensure sustainable management of aquatic resources.
- The Africa Centres for Disease Control and Prevention (Africa CDC), which play a central role in strengthening public health systems and management pandemics.
- The African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora, aimed at preserving biodiversity and essential natural resources.

Thus, the proposed strategy is based on a holistic and integrative perspective, guaranteeing synergy between the various initiatives and strategic frameworks. It seeks to be a lever to address the intersectoral challenges relating to food safety and VS, while ensuring effective governance suitably adapted to local and continental realities.

2.2. Strategic Objectives:

The proposed strategy, aimed at providing a framework for managing the challenges facing the harmonisation of policies in Africa, is divided into six strategic objectives (SO) and the 18 targets accompanying them:

- ✓ **Strategic Objective 1**: Strengthen and improve the capacities of the Veterinary Services, with particular emphasis on food safety and certification.
- ✓ Strategic Objective 2: Harmonisation of sanitary and phytosanitary standards.
- ✓ Strategic Objective 3: Improve trade and market access at national, regional, continental and global levels.
- ✓ **Strategic Objective 4**: Put in place and strengthen coordination mechanisms, increase cooperation and investments at national, regional, continental and global levels (public sector).
- ✓ **Strategic Objective 5:** Improve networking, links between SPS authorities and other stakeholders and integration of the informal market (public sector).
- ✓ **Strategic Objective 6:** Address cross-cutting challenges: Social inclusion, gender, research, environment, antimicrobial resistance and resilience.

2.2.1. Strategic Objective 1: Strengthen and improve the capacities of the Veterinary Services

This first objective is aimed at providing Member States' VS with the appropriate competencies, infrastructure and resources to address sanitary challenges and focuses on 4 targets.

- ✓ Target 1: Adaptation of surveillance and control measures to the specificities of African ecosystems.
- ✓ Target 2: Strengthening the capacities of the VS, particularly with regard to food safety and international certification.
- ✓ **Target 3:** Integration of digital technologies and information systems in sanitary management and the strengthening of sanitary safety checks.
- ✓ Target 4: Strengthening of cross-border infrastructure dedicated to the trade in animals and animal products.

Target 1: Adaptation of surveillance and control measures to the specificities of African ecosystems. One of the particularities of livestock farming in Africa is the widespread practice of pastoralism and transhumance, a production system that exploits seasonal grasslands and scarce forage resources in arid and semi-arid areas (37). In Sahelian countries, pastoralism accounts for 70-90% of cattle production and 30-40% small ruminant production. Pastoralism is the main source of food and income for some 268 million people in 36 African countries (6).

These systems allow optimal use of the available natural resources on land that is often arid or semi-arid, but they also pose major challenges, notably with regard to animal health and the management of ecosystems (37). Transhumance extends beyond State borders and is conducive to the spread of contagious diseases.

The mobility of herds facilitates the spread of contagious diseases, such as peste des petits ruminants (PPR), foot and mouth disease (FMD), contagious bovine pleuropneumonia (CBPP) and trypanosomosis. These diseases can spread rapidly, leading to significant economic losses and threatening the food security of pastoralist communities. Furthermore, transhumant herders often have only limited access to the VS, a situation that complicates the implementation of prevention and control measures. By adapting surveillance and control measures to local realities and strengthening cross-border cooperation, it is possible to reconcile these traditional practices with modern day requirements regarding sanitary safety and economic development.

In contrast to these livestock farming methods, demographic and economic development has seen the emergence of mega-cities (e.g. Cairo and Lagos) and regions with a high population density (Northern Maghreb and Mashreq, Gulf of Guinea, Great Lakes region), which are all centres with a high consumption of animal products, prompting the movement of animals and animal products and consequently the spread of diseases (37).

Priority actions:

- Train the VS in international standards, in particular those of WOAH, and in modern food safety management methods.
- Strengthen the technical and infrastructure capacities of veterinary laboratories to ensure early detection of animal diseases and zoonoses.
- Put in place electronic certification systems to improve the traceability and compliance of animal products destined for international trade.
- Promote harmonised epidemiological surveillance programmes for the prevention and control of transboundary animal diseases.
- Support the improvement of veterinary infrastructure, such as abattoirs, border control posts and quarantine centres.

Target 2: Strengthening the capacities of the VS, particularly with regard to food safety and international certification: Chapter 6.2. of the WOAH *Terrestrial Animal Health Code* (49) underlines the importance of veterinarians receiving comprehensive training. This must include competencies in animal health, management of foodborne zoonoses and food hygiene, affording them a unique role in ensuring the safety of food of animal origin.

