END-OF-PROJECT ASSESSMENT OF THE STDF PROJECT: "Improving sanitary capacity and facilitating export of livestock and livestock products from Ethiopia" STDF/PG/477 (MTF /ETH/098/STF)

EVALUATION REPORT

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Table of acronyms	
ADLI	Agriculture Development-led Industrialization
AGP	Agricultural Growth Programme
AHI	Animal Health Institute
AQSIQ	General Administration of Quality Supervision, Inspection and Quarantine.
AU-IBAR	African Union Inter African Bureau for Animal Resources
CAADP	Comprehensive Africa Agriculture Development Programme
CIRAD	Centre de coopération internationale en recherche agronomique pour le développement
CVO	Chief Veterinary Officer
DRSLP	Drought Resilience and Sustainable Livelihoods Programme
EAA	Ethiopian Agricultural Authority
EAS	Ethiopian Accreditation Service
EC	European Commission
EFDA	Ethiopian Food and Drug Administration
EIAR	Ethiopia Institute of Agricultural Research
ELTPA	Ethiopian Live Animals Traders Professional Association
EMDIDI	Ethiopian Meat and Dairy Industry Development Institute
EMPEA	Ethiopian Meat Producers and Exporters Association
FAO	Food and Agriculture Organization
FMD	Foot and Mouth Disease
IGAD	Inter-Governmental Authority for Development/
ILRI	International Livestock Research Institute
IZSAM-TERAMO	Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise
GHSA	Global Health Security Agenda
GTP II	Second Growth and Transformation Plan
LIMS	Laboratory Information Management System
LFSDP	Livestock and Fishery Sector Development Project
LLRP	Lowlands Livelihood Resilience Project

LMP	Livestock Master Plan
LoA	Letter of Agreement
LVC/PPD	Livestock Value Chain Public Private Partnership
MENA	Middle East and North African Countries
МоА	Ministry of Agriculture
МоН	Ministry of Health
MoTRI	Ministry of Trade and Regional Integration
NAHDIC	National Animal Health Diagnostic and Investigation Centre
NGO -	Non-governmental Organization
NSPSC	National SPS Committee
OECD/DAC	Organization for Economic Cooperation and Development/Development Assistance Committee
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PIF	Ethiopian Agricultural Sector Policy and Investment Framework
PSC	Project Steering Committee
PVS	Performance of Veterinary Services
QMS	Quality Management System
RDPS	Rural Development Policy and Strategies
SDG -	Sustainable Development Goal
SNV	Netherlands Development Organization
SoPs	Standard Operating Procedures
SPS	Sanitary and Phytosanitary Standards
STDF	Standards and Trade Development Facility
SWR	Stichting Wageningen Research
USAID	United States Agency for International Development
VDFACA	Veterinary Drug and Feed Administration and Control Authority
WOAH	World Organization for Animal Health (Founded as OIE)
WTO	World Trade Organization

Executive summary

The STDF Project, "Improving sanitary capacity and facilitating export of livestock and livestock products from Ethiopia" (STDF/PG/ 477) was evaluated in conformity with STDF's Monitoring, Evaluation and Learning (MEL) requirements regarding the mandatory end-of-project assessment of all STDF-funded projects by an external evaluator. The project was prepared, through an STDF supported Project Preparation Grant (PPG), in consultation with key project stakeholders in the meat value chain in Ethiopia. The project was approved by the STDF Working Group in March 2017.

The Food and Agriculture Organization (FAO) in collaboration with the Ministry of Agriculture of Ethiopia and financial support from the STDF, implemented the project "Improving sanitary capacity and facilitating export of livestock and livestock products from Ethiopia". The project was expected to contribute to the increment of export revenues of producers and feedlot and export abattoir operators along the meat export value chain in Ethiopia.

The main objectives of this end-of-project assessment are to: (i) assess the degree to which the planned project results have been realized (ii) assess the actual and potential impact of the project (iii) identify good practices and lessons learned from the project that could feed into and enhance the implementation of related interventions. The purpose of the Evaluation was to assess the relevance, coherence, efficiency, effectiveness, impact and sustainability of the Project; and identify key lessons and recommendations for future use.

Conclusion

The project was highly relevant and addressed practical SPS issues that impact the meat export trade of Ethiopia. Initiating a project that sets the institutional basis of a modern SPS system was a genuine need of Ethiopia.

The project had strong policy coherence and is aligned with the wider policy frameworks of the Government, both at federal and regional states level. The project interventions were as well complementary with supports provided by other development partners to improve SPS compliance.

Sustainability and exit planning were inadequately considered during project design and implementation. Fortunately, there are several partner initiatives on building national SPS capacity and the project should communicate with these initiatives to ensure sustainability of this project.

Delayed start-up of the project activities, unprecedented challenges such as the global COVID-19 pandemic, which occurred in the middle of the project, the poor security situation in parts of the country, restructuring of the government ministries were significant contextual factors which affected the potential for timely and efficient delivery of project interventions.

The project has played a significant role in the establishment of a Quality Management System (QMS) and residue testing capacity at the quality control laboratory and succeeded in making a huge step forward. The laboratory is ready to apply for accreditation of its microbiological and

physiochemical facility in compliance with ISO 17025. Achieving accreditation will provide a measurable impact on safe domestic and export trade of meat, but also for other products such as milk and honey.

The project made a limited contribution to the stated goal and outcomes. Since the project goal and outcome indicators were mainly geared toward exports, the project goals and outcome cannot be considered as achieved: they were probably too ambitious, and their achievement was conditioned by the increment in meat export that did not occur. Livestock and meat export is mostly influenced by demand and in Saudi Arabia it's driven by numbers of pilgrims, which due to covid restrictions dropped from 2.5 million pilgrims in 2019 to a few thousands in 2020, 60,000 in 2021 and only up to 1 million in 2022 to return back to 2.5 million pilgrims in 2023 only. Setting less ambitious goal and outcomes, less dependent on risks as well, would have been a more reasonable framing.

This does not mean that the project has failed. The project has laid the necessary foundation and conducive institutional environment to promote meat export trade. This coupled with fulfilment of other conditions, both SPS and non-SPS, is expected to enhance meat export trade in the coming years.

Financially, 71.6% of the project budget was spent and substantial amount of the project budget was not utilized since some of the main activities of the project were not implemented for different reasons specified in the following sections.

Recommendations

- 1. **Recommendation 1: FAO/STDF organize exit workshop:** There is a risk that the benefits arising from the project interventions will be minimal without ongoing investment and a carefully planned handover of responsibility and control to the Government of Ethiopia. Once the project evaluation is completed, it is worth to consider organizing meetings with key stakeholders and development partners on how best to sustain project outcomes and the roles partners can play in achieving this.
- 2. Recommendation 2: Government should address non-SPS issues which are seriously impacting the meat export trade: Any future increment in meat export depends on rigorous work on the part of the Government to enhance competitiveness in meat export trade by addressing inefficiencies in the value chain, ensuring that the livestock sector can consistently supply suitable quality and quantity of live animals for the export market, controlling for informal livestock trade and complying with the stringent halal requirements of importing countries etc. Having a clear and focused strategy that actively involve the private sector is critically important to address these issues. Otherwise, the future of livestock and livestock products export is precarious unless the country manages to meet evolving non-SPS issues.
- 3. Recommendation 3: Government should create strong linkage and coordination between federal level and state level institutes to support the implementation of SPS measures: The project-initiated coordination meetings between federal and regional institutes have improved both vertical and horizontal linkages, collaboration and harmonization of SPS

interventions. However, this initiative was discontinued after project closure. Similar projectbased coordination mechanisms were established in the past and ceased after project termination. Therefore, Government should consider institutionalization of the coordination mechanism by incorporating it into a structured and formalized system.