The same *Code* chapter emphasises the need for close cooperation between all stakeholders in a food safety system. This includes veterinarians, other relevant professionals and stakeholders in the sectors concerned. Furthermore, globalisation of the food supply has given the VS a broader role and new responsibilities. In this respect, the 'One Health' approach places the emphasis on collaboration between the competent authorities for animal health, food safety and public health. This integrated approach strengthens the efficacy of SPS systems while allowing better management of sanitary risks and is essential for strengthening the capacities of the VS, especially in areas at high risk of zoonoses. Initiatives such as those of the SADC and the West Africa, Economic and Monetary Union have enabled the setting up of VS networks and laboratory networks. These networks facilitate the exchange of epidemiological data, continuing education for veterinarians and harmonisation of sanitary practices (66). These collaborations make it possible for African countries to pool their limited resources and improve the efficacy of their VS in the face of growing food safety challenges (66).

- Border security and quarantine measures should be strengthened by increasing resources and staffing, and by regional coordination aimed at harmonising sanitary requirements for imports, animal identification, animal movement control and data management systems between countries.
- Implementation of traceability systems for animal products, food safety emergency plans and residue surveillance programmes. The food safety programme should be implemented in close collaboration with the public health authorities.
- Veterinary public health capacities should be strengthened by means of food safety legislation.
- Creation of regional centres of excellence for veterinary training and research.
- Veterinary education and veterinary curricula should be strengthened, taking into account WOAH guidelines for a veterinary education core curriculum, to ensure that veterinary graduates have the necessary competencies (WOAH "Day 1 competencies").

- The curricula for veterinary paraprofessionals (VPPs) must be evaluated, standardised and accredited. The creation of training centres for VPPs could be envisaged.
- Improve training for inspectors, notably through the development of inspection programmes for abattoirs (including the collection of information on animal diseases), and for processing and distribution establishments and facilities, to ensure food hygiene and safety in all premises and for products of animal origin at all levels of distribution, including local markets.

Target 3: Integration of digital technologies and information systems in sanitary management and the strengthening of sanitary safety checks: The use of digital technologies can revolutionise the management of the VS and SPS standards, by facilitating monitoring, traceability and access to information. Tools such as GPS-based surveillance systems, epidemiological and traceability databases are, in some places, increasingly being used to strengthen food quality and safety checks in Africa. They allow faster detection of contaminants and facilitate the management of risks related to products of animal and plant origin.

Digital traceability platforms, such as those developed by firms in partnership with FAO, enable agricultural products to be monitored 'from farm to fork', thereby ensuring greater transparency and a faster response in the event of contamination (21). A study by the World Bank in 2020 revealed that the introduction of traceability systems in the agricultural sector could reduce food losses by up to 10% in Sub-Saharan Africa, generating potential savings of 3.8 billion dollars a year (52).

Priority actions:

- Develop integrated databases at continental level for the traceability of animal products and for transboundary diseases.
- Promote the use of mobile applications and digital platforms for electronic health certificates.
- Put in place a harmonised early warning system for the surveillance and management of animal diseases.
- Strengthen the competencies of national and regional actors in the use of digital technologies for SPS management.
- Deploy artificial intelligence and data analysis solutions to identify trends and anticipate sanitary risks.

Target 4: Strengthening of cross-border infrastructure dedicated to the trade in animals and animal products: Cross-border infrastructure is often under-developed, which constitutes a major obstacle to the effectiveness of trade while at the same time increasing sanitary risks. This target focuses on overcoming these deficiencies.

- Build or modernise specific infrastructure, such as quarantine centres, certified abattoirs and refrigerated storage facilities at borders.
- Create integrated sanitary control posts at priority border crossing points to harmonise SPS inspections.
- Promote innovative funding mechanisms, such as public-private partnerships, for the development of SPS infrastructure.
- Facilitate access to infrastructure for small-scale producers, including local livestock producers and transhumant herders.
- Integrate connected infrastructure with regional trade corridors, promoting a secure, smooth flowing logistical chain.

2.2.2. Strategic Objective 2: Harmonisation of sanitary and phytosanitary standards

SPS standards are crucial for ensuring the safety of agricultural and animal products traded between African countries. However, their implementation varies widely from one country to another, hampering intraAfrican- trade and exposing some countries to increased sanitary risks. The AfCFTA and the AU are working to harmonise SPS standards with the aim of reducing obstacles to trade and improving food security. The African Continental SPS Policy Framework, established in 2019 by FAO and the AU, seeks to strengthen the SPS systems of all AU member countries (10) (22). According to FAO, the alignment of SPS standards could increase intraAfrican trade in agricultural products by 20%, corresponding to an estimated gain of 3.6 billion dollars for African exporters by 2025 (24) (28). This second objective- focuses on two targets:

- Target 1: Increased participation in standardisation and harmonisation efforts to create a unified framework.
- Target 2: Strengthening the integration of regional value chains.

Target 1: Increased participation in standardisation and harmonisation efforts to create a unified framework: Annex 7 of the AfCFTA agreement contains two key provisions: strengthen the harmonisation of SPS measures between Member States and facilitate the mutual recognition of equivalent SPS measures. These two provisions will reduce the costs involved in achieving compliance with SPS measures. However, the current level of standardisation efforts in Africa is poor, with an enormous gap between the continent and its trading partners. Hence there is a need to speed up the development and harmonisation of standards between AU Member States in order to eliminate unnecessary obstacles to trade and facilitate safe trade (36). Furthermore, there is a need to intensify existing efforts to bring standards into line with international standards, such as those of the IPPC, the Codex Alimentarius Commission (CAC) and WOAH. It is equally important to strengthen and/or reactivate the national Codex committee or other similar committees in Member States, and to ensure collaboration between governments, the private sector and consumer associations. The current management of food systems must therefore ensure strong and effective representation of all stakeholders to enable strict compliance with food safety regulations.

- Develop continental guidelines based on the international standards of WOAH, FAO and WHO (Codex Alimentarius) and the IPPC to encourage Member States to align their regulations with these standards.
- Support the examination, harmonisation and modernisation of legal/regulatory SPS frameworks by Member States on the basis of international standards, in particular in key trade corridors.
- Encourage Member States to establish and respect science-based SPS measures for the protection of human, animal and plant life and health.
- Promote the use of risk evaluation to ensure the least restrictive trade possible while minimising risks to public health.
- Establish and promote surveillance systems for priority pathogens, pests and risks of greatest concern for the safety of animal feedstuffs, plants, animals and food products.
- Strengthen systems to monitor and evaluate the implementation of SPS standards, to identify and eliminate gaps.
- Advocate application of the concepts of regionalisation/zoning and compartmentalisation (recognition of disease-free zones and zones with low prevalence) to facilitate safe trade.
- Rely on the support of the RECs (e.g. ECOWAS and COMESA) to apply harmonised policies, including the establishment of a regional framework for mutual recognition of SPS certificates to reduce the delays and costs related to cross-border inspections.

Target 2: Strengthen the integration of regional value chains: This target is aimed at developing effective and sustainable regional animal value chains to stimulate local and regional economy while ensuring sanitary safety.

Priority actions:

- Identify and develop priority regional trade corridors for animal products.
- Support the creation of integrated value chains, with actors collaborating in different links of the chain (production, processing, distribution).
- Improve small-scale producers' access to regional markets through partnerships with agrifood firms.
- Put in place regional centres of excellence to support training and innovation initiatives within the value chains.
- Promote continental labelling and certification to enhance the competitiveness of African products on international markets.

2.2.3. Strategic Objective 3: Improve trade and market access at national, regional, continental and global levels

The entry into force of the African Continental Free Trade Area (AfCFTA) Agreement has strengthened the need to adopt approaches that facilitate compliance with food safety requirements for small-scale farmers and small and medium-sized enterprises (SMEs). Harmonisation of food safety measures at continental level and the promotion of cooperation on regulations will be crucial to generate transparency and trust in the regulatory environment. These approaches will also help to eliminate non-tariff barriers to trade and facilitate access to the various markets. Priority will be given to commodities identified in the Abuja Declaration of 2006 as strategic food products and to other priority regional agrifood value chains to facilitate intra-African trade. The aim of this objective is to ensure consistency and uniformity, and to build on lessons learnt and best practices to facilitate access to markets at all levels. This third objective focuses on 2 targets:

- ✓ Target 1: Develop trade opportunities.
- ✓ Target 2: Valorisation of local animal products to enhance their competitiveness on international markets.

Target 1: Develop trade opportunities: This target focuses on the development of trade opportunities by improving infrastructure and reducing trade barriers.

An example of a measure is the development of open platforms for the dissemination of standards, which would speed up the use of harmonised, equivalent standards. At the global level, the WTO already offers this service free of charge to users via its 'ePing' platform. At the continental level, the creation of a shared online platform for publishing harmonised and equivalent SPS measures for various RECs should also be a priority and be made available to the public free of charge. It would help to ensure transparency, raise awareness of standards and increase the likelihood of their being adopted and used by food producers, handlers and processors, and by all other stakeholders (36).