- 4. Recommendation 4: Kality Quality Control Laboratory introduce Fee charge for service in to Ethiopian Government: The quality control laboratory must pursue a funding model that will help meet the cost of laboratory operations. Establishing sustainable laboratory service through introduction of cost recovery for laboratory services provided for the commercial sector and export testing is a plausible approach.
- 5. Recommendation 5: FAO Support implementation of Laboratory Information Management System (LIMS) at the quality control laboratory and regional laboratories: The support from FAO through USAID funded GHSA programme was instrumental for the establishment of LIMS at AHI to automate the process of collecting, tracking, analyzing, reporting, and storing specimen data. This project supported further expansion of LIMS to the quality control laboratory, but its functionality encountered problems which have to be fixed in consultation with IZSAM. FAO have the experience and comparative advantage to lead this process including the LIMS expansion to the three regional laboratories.
- 6. Recommendation 6: STDF strongly encourage implementers to design a plausible exit strategy: STDF should encourage project implementers to design project exit strategy to avoid haphazard termination of projects and ensure sustainability of project outcomes. It should be the joint responsibility of the implementer and the beneficiary, and should be addressed initially in the design stage, updated regularly and well addressed in the final project report.
- 7. Recommendation 7: STDF consider enhanced role of the private sector in future SPS projects: A private sector perspective can add valuable understanding and reality checks, and reinforce sustainability. In future SPS projects, the funding agency and the implementing organization should seek active public private partnership and innovative ways to foster private sector participation. A robust private sector participation and dialogue can add valuable understanding of the reality on the ground, and ensure sustainability.

Lessons Learned

One lesson learnt regarding the implementation of the project is the need for enhanced role and responsibilities of national institutes to ensure country of project outputs. This is also in agreement with STDF projects aim: building national SPS capacities in the long term. Moreover, it is also in agreement with Paris Declaration and the Accra Agenda Action.

It is not advisable to build a project log-frame based on an over-optimistic outcome and goals which could be impeded by several risks beyond the control and influence of the project. This is especially the case in a country such as Ethiopia where the trade situation is very unstable due to SPS and most importantly non-SPS issues. As a result, the outcome of the project was only

partially accomplished and the project goal has not been achieved. Probably, the goal could have been framed from the outset or revisited during implementation to make it more realistic, easy to gauge and track.

Some of the project activities were executed by national experts and institutes. This principle of implementation enabled country partners to build their capacity and continue to provide relevant and effective support services even beyond the project life, further expanding the impact and sustainability of the project results.

Key outputs of the project related to enactment and enforcement of primary and secondary legislations involves approval of policies and legislative framework by government at very senior level, beyond not only the control but also the influence of the project. In future it would be advisable to define deliverables in terms of submission rather than approval.

1. Introduction

1.1- Objectives and Scope of the Evaluation

Purpose: The purpose of the assignment, according to the Terms of Reference, was to assess the relevance, coherence, efficiency, effectiveness, impact and sustainability of the Project; and, based on the findings and conclusions, identify key lessons and recommendations for future use.

Scope: The aim of this project endline assessment was to assess the project design and relevance, coherence, efficiency, effectiveness, impact and also assess against goals, objectives/outcomes, and outputs set in the project's proposal. The assessment documented knowledge and learning that offer strategic and operational recommendations to draw best practices and lessons learnt for future programming and effectiveness of projects. The results of the assessment will be used by decision-makers; the STDF and other donor agencies, FAO and other implementing organizations and government of Ethiopia on future programming and strategy.

Objectives of the Evaluation: The evaluation assessed the Project against criteria of relevance, coherence, effectiveness, efficiency, impact and sustainability. It also looked into the wider context and reviewed the extent to which cross-cutting issues such as gender equality and environmental sustainability were taken into account at formulation and implementation stage.

The evaluation had the following specific objectives:

- i. Assess the degree to which the planned project results have been realized;
- ii. Assess the actual and potential impact of the project;
- **iii.** Identify good practices and lessons learned from the project that could feed into and enhance the implementation of related interventions.

The project log-frame indicators were used as the basis for evaluating the project. The evaluation approach and methodology were guided by main documents and frameworks:

- The terms of reference of the evaluation
- The guidelines for evaluation of STDF funded projects¹
- The STDF Monitoring Evaluation and Learning Framework MEL (2020 version)²

1.2- Context

Ethiopia is a country with an agriculture led economy that has recognized the importance of agricultural export for economic development and poverty alleviation. Greater participation in world trade could provide additional opportunities to address the challenging issues of economic growth and poverty reduction. Ethiopia has the livestock resources required to increase exports.

¹ STDF_Guidance_MEL_PG_Implementing_Partners.pdf (standardsfacility.org)

² <u>https://standardsfacility.org/sites/default/files/STDF_MEL_Framework_Final_English.pdf</u>

The principal opportunities for increasing exports stem from strong demand for meat and livestock in Middle East and North Africa region (MENA). However, Ethiopia also faces constraints, most notable one being failure to comply with the growing SPS requirements of importing countries. These escalating SPS standards for livestock and livestock products, with all their auditing and certification requirements, present a growing challenge for Ethiopia seeking access to external markets. The future of livestock and livestock products export is precarious unless the country adapt to and keep pace with the newly emerging changes and practices related to Sanitary and Phytosanitary Standards.

The Ethiopian Government has been striving to address some of the issues related to SPS requirements through a number of past and on-going projects. The Food and Agriculture Organization/FAO in collaboration with the Ministry of Livestock and Fisheries of Ethiopia with financial support from the Standard and Trade Development Facility (STDF) implemented a project entitled "Improving sanitary capacity and facilitating export of livestock and livestock products from Ethiopia". The project was expected to contribute to the increment of export revenues of producers and feedlot and export abattoir operators along the meat export value chain in Ethiopia.

1.3- Summary of the Project

The project was designed in response to the need to strengthen SPS compliance for market access in the meat export industry. The expected impact of the project was to increase the export revenues of producers and feedlot and export abattoir operators along the meat export value chain in Ethiopia. This was to be achieved by improving SPS compliance for market access in the meat export industry.