- Set up platforms for the exchange of trade information, to connect producers, buyers and regional and international markets.
- Put in place pilot transboundary sanitary zones to facilitate trade in strategic regions.
- Provide support for SMEs in complying with SPS standards in the form of subsidies and technical assistance programmes.
- Create logistical infrastructure, such as refrigerated storage centres and trade corridors suitably adapted for the transport of perishable products.

- Strengthen the capacities of professional organisations (cooperatives, livestock producers' associations) to enable them to play an active role in promoting trade.
- Promote mutual recognition agreements and equivalence of systems and facilitate regulatory consistency and cooperation between Member States.
- Promote regional agreements on recognising the analysis certificates of accredited food safety laboratories.
- Facilitate border controls by operationalising one-stop border posts bringing together the authorities involved in border controls.

Target 2: Valorisation of local animal products to enhance their competitiveness on international markets: This target seeks to increase the added value of African animal products by counting on their quality, their compliance with SPS standards and their distinctiveness on global markets.

Priority actions:

- Develop quality and origin labelling to valorise local animal products (meat, milk, hides, etc.) on international markets.
- Support local processing initiatives for animal products, to generate added value and reduce dependence on exports of unprocessed raw materials.
- Encourage the training of local actors (producers, processors) to improve the quality of products in accordance with international SPS requirements.
- Create international marketing campaigns to promote African animal products as being of high quality and sustainable.
- Support the cooperatives and SMEs involved in the value chain to improve their access to funding and markets.

2.2.4. Strategic Objective 4: Put in place and strengthen coordination mechanisms, increase cooperation and investments at national, regional, continental and global levels (public sector)

This strategic objective is aimed at putting in place well-coordinated and well-funded food safety programmes at national, regional and continental levels. It will allow greater promotion of inclusive and innovative RECs and coordination mechanisms at continental level to give Africa a greater voice in international negotiating forums on food safety issues. This fourth objective focuses on 3 targets:

- ✓ Target 1: Establishment of institutional structures and partnerships.
- ✓ Target 2: Prevention and management of conflicts relating to transhumance and cross-border trade.
- ✓ Target 3: Facilitate increased investment in relevant infrastructure and institutions.

Target 1: Establishment of institutional structures and partnerships: This strategic target is aimed at strengthening institutional structures and partnerships to support the harmonisation of food safety standards and policies. It places the emphasis on better coordination between national, regional and international actors, while prioritising the harmonisation of trade facilitation procedures and mechanisms at borders to ensure the smooth flow of trade and strengthen food safety systems.

- Increase investments in key infrastructure (laboratories, abattoirs, refrigerated transport systems) to improve logistical capacities.
- Put in place mechanisms to monitor and evaluate the progress achieved and adjust interventions where necessary.
- Put in place a coordination mechanism for the competent authorities at the Ministries of Agriculture, Health and Trade and other competent authorities in the management of food safety programmes.

- Encourage public-private partnerships to mobilise the necessary financial and technical resources to strengthen SPS systems.
- Create a continental coordination body specifically for food safety, animal health and trade in animal and animal products, under the aegis of the AU.
- Strengthen cooperation between the regional economic blocs (ECOWAS, SADC, COMESA, etc.) to ensure consistent implementation of SPS standards.
- Develop a collaborative programme to facilitate the exchange of information between the different categories of parties involved.
- Strengthen international cooperation on technical and financial support.

Target 2: Prevention and management of conflicts relating to transhumance and cross-border trade: Conflicts relating to transhumance and cross-border trade are frequent in Africa, due in particular to differences in resource management and border management practices. This strategic target is concerned with the need to prevent and manage these tensions.

Priority actions:

- Harmonise transhumance policies between Member States to facilitate livestock movements while reducing community tensions.
- Put in place mechanisms for dialogue between herders, crop producers and local authorities in transboundary zones.
- Develop clear legal frameworks for managing conflicts relating to access to resources (water, pasture) in transboundary zones.
- Strengthen regional mediation mechanisms to resolve disputes relating to trade or cross border- movements of herders.
- Raise awareness among local communities of the advantages of collaborative management of transboundary resources.

Target 3: Facilitate increased investment in relevant infrastructure and institutions: The inadequate performance of African food safety, trade and health systems, as revealed in the CAADP biennial review data, can be reversed by means of targeted policy measures to strengthen the continent's infrastructure (36). SPS and quality control infrastructures are essential for ensuring the effectiveness of food safety checks, standard-isation, the scientific evaluation of risks and compliance with international standards. However, setting them up requires capital-intensive investments, making these infrastructures often inaccessible to small-scale farmers and producers, who make up the majority of actors in the agricultural sector in Africa. To remedy these gaps, African countries need to mobilise their national resources to stimulate investment in SPS infrastructure. Furthermore, it is crucial to explore alternative financing, for example from the private sector, international donors and development partners, to cover the high initial costs and guarantee sustainable investments (36).

One of the main obstacles to the development of the VS is their inability to produce convincing investment dossiers based on conclusive data and reliable economic analyses. These dossiers are crucial to attract financial resources from national budgets, grants or donors and to create a climate of transparency and responsibility conducive to a virtuous circle of investments (50).

Cost benefit analyses and economic assessments are critical tool for national Veterinary Services. The Global Burden of Animal Diseases (GBADs) can support WOAH Members and partners standardise economic approaches and priority-setting in the field of animal health (20). By providing comparable data on animal diseases, the GBADs programme helps to guide investments and ensure effective, long-term monitoring (34).

In parallel, the WOAH PVS Pathway has demonstrated its usefulness in strengthening the capacities of the VS (48). However, the absence of specific competencies in health economics in this programme is a significant weakness. The inclusion of competence in the field of health economics would enable the VS to better respond to emerging priorities and optimise their resources.

The Pandemic Fund, a unique multilateral mechanism, provides capacity-building support for preventing, preparing for and responding to pandemics for low- and medium income- countries. This fund finances critical areas such as surveillance for infectious diseases, diagnosis, laboratories and strengthening of the VS. The PVS indicators were recently integrated into its results framework for essential activities in the field of animal health and 'One Health' for WOAH Members.

Priority actions:

African countries should consider:

- Strengthening capacity building efforts to assess and improve data management and economic analysis in the animal health sector.
- Identify and initiate national or sector-specific case studies that are consistent with evidence-based approaches to animal health and economic sustainability.
- Develop and advocate for investment strategies supported by economic analysis to guide priority setting and decision making in animal health programmes.

.2.2.5. Strategic Objective 5: Improve networking and collaboration between SPS stakeholders and integration of the informal market (private sector)

The fifth objective seeks to strengthen communication and collaboration between the different actors involved in SPS policies, to improve the coordination and effectiveness of interventions and propose measures to integrate actors operating in the informal market. This fifth objective focuses on 2 targets:

- ✓ Target 1: Communication and collaboration between SPS actors.
- ✓ Target 2: Integrate the informal market and encourage investment.

Target 1: Communication and collaboration between SPS actors: Persistent tensions between the various stakeholders involved in the implementation of SPS measures, notably veterinary authorities, producers, firms, traders and other actors in the value chains for animal resources, have often hindered compliance with and effective application of these standards. These frictions notably stem from a lack of communication, coordination and mutual understanding regarding the roles and responsibilities of each player. This has led to lapses in the system of SPS compliance, compromising food safety as well as trade opportunities on local, regional and international markets. To overcome these challenges, several strategic interventions can be undertaken, such as creating a climate of trust, transparency and collaboration between the different actors, along with fluid communication and increased coordination, which will help not only to improve food safety but also to increase the competitiveness of products emanating from animal production systems in Africa.

- Strengthen platforms for dialogue and collaboration between the SPS authorities, the veterinary organisations and the private sectors.
- Set up a Rapid Alert System for Food and Feed (RASFF) in Africa, aimed at responding rapidly to food safety threats.
- Support for the formation, implementation and viability of continental and global platforms for commercial operators and others (agricultural organisations, veterinary bodies, veterinary education establishments, youth networks and networks of women, etc.).
- Create, operationalise and support the functioning of networks.
- Create a continental network of SPS experts to exchange knowledge and best practice.
- Integrate SPS authorities in trade governance mechanisms to ensure effective coordination.
- Promote awareness campaigns to encourage the participation of stakeholders at all levels (producers, transporters, consumers).
- Support management of the interfaces between humans, fauna and the ecosystems through the effective participation of stakeholders to ensure food safety in commodity based- trade.

Target 2: Integrate the informal market and encourage investment: Informal markets are crucially important for food and nutritional security in Sub-Saharan Africa. It is here that most people obtain the major proportion of their food, and especially the food of animal origin and fresh products presenting the highest risk. The income generated by these sales provides millions of farmers and traders with the necessary income to meet their households' basic requirements. In many countries, women play a leading role in this system and it is one of their rare employment options (52). For instance, in eastern and southern Africa, the traditional sector supplies 85-90% of market demand and by 2040 will still be meeting 50-70% of the demand. Yet the majority of investments currently focus on formal markets and exports, as legitimate components of African agricultural development strategies. Even if the emphasis placed on exports remains relevant, investments need to be broadened in scope, developed, prioritised and targeted, to mitigate the sanitary risks on the internal markets, chiefly responsible for the public health burden of unsafe food that Africans have to contend with. Innovative policies are needed to facilitate progress on food safety in the informal sector.