The project focused on capacity building to enable the country to comply with SPS requirements of potential importing countries in the MENA as well as in South East Asia for exporting sheep, goat and cattle meat. The project sought to strengthen the regulatory capacity of the country through enhancing competence of public regulatory institutions to perform official controls. The federal veterinary services were to be capacitated in SPS negotiations, risk analysis, reviewing and updating legislations, standard operating procedures (SOPs) and guidelines. Three regional veterinary laboratories in areas where animals are sourced for the export of meat were to be supported, trained and coached in laboratory quality management and information management systems. The quality control laboratory of the Livestock Authority was to be capacitated to perform laboratory analysis for the possible presence of residues in meat. Moreover, the project sought to strengthen market linkages and market-oriented approaches among prospective business partners along the value chain through awareness creation, better understanding of markets and compliance with importing countries' requirements in terms of animal health, SPS and hygiene and sanitation standards.

The initial timeframe for the implementation of the project was 1 July 2018 up to 30 June 2021. However, due to various reasons, project implementation was delayed and hence four NCEs were requested and granted. This has extended project end date to 31 October 2023. The total project budget was 795,450 of which 565,076 was spent.

The project engaged both the public and private sector in Ethiopia based on a value chain approach. On the government side, the project involved the Ministry of Agriculture (MoA), Ministry of Health (MoH), the National Animal Health Diagnostic and Investigation Center (NAHDIC) and three other regional laboratories, the Veterinary Drug and Feed Administration and Control Authority (VDFACA) and the Ethiopian Meat and Dairy Industry Development Institute (EMDIDI). On the private sector side, the project involved stakeholders in the meat value chain, notably small farmers in the project areas, processors, and traders, cooperatives and their members, the Ethiopian Meat Producers and Exporters Association (EMPEA) and the Ethiopian Live Animals Traders Professional Association (ELTPA).

The United Nations Food and Agriculture Organization (FAO) was contracted by WTO as the organization to implement the STDF's project. The project grant holder, FAO, oversaw the implementation of the whole programme delivery, monitoring and reporting. Project manager assigned by FAO was coordinating project activities, ensuring proper administrative control of project expenses and the timely delivery of reports. A Project Steering Committee (PSC) was established to oversee and provide guidance on project implementation. The PSC was responsible to promote ownership of the project by ensuring that the project beneficiaries and stakeholders are fully consulted on key decisions in the implementation of the project.

Project activities were implemented by national and international implementing partners including MoA, VDFACA, NAHDIC/AHI, CIRAD, SWR, and IZSAM-TERAMO through Letter of Agreements.

Project title	Improving sanitary capacity and facilitating export of livestock and livestock products from Ethiopia					
Project code	MTF /ETH/098/STF					
WTO funded project ref	STDF/PG/477					
Resource partner	Standards and Trade Development Facility					
Budget	USD 795 450					
Geographic area	Oromia (Borena), Afar, Somali and Federal Institutions					
Implementing partners	MoA, AHI (NAHDIC), Livestock Authority (VDFACA),					
	Wageningen University, Istituto Zooprofilattico					
	Sperimentale dell'Abruzzo e del Molise G Caporale (IZSAM),					
	Centre de Coopération International en Recherche					
	Agronomique pour le Développement (CIRAD).					
Duration	5.4 years					
Project signed	28 June 2018 (between WTO and FAO) 11 October 2018					
	(between MoA, MoF and FAO)					
Project initial implementation period	1 July 2018-30 June 2021					
Project started	22 November 2018					
First extension to	30 December 2021					

Table 1- basic project information

Second extension to	30 June 2022
Third extension to	31 December 2022
Fourth extension to	31 October 2023

1.4- Independent Evaluation

The evaluation has been conducted by Wondwosen Asfaw, a consultant. Wondwosen is a veterinarian, specialized in veterinary epidemiology and livestock development, and in SPS matters. He has around 36 years of professional experience, mostly in Ethiopia, the IGAD and EAC region. He had long association with Ethiopian veterinary services and served as CVO and permanent delegate to WOAH for over three years. Wondwosen has worked in Ethiopia, EAC and IGAD regions for various development agencies (ILRI, FAO, SNV, USAID, Texas A&M University, AU-IBAR, IGAD) and on different topics. This has been an asset for conducting this evaluation since the consultant was already familiar with the context, and already knew most of the project stakeholders. The consultant also had a knowledge of the pre-project situation, which facilitated the assessment of changes. He has never been employed by the WTO/STDF and therefore no conflict of interest for the expert in undertaking this evaluation.

2. The Methodological Approach

Key evaluation criteria questions

The analysis is based on the OECD/DAC evaluation criteria³ (relevance, coherence, effectiveness, efficiency, impact, sustainability) and lessons learned. The evaluation Matrix with detailed evaluation questions pertaining to each evaluation criterium, detailed indicators and pre-identified sources of information and verification is attached in Annex 1.

Data collection methods and sources

The evaluator employed a mixed-methods approach, collecting and analyzing both qualitative and quantitative data. Information is collected from both primary sources (semi-structured interviews,) and secondary sources.

A desk analysis of available background information, literature reviews, project documents (progress and final reports, and end-of-project draft report), other relevant documents produced under the project and any other information.

A semi-structured face-to-face interview with key stakeholders involved in the project (including beneficiaries, implementing partners, any other relevant public/private sector organizations) that are potentially relevant to the project was carried out. More detailed semi-structured

³ Based on the OCED definitions and principles for evaluation criteria, updated in 2019. See: <u>www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm and</u> <u>www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf</u>

interviews targeted at particular groups of stakeholders involved in the project was elaborated separately and is shown in annex 3. The list of people contacted is shown in Annex 4.

Telephone interviews is conducted with representatives of three regional veterinary laboratories (Semera, Jigjiga and Yabelo) and some other stakeholders.

Virtual interview was conducted with regional organizations - IGAD/ICPALD.

Quantitative data on Ethiopian meat export: Ethiopia's meat export data both in value and volume for the project period and beyond was collected from various sources to assess trends over the years. As much as possible, disaggregated data by export abettor, importing country, type of meat (beef, sheep and goat meat, offal) was collected. Data sources were Ethiopian Meat Producers and Exporters Association (EMPEA), meat exporters, Ministry of Trade and Economic Integration (MoTEI), Livestock Authority, FAOSTAT, UN Comtrade etc. The use of multiple data sources allows data triangulation and get accurate and comprehensive information on meat export performance.

Physical observation: To support the evaluation findings, the evaluator undertook physical observations of selected project interventions in order to identify the most significant changes that have been brought about by the project.

Conduct validation workshop: After draft report submission and review, a validation workshop was conducted that brought together beneficiaries and implementing partners with a view to analyze the findings of the evaluation and contribute to the finalization of the report.

The evaluation of the project employed a participatory and consultative approach to encourage stakeholder ownership of the findings and recommendations, and of the learning opportunity that the occasion offered.

3. Findings and analysis

3.1- Responses to the Evaluation Questions (EQs)

EQ1. Relevance:

 To what extent did the objectives and design of the project respond to: (i) the SPSrelated needs, policies and priorities of the beneficiaries, as well as other stakeholders involved (public and/or private sector, regional, international partners, etc.); as well as (ii) the STDF's goal to facilitate safe trade?

The project objectives were relevant to SPS-related needs and priorities of beneficiaries to facilitate safe trade and to comply with SPS requirements, both in the public and private sector. Maintaining the market access of meat in the MENA and Southeast Asia helps to support the domestic economy by contributing to employment earnings and government revenue. It is worth

to note that there were instances in which live animal and meat export consignments from Ethiopia were rejected by importing countries' regulatory authorities on SPS grounds.

Ethiopia has duly recognized livestock as a major growth driver for the economy and formulated a Livestock Master Plan (LMP) to guide the development of the sector. The Master Plan has been used to inform the second Growth and Transformation Plan (GTP II) of the sector, which is officially endorsed by parliament. The LMP of the country is export focused, and with the second Growth and Transformation Plan that span from 2015-2020, the country envisaged to reach the capacity to export 1.2 million heads of animals (USD 526 million) and 78,000 tons of meat (USD 383 million) per year.

The AGP programme was also designed to help increase agricultural productivity and market access for key crop and animal related commodities such as meat and livestock. The AGP is aligned with broader programmes targeted at poverty reduction and agricultural/livestock development including the Agriculture Development-led Industrialization (ADLI), the Comprehensive Africa Agriculture Development Programme (CAADP), Rural Development Policy and Strategies (RDPS), the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) and the Ethiopian Agricultural Sector Policy and Investment Framework (PIF). The most recent policy framework, the ten-year prospective plan (2021-2030), envisages to enhance productivity and competitiveness of the agricultural sector to increase foreign exchange earnings and domestic revenues.

The objectives of the project were well aligned with the STDF programme goal of increased and sustainable SPS capacity in developing countries, as well as the overall aim of improved market access, competitiveness and trade performance. Moreover, the objectives and design reflected the STDF's goal of 'safe trade', in terms of strengthening national residue testing and surveillance capacity, improving livestock disease risk analysis and the promotion of best practices in the livestock value chin.

The theory of change/intervention pathway was very optimistic and did not take into account trade and economic contexts and risk factors beyond SPS issues which resulted in non-achievement of project outcomes and goal. During the Project implementation, several non-SPS issues came increasingly into play which were not considered in the initial design. Over the last few years, beleaguered meat exporters have been grappling with all these challenges. These changes in country and trade context could have been regularly assessed and the project high level goal, risks, assumptions and sustainability modified accordingly to keep the project fit for purpose.

2. How were local contexts, ownership, processes and stakeholders taken into account in the design and implementation of the project?

The actual original initiator of the project was the Ministry of Agriculture. This Ministry considered the project as a unique opportunity to implement the Animal Health Strategy and recommendations of the OIE PVS evaluations, and to fulfil some of the preliminary conditions for

SPS compliance. The design of the project was conducted under the Ministry's leadership, which explains why the project intervention was so much orientated towards trade facilitation and was designed as part of an STDF funded PPG Improving sanitary capacity to facilitate livestock exports Standards and Trade Development Facility (standardsfacility.org). The project adopts a comprehensive value chain approach and the activities are based on gap assessments of past, present and future government and donor funded programme interventions.

The project was also designed by taking into account the concerns and interests of all relevant stakeholders along the chain for addressing the existing key gaps in the livestock and meat value chains. Rigorous stakeholder consultations were undertaken in the preparation and inception of the project to ensure meaningful, effective and informed participation of key stakeholders and to address their expectations and demands.

There is evidence that the level of engagement and collaboration with stakeholders has improved over the course of project implementation, especially with public institutes. However, there is limited evidence that the quality of such engagement and coordination with private sector and their associations was optimal.

3. To what extent did the project remain relevant, even if the circumstances changed over the course of implementation?

The relevance of the project remained significant throughout the course of implementation despite unprecedented challenges such as the global COVID-19 pandemic occurring in the middle of the project, the poor security situation in most parts of the country, the northern Ethiopia conflict which affected the implementation of the project activities at field level, and the restructuring of the government ministries through merger and split.

Despite the changing local circumstances and trade environment that heavily hit the meat export industry, the project interventions remained relevant. However, the project interventions were not sufficient enough to enhance market access and increase meat exports.

EQ2. Coherence:

1. How well did the project fit vis-a-vis other interventions in the particular context (country/region, sector, etc.)?

The project complemented broader SPS related support in the country and in the region by the GHSA and other FAO projects, UNIDO, EC HEARD project, AU-IBAR, IGAD/ICPALD and others. DRSLP, LLRP and LFSDP projects through funding from various development partners have broader livestock sector and pastoral resilience interventions, have also supported various SPS activities including procurement of analytical equipment for the quality control laboratory, support regional veterinary and field veterinary services, roll out of Livestock Identification and Traceability System (LITS).

The recently launched World Bank project with an outlay of \$327.5 million to cushion pastoralists in Djibouti, Ethiopia, Kenya, and Somalia from the impacts of drought and better connect them

to markets is also expected to contribute to the strengthening of the SPS capacity. The De-risking, Inclusion and Value Enhancement of Pastoral Economies in the Horn of Africa (DRIVE), will enable the region to adapt to the impacts of climate change, commercialize livestock production in pastoralist communities, and ensure inclusion of the marginalized and vulnerable groups such as women in the sector.

2. To what extent did other interventions (including policies) support or undermine the project, and vice versa?

The project had strong policy coherence and was aligned with the wider policy frameworks of the Government, both at federal and regional states level. The project goal of enhancing the capacity of national institutes, expand export market access for agricultural products including meat fit well with existing policy of the country aimed at assisting the country to maintain access to key export markets and an improved capacity to support animal health and food safety work.

Other complementary work has also previously and concurrently been undertaken by various development partners, NGOs and government institutions. These interventions were harmonized with that of the project and complement each other with no duplication of effort and activities.

Here are some examples that demonstrate how project activities were complementary to and/or coordinated with other interventions

- -The 15 SoPs reviewed and updated by the project were developed earlier by USAID funded SPS-LMM programme in 2009 and 2010. The documents were reviewed in light of scientific advances in SPS matters, global standards, importing country requirements and institutional changes in the country. Currently UNIDO is developing an SPS web site where important documents will be uploaded including the SoPs for Ethiopia. Moreover, UNIDO also has a plan to further develop the SoPs into easy to learn training modules for all value chain actors.
- -The draft primary and secondary legislations the project reviewed were initially prepared by EC LVC/PPD project in 2013 and their approval was overtly delayed for various reasons. The project took it from there and worked on the primary legislation, "proclamation on animal health and veterinary public health" and other secondary legislations. Unfortunately, the project also faced similar hurdles and the laws were not passed by the parliament.
- -QMS system and LIMS were introduced to Animal Health Institute through support from FAO. As a result, AHI has made considerable progress over the past years in implementing a quality assurance programme and establishing a suite of WOAH-recommended laboratory tests to support disease control and exports. The LIMS has significantly improved data management, sample turnaround time, data quality and the timeliness of reports. The project intervention to introduce LIMS and QMS to quality

control laboratory using the national expertise and skill from AHI shows the level of complementarity and coordination among national institutes.

3. What were the synergies and interlinkages between the project and other interventions carried out by the same institution/government, as well as with the relevant international (Codex, WOAH) standards?