Priority actions

- Clarify the legal status of street vendors to reduce their vulnerability and facilitate their access, organisation and training with regard to food safety.
- Create economic and social incentives for small-scale farmers, traders and retailers in order to improve food safety practices.
- Reduce the regulatory burden, which weighs heavily on the informal sector and makes it economically
 more difficult for operators to invest in food safety, such as the multiple requirements for licences totally
 unconnected with food safety.
- Adapt food safety training and other forms of technical assistance to ensure that it reaches those people, including women, who will derive the most benefit.

2.2.6. Strategic Objective 6: Address cross-cutting challenges: Social inclusion, gender, research, environment, antimicrobial resistance and resilience.

Strategic Objective 6 is aimed at enriching the overall strategy by addressing cross-cutting challenges in the harmonisation of food safety policies and policies on VS in Africa. These challenges include aspects relating to social inclusion, gender, research, the environment, antimicrobial resistance (AMR) and resilience. A crucial point to be considered is educating consumers on food safety, since a substantial proportion of foodborne diseases (30-40%) are linked to inadequate household practices. Clearly, the efforts and investments made upstream to strengthen food safety will prove ineffective if hygiene rules are not followed at home. It is crucial to raise consumer awareness of the nutritional benefits of food (as a source of micronutrients and proteins, for example) and of the potential risks (such as allergens present in milk and meat products). Furthermore, consumers need to understand the ecological impact of the different animal production systems. In this respect, the information provided must be based on scientific data rather than on purely commercial strategies. Social media, in their capacity as modern educational tools, can effectively contribute to this awareness and they allow the impact of the initiatives carried out to be measured. This sixth and final objective focuses on five targets:

- ✓ Target 1: Promotion of social inclusion and gender in SPS and veterinary policies.
- ✓ Target 2: Strengthening of research and innovation capacities in the veterinary and SPS field.
- ✓ Target 3: Integration of environmental issues in SPS and veterinary policies.
- ✓ **Target 4:** Strengthening resilience to climate change and sanitary crises.
- ✓ Target 5: Implementation of initiatives to combat antimicrobial resistance.

Target 1: Promotion of social inclusion and gender in SPS and veterinary policies: Women and young people play a central role in both livestock and animal product trade value chains, yet they often remain marginalised.

Priority actions:

- Include gender indicators in SPS and veterinary action plans.
- Train and support women and young entrepreneurs in achieving compliance with SPS standards.
- Encourage their participation in decision-making processes relating to SPS policies.
- Put in place specific initiatives to support female livestock owners and small, family-run farms.
- Raise awareness among actors in the sector of the benefits of equity and inclusion in value chains.

Target 2: Strengthening of research and innovation capacities in the veterinary and SPS field: Research and innovation are essential to be able to propose suitably adapted solutions to address the sanitary and economic challenges of cross-border trade in Africa. This target is aimed at promoting scientific and technological advances to strengthen SPS and veterinary systems.

Food safety research applied to animal production must be conducted within a 'One Health' framework, by adopting an integrated approach encompassing the whole of the production chain, from the farm to the consumer. It is essential to develop alternatives to antibiotics, such as vaccines, probiotics, bacteriophages and even new management practices. At the same time, efforts must also be made to devise systems for treating livestock effluents that minimise their environmental impact.

The development of rapid, precise techniques to detect pathogens and chemical residues in meat and milk is crucial to prevent contaminated products entering food systems. Moreover, tools must be developed to identify sources of contamination, prevent fraud in the meat sector and ensure the safety of new sources of protein, such as insects and cell cultivated- meat.

Lastly, within the framework of regulatory surveillance, the use of technologies such as genome editing could make a significant contribution to enhancing food safety, especially in intensified animal production systems catering for a growing demand for meat and dairy products.

Africa has a considerable potential for research and training, but greater support is needed to maximise its impact (37). In West and Central Africa, the Inter-State School of Veterinary Sciences and Medicine (EISMV) in Dakar (Senegal) and the International Center for Research and Development on Livestock in the Subhumid Zone (CIRDES) in Bobo-Dioulasso (Burkina Faso) play a key role. CIRDES, a regional body covering eight West African countries, collaborates with national agricultural research systems (NARS) to conduct research focussing on animal health and production, genetic conservation, environmental protection, training and the transfer of technology.

At an international level, research centres such as the International Livestock Research Institute (Nairobi, Kenya) and the French Agricultural Research Centre for International Development (CIRAD, Montpellier, France) also conduct studies on livestock production and animal health in Africa.