The project initiated NSPSC, stakeholders coordination forums and awareness raising workshops have resulted in better harmonization of SPS interventions implemented by various government institutes. Linkages and synergies were leveraged, including resource mobilization to support scaling-up of some project activities (see on impact -page 26).

The project was coherent with the aims of relevant international organizations and standards making bodies. The Codex and WOAH, the most relevant standards-making body for this project, aims to secure coordinated, effective action to ensure food safety and prevent and control the introduction and spread of livestock diseases. The project had a good fit with these aims, given its focus on more coherent and conscientious national implementation of internationally agreed and adopted standards and norms. The Project was compatible with STDF programme goals and overall aims of facilitating safe trade and helping increased and sustainable SPS capacity in developing countries. It was also compatible with the Sustainable Development Goals (SDGs) set out in the STDF Strategy 2020-24.

EQ3. Effectiveness:

The project log-frame (Annex 2) is used to assess the effectiveness criterion. The attainment of project's output, outcome and goal are assessed using the indicators and targets. The various progress reports of the project did not help in assessing the level of attainment of various outcome and goal indicators. Therefore, this was done through secondary information obtained from other sources, primarily from stakeholder interviews. The attainment or non-attainment of targets related to each indicator is explained, when possible, by identifying and assessing the main constraints and risks faced by the project during implementation, as well as the conduciveness of the environment.

1- Overall judgement on effectiveness

The project was effective in building institutional capacity for SPS compliance and in creating SPS awareness among value chain actors including feedlot operators, export abattoirs and professional at different level. Moreover, it has created increased coordination and linkages among local sector value chain actors. However, such linkage and coordination were not created with importers in destination markets and competent authorities in importing countries. As a result, the partial achievement of outputs did not translate entirely in a good achievement of outcome and goal. The main explanation for this is that the outcome and goal were probably too

much geared towards facilitation of trade through increment in export meat volume and value, which was very much subject to various risks.

Whilst there was a significant volume of activity-based reporting and progress reporting to the donor, much was prepared in isolation and without adequate consideration of achievement against project targets at the output, outcome and objective levels.

2- Achievement of project goal, outcome and outputs2.1- Achievement of outputs

a. A total of 1 proclamation and 8 regulations enacted and enforced that address both large and small ruminants to address gender equity and empowerment

The project supported the revising, updating and finalization of the proclamation on Animal Health, Welfare and Veterinary Public Health through stakeholders' consultation and validation. The Ministry of Agriculture (MoA) and Attorney General sanctioned the legislation and sent out to the Council of Ministers. The comments from Council of Ministers were addressed and the response accepted and was submitted to parliament's legal standing committee, which usually arranges a public debate before promulgation. Following the establishment of the new parliament, which convened in September 2021, and subsequent establishment of new a government, several government ministries and institutions were subjected to structural changes (division or merger). Accordingly, all the laws, including the advanced draft proclamation of the Animal Health, Welfare and Veterinary Public Health, were reverted back to the MoA to consider the revised changes in institutional structure and mandates. The revised draft proclamation was subjected to the wider stakeholder's validation with support from the project. Interviewees from MoA affirmed that, after project closure, the draft is resubmitted to the council of ministers for approval and to pass it to the parliament for final promulgation. The ratification process will depend on the government priority since there are a number of laws awaiting approval.

The delayed endorsement of the primary legislation has also hindered the review and submission of the 8 secondary legislations (regulations). Consequently, based on the recommendation of the state minister for Livestock Sector Development, the 8 regulations were merged into two categories of subsidiary regulations with support from the project: the first dealing with animal health and welfare while the second with establishment of veterinary statutory body (the veterinary board of Ethiopia). The approval process of the two regulations is pending and awaiting the promulgation of the proclamation.

Throughout much of the last two decades, draft legislation has been in existence, however the process of editing and commenting by various institutions and higher authorities has been prolonged. All possible efforts should be made to convince decision makers, legislators and any other appropriate representative of the government of Ethiopia of the urgency of adopting current draft legislations. The delay in adopting this draft primary and secondary legislations limits the effectiveness of existing public and private animal health services, negatively impact disease prevention, control and eradication efforts and makes it difficult for the country to comply with

SPS requirements, maintain its current markets and penetrate potential new markets for its livestock and livestock products.

b. Four regional veterinary laboratories and Kality Quality Control lab implementing LIMS & QMS.

Introduction of QMS in the quality control laboratory. The Animal Health Institute (former NAHDIC) was tasked through LoA to support the quality control lab in introducing QMS. AHI provided series of trainings to 49 participants (40 male and 9 female) on QMS to the quality control laboratory (Table 2) and this was one of the most commended interventions of the project by the laboratory management and staff. It has laid the foundation in the pursuit of achieving the goal of placing the quality control laboratory on the path towards accreditation. The plan is to apply for selected test methods in the coming few months and necessary preparations are currently underway.

Training topic	Number of participants	Training location	Training dates	
Refresher training on ISO/IEC 17025/2017 requirements, accreditation test and proficiency test	40 (7 female)	NAHDIC	18-20 Nov 2021	
Internal auditing, lead auditing and reporting of findings	21 (3 female)	NAHDIC	16-20 Dec 2021	
Techniques of root cause analysis, development of an effective corrective action and preventive actions for handling of non-conformance	40 (9 female)	NAHDIC	8-9 June 2022	
Determination of test method measurement uncertainties, equipment calibration and traceability management system	40 (9 female)	NAHDIC	16-18 June 2022	
Test method selection, verification and validation	29 (6 female)	NAHDIC	20-22 Sep 2022	
Mentoring guideline preparation as part of QMS support	10 (all male)	NAHDIC	17-21 Oct 2022	
Pathogen bacteria isolation, characterization from food of animal origin by means of conventional or classical techniques application	15 (4 female)	NAHDIC	3-12 Oct 2022	

Table 2- List of trainings provided to quality control laboratory staff by AHI

Challenges still remain in the pursuit of achieving accreditation and these include:

- The need to perform calibrations on all laboratory equipment used in the testing methods that are to be accredited. This activity has not been completed and is an essential requirement for the achievement of accreditation.
- Proficiency testing must be continued in order to develop a sufficient evidentiary trail of reproducible laboratory data that can be assessed for accreditation.
- The functionality of the laboratory must be improved by increasing the number of samples analyzed. The sample throughput is an important factor in achieving a sufficient evidentiary record of analytical results data that can be assessed for accreditation.

 Besides the requirement for efficient procurement system, supply of reagents and other laboratory specific consumables remains a major bottleneck. The majority of these consumables and supplies are not locally produced, but imported from abroad and the purchase of these items depends upon the availability of budget and scarce foreign currency.

Installation of a Laboratory Information Management Systems (LIMS) in the quality control laboratory. This was done by IZSAM, an Italy based laboratory through LoA. The LIMS allows to track samples from submission to testing and reporting and can facilitate the linkage between diagnostic results and response in the field, through a shift from paperwork to computerized systems. LIMS training was provided to twenty-five staff (five female) of the quality control laboratory. These interventions were expected to enable the quality control laboratory to track samples from submission to testing and reporting, as the system is networked.

Unfortunately, according to interviewees from the quality control lab, the system is not up and running due to various issues including inadequate initial assessment of the workflow and process peculiar to the lab, lack of IT officer in the lab and connectivity issues which might be affecting their network. According to interviewee from IZSAM, they are not aware of this problem but are ready to evaluate the system's status and think that reactivating the system and restoring its functionality should be a straightforward process.

Moreover, there is one major concern raised by the laboratory management related to confidentiality of data. Despite the confidential agreement concluded between the laboratory and IZSAM, the laboratory management still think sensitive regulatory data might be vulnerable and they are thinking to explore possible use of locally developed systems. Honest and transparent discussion should be held between the laboratory management and IZSAM to create common understanding and agree on the course of action for the future.

Training on LIMS to regional laboratories. Moreover, to extend LIMS to the Regional Veterinary Labs (RVLs) and facilitate introduction of QMS, the AHI was tasked with training on LIMS and undertaking infrastructure assessment in selected laboratories. Accordingly, three RVLs (Yabello, Jigjiga and Semera) were assessed in terms of IT infrastructure and on job training was provided in each Lab to build capacity of their staff in using LIMS. A total of 46 laboratory staff (8 in Jigjiga, 20 in Yabello and 18 in Semera) were trained on use and application of LIMS. The support included installation of SILB system on PCs of regional veterinary labs, live demonstration of the use of the system and testing of the functionality of the installed system.

The interviewees from the three laboratories found the training to be very useful and keen to use LIMS in their respective labs. Two of the labs have procured the necessary equipment based on the infrastructure assessment made by AHI staff and are awaiting the support from AHI to operationalize LIMS in their laboratories.

AHI is ready to support both of the regional laboratories and the quality control laboratory in establishing LIMS. LIMS has brought substantive changes in the efficiency of AHI from sample reception to test reports. However, AHI also has concerns that have to be addressed in

consultation with IZSAM for better and sustained use of LIMS in its laboratories and elsewhere in the country including the regional veterinary laboratories and the quality control lab.

- Minor customization and troubleshooting on LIMS have to be done by IZSAM. Local capacity at AHI should be built with training of AHI staff to handle these issues and run LIMS independently.
- The source code for LIMS should be Officially handed over to AHI. But this also depends on the initial agreement between IZSAM and FAO or AHI.
- Some improvement on the IT infrastructure at the AHI is needed to support the growing volume of data and to create test environment (server, UPS etc.).

Development of Residue Monitoring Plan and support residue analysis capacity in the quality control laboratory: The OIE PVS Evaluation (2011) and Gap-Analysis (2012) reports identified the lack of capacity for residue monitoring at national level. Accordingly, a national residue monitoring plan was developed and validated with support from the project. Virtual training on the residue testing and monitoring in livestock products, was arranged for the laboratory staff through Stichting Wageningen Research (SWR).

All the training components were successfully completed and 5 laboratory staff (1 female) were provided with certificate of participation. The lab management and staff noted that this is the most acclaimed intervention which laid a solid foundation for residue testing. The laboratory has already released preliminary assessment reports on residue testing in livestock products and feed.

c. Negotiation carried out and trade agreement concluded with three new importing countries

This activity was not implemented despite its crucial role in bringing the much-needed change in meat export value and volume. Poor interest from the MENA importing countries due to non-technical reasons (geopolitical) prevailing in these countries and the strict halal requirements from importing countries are cited by project reports as major hurdles to create linkage between the competent authorities of importing MENA and Southeast Asia countries and Ethiopia. However, project reports were short of elaborating the detail and efforts made on trade facilitation in consultation and collaboration with the Ethiopian competent authorities.

d. 14 SOP and guidelines applied along the value chain

The project supported the revision and updating of fifteen SOPs and guidelines that define the minimum standards that producers, meat processors, traders and transporters must satisfy in order to participate in the export trade. The SOPs reviewed and updated are:

1. Meat Quality Guidelines for Export Abattoirs

- 2. Meat Inspectors' Guidelines for Regulating Export Abattoir Operations
- 3. Meat Handlers Personal Hygiene Guidelines for Export Abattoirs
- 4. Export Abattoirs Construction Guidelines
- 5. Livestock Handling and Transport Guidelines
- 6. Meat Cold Chain Guidelines for Export Abattoirs
- 7. Meat Transport and Storage Guidelines for Export Abattoirs
- 8. Meat Inspection Guidelines for Export Abattoirs
- 9. Meat Inspection Guidelines for domestic Abattoirs
- 10. Operational Guidelines for Domestic Abattoirs
- 11. Construction Guidelines for Live Animal Export and Post-Entry Quarantine Facilities
- 12. Feedlot Construction Guidelines
- 13. Feedlot Health Management and Biosecurity Guidelines
- 14. Operational Guidelines for Livestock Export and Post-Entry Quarantine Facilities
- 15. Ante-mortem inspection guidelines for export abattoirs

The project also carried awareness creation among stakeholders on approved SOPs/Guidelines. To this end 200 stakeholders mainly staff from federal MOA directorates, meat inspectors from different export abattoirs, inspectors from live animal quarantine and border control posts, individuals from private companies involved in live animal and meat export trade, representatives from different towns of Oromia region and Addis Ababa city administration dealing with meat inspection services participated in the awareness creation workshop and document validation. The workshop was conducted in four rounds. Comments provided during the workshop were used to enrich the documents further, which are currently in use.

Some interviewees noted that the SoPs are routinely used by value chain actors. However, it is difficult to verify as there is no adequate system in place to monitor their effective use. The initial plan of the project was to develop an SPS website and upload the SoPs for wider use, but this did not materialize either.

e. Strong and functional risk analysis unit established

The capacity of the risk analysis unit of MoA was improved by conducting a qualitative and quantitative risk analysis training of trainers to seventeen staff, 11 from different MoA directorates, 3 from VDFACA, 2 from AHI and one from Addis Ababa University (1 female). The training was provided by two experts from CIRAD.

The participants in this training course were trained to undertake their role as national risk analysis trainers. In this role they were expected to develop risk analysis documents for priority trade-sensitive diseases and cascade the training to a wider group of veterinarians working in the Regional Agriculture or Livestock Bureaus or Agencies. The interviewees noted that the training was very useful and enhanced their knowledge and skill on application of risk analysis. The MoA risk analysis unit has made productive use of the risk analysis training provided by the project and other partners.

- Developed a standard import risk analysis template and requirements
- Prepared a comprehensive guideline for risk analysis
- Risk assessment was conducted to determine the risk of release of FMD virus through export of small ruminant meat
- Undertaken import risk analysis on importation of heifers and also set requirements (compiled document submitted to state minister office)
- Risk analysis training provided for the new EAA (quarantine) professionals
- Quality and number of risk assessment is increasing with scientifically justifiable decisions.
- Import risk analysis were conducted for Day old chickens, breeding cattle, semen, etc. thereby ensuring safe trade and reduce risk of disease introduction into the country

f. Development of a national communication strategy and web-site development

Strengthen information exchange through web site development was one of the activities of the project which was not implemented. The plan was to develop a fully functional web site dedicated to SPS & related issues such as providing timely and regular information to exporters related to SPS and changing regulatory environment. The project has done its best to ensure implementation of this activity; ToR for the IT consultant developed through involvement of MoA and FAO IT section and CVs of potential consultants were collected. Unfortunately, the timing coincided with the decision of the government to take out all animal and animal regularity functions from the Ministry of Agriculture to a newly established Ethiopian Agricultural Authority. This restructuring took overtly longer time and it was not possible to do it as initially planned.