In addition, regional and continental structures have been set up to define research priorities and offer forums for dialogue between African producers, NARS, international research centres and funding agencies. These include the West and Central Africa Council for Agricultural Research and Development, the Association for Strengthening Agricultural Research in Eastern and Central Africa and the Forum for Agricultural Research in Africa.

Priority actions:

- Strengthen and support the regional research centres specialising in transboundary animal diseases, food safety and SPS standards.
- Support the development and distribution of vaccines and treatments adapted to specific pathologies of animals in Africa.
- Strengthen partnerships between research centres and the VS for the transfer of innovations to operational actors.
- Promote the use of biotechnologies and information and communications technology to improve traceability, disease detection and management of sanitary risks.
- Mobilise national, regional and international funding resources to support applied research projects in the SPS and veterinary field.

Target 3: Integration of environmental issues in SPS and veterinary policies: The increasing interactions between animal health, the environment and trade call for environmental issues to be taken into account to ensure long-term sustainability.

Priority actions:

- Promote sustainable livestock production practices that minimise environmental impacts such as deforestation and soil degradation.
- Integrate 'One Health' principles, acknowledging the interconnection between human, animal and environmental health, in SPS policies.
- Put in place systems for managing biological waste from abattoirs and quarantine centres, to reduce risks
 of pollution and disease.
- Promote programmes for restoring degraded ecosystems in transboundary zones that have intensive livestock farming.
- Develop continental guidelines on managing the environmental risks associated with trade in animals and animal products.

Target 4: Strengthening resilience to climate change and sanitary crises: Climate change and global pandemics increase the risks to the health of animals and humans. This target is aimed at encouraging anticipatory and resilient approaches.

- Evaluate the climate implications for SPS and veterinary policies.
- Implement adaptive measures to protect animal production systems in vulnerable areas.
- Strengthen crisis management capacities, notably for transboundary animal epidemics.
- Promote sustainable livestock production practices so as to reduce sanitary and environmental risks.
- Develop partnerships for research and development of vaccines and treatments adapted to African contexts.

Target 5: Implementation of initiatives to combat antimicrobial resistance: Antimicrobial resistance poses a growing threat to public health and animal production, with implications for international trade.

Priority actions:

- Develop and harmonise national strategies to combat AMR in accordance with the recommendations of the Quadripartite (FAO, UNEP, WOAH and WHO) and the AMR Multi-Stakeholder Partnership Platform.
- Promote the prudent and regulated use of antimicrobials in animal production systems.
- Strengthen the capacities of veterinary laboratories to detect and monitor AMR cases.
- Raise livestock owners' and veterinarians' awareness of good practices in the use of antimicrobials.
- Mobilise funding for the development of alternatives to antimicrobials, such as vaccines and biological solutions.

2.3. Expected results:

- I. Greater harmonisation of SPS policies between the Member States, reducing technical trade barriers.
- II. A significant improvement in the capacities of the VS, allowing better prevention and management of sanitary risks.
- III. An increase in cross-border trade flows of animals and animal products, stimulating regional economy.
- IV. Stronger collaboration between Member States, the regions and international partners, supporting equitable and sustainable trade.
- V. Increased participation of private and community actors in the implementation of SPS standards and mechanisms.

2.4. Implementation of the strategy to harmonise policies on food safety and Veterinary Services

Implementation of the strategy proposed here is principally based on activities conducted at a national level, with the support of the RECs and the AU, with which WOAH maintains formal relations. The main national legal instrument, established to coordinate Member States' food safety obligations, will act as a contact point for activities relating to the strategy. This contact point could also be the focal point for the Codex Alimentarius (Codex Contact Point) or the SPS Committee. Indeed, the strategy could be coordinated by the national Codex committee, bringing together all the stakeholders involved. The veterinary dimension will be the responsibility of the Chief Veterinary Officers (CVOs). Member States will opt for the coordination mechanisms they consider to be the most effective and most appropriate.

At the regional level, existing coordination mechanisms will be strengthened to ensure the harmonised implementation of the strategy within the RECs. At the continental level, the continental SPS Committee, in collaboration with the Veterinary Committee, will support the coordination and guide the implementation of, the strategy for harmonising food safety and VS policies in Africa.

The strategy will be implemented in a participatory and transparent process, to ensure that all relevant interests are taken into account. An inclusive approach will be adopted, with the participation of representatives of the governmental sectors involved, local communities, the scientific community, civil society organisations, NGOs, research institutions and universities. The regional framework will establish intersectoral and interadministrative coordination mechanisms bringing together all the stakeholders involved, at all levels (national, regional and continental). Collaborative management is essential and will be informed by the best scientific data available, as well as by local, traditional and indigenous knowledge, best practice and the lessons learnt from past experience.