The plan to develop a national communication strategy for meat value chain to provide stakeholders with general and specific information related to SPS and build an enhanced partnership between the government, the private sector and trading partners is not accomplished.

g. Conducting biannual joint planning workshops

The Ministry of Agriculture organized two joint biannual review/planning meeting between federal and regional veterinary services with support from the project. The participants of the meetings were representatives of the federal and regional veterinary services. The meetings had the objective of reviewing and harmonizing animal health plans, identify animal health and SPS issues that demand coordinated actions and joint monitoring and identify and /or understand major Sanitary constrains of livestock and meat export markets.

Ethiopia has a federal arrangement in which the regional veterinary services are answerable to their respective regional states not to the federal government. As a result, linkages and coordination between federal and regional veterinary services are deficient impacting disease prevention, control, surveillance and SPS compliance. The biannual joint planning workshops the project supported are paramount important to ensure vertical and horizontal linkages, functional integration, technical harmonization and optimal coordination and achieve an effective National Veterinary Services with common national objectives.

For example, the joint coordination workshop held on 22-23 September 2021 has identified around 45 action points with responsible institutes and timeline for execution. The evaluator couldn't come across a report on the progress made on the implementation of the action points. Moreover, rather than trying to tackle all challenges it would have been better to fucus on few doable action points that could be rigorously monitored through measurable way to track progress.

Similar coordination forums were established in the past with support from various development partners but were terminated once the donor funding dried. Government ownership is the key to sustainability. Donor money cannot be taken for granted. Government ownership and investment in national coordination forums between federal and state veterinary services will be determining factors in the long-term for sustainability of such initiatives.

h. Conducting quarterly SPS committee meeting

The National SPS Steering Committee (NSPSC) has been revitalized with revised Terms of References and its membership. It was chaired by the CVO from Ministry of Agriculture, who is also the Permanent Delegate of Ethiopia to WOAH. The NSPSC is composed of public (ministries, departments and agencies involved in SPS-related activities) and the private sector.

The NSPC has undertaken the following activities with the objective of enhancing stakeholder coordination, awareness creation on SPS issues and to identify SPS gaps in the relevant sectors.

- Organized a National SPS Sector Stakeholder Coordination Meeting and deliberated on how to enhance coordination among sectors (Animal health, plant health and food safety) on SPS issues and related activities. The meeting involved 36 technical directors and experts from Ministry of Agriculture, VDFACA and Ministry of Trade and Industry.
- Awareness creation on SPS requirements in animal health, plant health and food safety were conducted of 40 staffs of Ministry of Agriculture (MoA), Ethiopian Food and Drug Authority (EFDA), Ministry of Trade and Regional Integration (MoTRI), Ethiopian Standard Agency (ESA), Veterinary Drug and Animal Food Administration Control Authority (VDFACA).
- Sector specific SPS gap assessments (Animal, plant and food safety) were conducted by expert teams from respective sectors. Performance and current status of the export abattoirs, feedlots and Bole airport check post, capacity of phytosanitary service implementers (MoA and EIAR) and Food Safety Assessment implementation related to SPS by manufacturer, importer, exporter and port inspectors were assessed.
- Findings from sector specific gap assessments were presented to a wider stakeholder for validation. A total of 34 people from MoA, Meat and Live Animal Exporters/Associations, Ethiopian Food and Drug Authority (EFDA), Ministry of Trade and Regional Integration

(MOTRI), Ethiopian Standard Agency (ESA), and Veterinary Drug and Animal Food Administration Control Authority (VDFACA) participated in the validation meeting.

The revitalization of the NSPSC and the activities it has performed are commendable. However, the implementation of the recommendations which came out of the NSPSC meetings and gap identification studies carried for the animal, plant and food safety sectors require concerted and sustained efforts. Most importantly, since the closure of the project, the NSPSC has ceased to operate constrained by inadequate funding. The institutionalization of the committee and securing fund for its operation should be further discussed among the major SPS stakeholders.

Obviously, minor costs may be involved in maintaining regular meetings of the NSPSC. However, these costs are not substantial and should be integrated in and covered by national government budgets, where appropriate. Meetings can be rotated among certain ministries or private sector SPS stakeholders to share the costs related to the venue, coffee and/or lunch. The usual practice of paying per diem for NSPS committee members should be discouraged as much as possible as it distorts incentives and lead to discontinuation when funding is ceased.

i. At least 8 trade deals concluded between Ethiopian meat exporters and importers in MENA and SE Asia

No trade deal was facilitated and concluded between Ethiopian exporters and importers through support from the project. The project plan was to facilitate participation of Ethiopian exporters to annual food trade fares such as the annual Gulfood fair in Dubai and help them to make business to business deals with new potential importers. Gulfood is the world's leading and largest annual food and beverage trade exhibition. It is now an established practice for Ethiopian exporters to attend this fair on annual basis. The Ministry of Trade and Regional Integration (MoTRI) is the Government entity that coordinates agricultural product exporters for the trade show and the cost of the trip is usually met by individual exporters.

MoTRI, EMPEA and IGAD have the experience and the comparative advantage when it comes to arranging and coordinating such business-to-business missions. The project could have taken these opportunities and seriously engage these institutes, especially the EMPEA, to ensure realization of this important activity.

2.2- Achievement of outcome

a. SPS certification system of Ethiopia accepted by 100% of the existing importing countries in MENA and at least 60% of the identified potential importing countries in SE Asia.

Usually, acceptance of SPS certificates is achieved through bilateral negotiation between the competent authorities of importing and exporting countries. Bilateral negotiations were not facilitated by the project to ensure acceptance of Ethiopia SPS certificates in destination markets.

The country has maintained the traditional market destination in MENA and Southeast Asia countries despite the decrease in export volume and value to these markets. However, there were no new markets penetrated except the acceptance of Ethiopian SPS certification system and small first shipment made to Cambodia through other initiatives. There are ongoing efforts by some of the meat exporters in collaboration with MoA and EAA to get into markets in China and Malaysia.

There is a big and growing meat market in China. Over the past few years, Ethiopia is negotiating with China and series of bilateral meetings and exchange visits were made to access this market. The major concern of Chinese competent authorities is the Ethiopia's endemicity for Foot and Mouth Disease (FMD) and absence of official control programe to control the disease. There is an ongoing discussion with AQSIQ looking into possibilities of allowing processed meat into China market. Countries such as Indonesia have also a big demand for meat, but have also similar concerns over FMD.

b. At least 60% of export abattoirs in Ethiopia expand their export volumes/values by entering into new markets and expanding their customer base in SE Asia and MENA.