An action plan remains to be developed to translate the strategy into concrete results. This action plan will define measurable objectives, accompanied by indicators for monitoring and evaluation. Member States will need to adopt a harmonised approach for monitoring progress. The review process, coordinated at institutional level by the RECs and supported by the AU, will serve to identify the challenges, adjust the action plan and update the priorities.

Strategic partnerships will be indispensable to expedite implementation and achieve the set objectives. The principal actors will include national ministries and departments, the AU, the RECs, the scientific community, the public and private sectors, as well as the NGOs involved in production, animal health and food safety.

Lastly, international organisations, such as WOAH and FAO, will play a crucial role in facilitating the implementation of integrated policies. These organisations, alongside the AU, will offer a normative framework, training and surveillance tools for food systems. They will help African countries comply with SPS standards and fight zoonoses by providing resources and guidelines. The AU, through the Inter-African Bureau for Animal Resources (AU-IBAR), the Pan-African Veterinary Vaccine Centre (AU-PANVAC) and the Africa Centres for Disease Control and Prevention (Africa-CDC), will coordinate the animal health and public health initiatives at a continental level, and support the development of regulatory frameworks and training programmes for professionals in the different sectors.

CONCLUSION:

The VS and food safety systems play a fundamental role in realising the opportunities offered by the AfCFTA. The analysis of the challenges reveals a complex reality: the lack of human and financial resources, the disparity of technical capacities between countries, the absence of harmonisation of sanitary standards, and the growing threats posed by zoonoses and food contamination. In addition, there are structural weaknesses in the coordination of policies, at both national and regional level, which hinders the creation of a common framework capable of ensuring effective, equitable sanitary safety throughout the continent.

Strengthening these systems is essential in order to maximise the advantages of trade liberalisation, in particular by ensuring the production and circulation of good quality, safe food products across the continent. This note has made it possible to evaluate the current state of food safety in Africa and the progress achieved, and to identify the actions required to improve public health, food and nutritional security and intra- and extra-African trade.

Harmonisation of veterinary and food policies has emerged as an inescapable priority for the successful implementation of the AfCFTA and other regional initiatives. The adoption of common standards and integrated systems will make it possible not only to improve food security and reduce sanitary risks, but also to strengthen the resilience of systems in the event of sanitary and environmental crises. This harmonisation will also act as a lever to increase the competitiveness of African agricultural products on global markets, while meeting the growing demands of consumers in terms of quality and safety.

However, this ambition cannot be achieved without the coordinated commitment of all stakeholders: policy-makers, regional institutions, the private sector, international organisations, scientists and civil society. The implementation of harmonised practices, coupled with the strengthening of technical and institutional capacities in each country, will make it possible not only to ensure food safety, but also to reduce the risks from diseases of animal origin and ensure a healthy environment for food production and consumption.

In this respect, it is crucial to maintain efforts in favour of dialogue, research and collaboration to support the development of inclusive policies adapted to local realities. For example, investing in the training of Veterinary Service professionals, improving sanitary infrastructure and promoting the exchange of knowledge and good practice are all measures that will promote the successful integration of African markets.

Encouraging perspectives are starting to take shape. The establishment of regional cooperation mechanisms, the integration of digital technologies in the surveillance and management of sanitary risks and increased investments in veterinary and food control infrastructure provide numerous opportunities to address these challenges. The unification of markets through initiatives such as the AfCFTA also act as a strategic lever to harmonise standards, promote safe trade and strengthen the competitiveness of African food products on the international stage.

Faced with these issues, it is imperative to act in a proactive and concerted manner. First of all, policy-makers need to recognise the VS as a crucial pillar of food security and public health. This means allocating adequate resources, implementing coherent policies and valorising these services in national and regional strategies. Furthermore, the various stakeholders, including international organisations, private sector actors and civil society, must work together to develop innovative initiatives that promote an integrated approach to the food chain, 'from farm to fork'.

Lastly, strengthening of food safety systems is not simply a matter of public health or trade. The aim is also to ensure food and nutritional security for the population, alleviate poverty and promote sustainable, inclusive development. By acting now to strengthen these systems and harmonise policies, Africa will be able not only to address the existing challenges, but also to position itself as a key player in the global food trade, thereby contributing to the well-being of its populations and the prosperity of the continent.

In short, the challenges relating to the VS and food safety, in the context of the unification of African markets, require coordinated, innovative and inclusive responses. Only through a collective commitment, guided by a clear vision and sustained efforts, will the continent be able to build a resilient, secure and competitive food system, thereby contributing to the well-being of the population and sustainable development.

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