The increment in meat export by export abattoirs both in value and volume by entering into new markets and expanding their customer base could not be achieved as activities which could possibly lead to this were not performed.

There are a number of new, modern, export-oriented meat-processing facilities in Ethiopia with small ruminant and cattle kill lines which have started to emerge around the country. According to the Ethiopian Meat Producers and Exports Association's 2021 data, there are 14 export abattoirs with around 157,000 tons of sheep, goat, and beef production capacity per year (Table 3). However, the existing meat processing facilities are generally operating far below than their full capacity for many reasons which are complex and interlinked. For instance, of the two export abattoirs owned and run by Allana group, Allana frigorifico boran Foods PLC, which has the highest slaughter capacity (90,000 ton/year) is temporarily closed due to livestock supply issues.

Besides the SPS compliance and trade facilitation, there are pressing non-SPS issues which are seriously impacting negatively the meat export trade.

 Any substantial increment in meat export from Ethiopia can only be achieved through beef export. Ethiopia has the potential to significantly increase its beef production. However, the competitiveness of beef is increasingly getting questionable because of inefficiencies in the value chain, increased costs of feeds and transportation. The main competition for the Middle East beef export markets comes from South America, Oceania, Eastern Europe and the European Union. The disease-free status of most of these countries and more efficient production and marketing system they have attained are major competitive advantages which these countries hold over others.

- The export abattoirs are unable to procure suitable quality and quantity of live animals for the export market. Ensuring reliable and consistent supply of quality meat based on the requirement of the importers in terms of weight, age etc., remain a problem.
- There is high demand for meat in local markets. Hence, export abattoirs are competing with the domestic supply of live cattle and sheep and goats. For example, domestically consumed beef can sell at twice the export price.
- During a public-private discussion on agriculture in July 2023, commodity exporters voiced their concerns that exporting is no longer profitable due to the skyrocketing domestic prices. Exporters say they are facing a major setback as they struggle to cope with mounting losses. The situation, according to industry insiders, has significantly worsened over the past five years, with export losses now reaching between 30 to 40 percent, up from just five percent previously. In an effort to compensate for these losses, exporters have resorted to exporting at a loss in order to offset that by importing goods and selling them for a higher price, contributing to inflation in an import dependent economy.
- Informal live animal trade is one of the major challenges of the export trade alongside other structural problems. Informal exports are more than double the formal exports, which has a very significant impact on the national economy, in terms of both lost government revenues and high domestic prices.
- HALAL certification and requirements are getting more stringent over time. Halal certification bodies demand continuous training in relation to the HALAL slaughtering/certification process. Such trainings should always be recorded, documented and presented as evidence during official auditing by the inspectors of the importing countries.

NO.	Company Name	Designed capacity in tone	Remark		
1	Modjo modern export Abattoir	5,230	Goat and mutton		
2	Lunna export Abattoir	5,230	Goat and mutton, Beef		
3	Organic export Abattoir	4,500	10,000 soon coming (Goat and mutton, Beef)		
4	Abyssinia export Abattoir	5,000	Goat and mutton, Beef		
5	Hashim export Abattoir	5,000	Goat and mutton, Beef		
6	Allana Akseker export Abattoir	6,000	Goat and mutton, Beef		
7	Halal export Abattoir	5,000	Goat and mutton		
8	ELFORA Bishotu export Abattoir	5,300	Goat and mutton, Beef		
9	ELFORA metehara export Abattoir	4,500	Goat and mutton, Beef		
10	Alnujum export Abattoir	5,000	Goat and mutton, Beef		
11	Jigjiga export Abattoir	6,000	Goat and mutton		
12	Abergelle export Abattoir	6,000	Goat and mutton, Beef		
13	Allana frigorifico boran Foods PLC	90,000	beef, mutton and goat meat		
14	BinRoe export Abattoir	4,500	Goat and mutton		
	TOTAL	157,260			

2.3- Achievement of goal: not achieved

c. 15% increase in real average annual meat export value at national level by addressing importing countries' requirements within 3 years

15% increase in real average annual meat export value at national level by addressing importing countries' requirements within 3 years is not achieved.

Currently Ethiopia is exporting on average around 20,000 MTs of chilled ruminant meat worth of 100 million USD a year, (10% of which is variety meat/offal). It is the leading small ruminantmeat-exporting country in Africa, but its world market share is very small (around 1.3%). Export volume for beef, mutton, and goats has declined in recent years from 19,238 MT in 2018 to 17,109 MT in 2021. The data for meat exports in 2022 was 21,062 MT worth 112.61 million USD. This suggested that the rate of decline may be slowing and the export market was reviving. But that was not the case and the most recent data for the 7 months in 2023 shows that the volume of meat exported was 7,555.2 MT worth 43.15 million USD, showing a declining trend again. The major export markets for Ethiopian sheep and goat meat are the United Arab Emirates (52%) and the Kingdom of Saudi Arabia (41%). The remaining 7 percent of meat is exported to Kuwait, Qatar, and other countries.

Type of product	2018		2019		2020		2021	
	Volume	USD	volume	Value	Volume	Value	Volume	Value
Edible offal of cattle, fresh,								
chilled or frozen	330.7	\$787	822.48	\$1 <i>,</i> 701	686.43	\$1 <i>,</i> 828	559.09	\$1 <i>,</i> 331
Meat of cattle boneless, fresh or								
chilled	1.99	\$7			4.89	\$12	18.26	\$44
Meat of cattle with the bone,								
fresh or chilled	3073	\$10,313	947.11	\$3 <i>,</i> 038	166.28	\$536	317.46	\$1,123
Meat of goat, fresh or chilled	15214	\$86 <i>,</i> 645	12741	\$70,044	10889	\$62,002	15463.72	\$86,403
Meat of sheep, fresh or chilled	618.2	\$3,367	486.63	\$2 <i>,</i> 623	418.81	\$2,283	751.24	\$4,116
TOTAL	19238	\$101,119	14998	\$77,406	12166	\$66,661	17109.77	\$93 <i>,</i> 017
Source: FAO STAT								

Table 4– value (in million USD) and volume (in thousands) of meat export from 2018-2021

Source: FAO STAT

3- What were the major factors influencing the achievement or non-achievement of the project objectives, outcomes and outputs?

Most crucial interventions including support negotiation on SPS and related issues and strengthen linkages between exporters and importers of meat in selected key meat markets in MENA and SE Asia countries did not happen.

- Negotiation and bi-lateral agreements between the competent authorities of Ethiopia and importing countries in MENA and South East Asia countries.
- Strengthen linkages between exporters and importers of meat in selected key meat markets in MENA and SE Asia through attending trade fairs and doing business to business deals.

The non-occurrence of these interventions had a major influence on the chain of results both between outputs and outcome, and between outcome and goal. The partial achievement of the outcome (improve SPS compliance and linkage for market access in the meat export industry) did not allow the achievement of the goal (increase export revenues of producers, feedlot operators and export abattoir owners along the meat export value chain in Ethiopia). The emergence of meat export market is not only dependent on SPS compliance, but also require many other conditions to occur and therefore, SPS compliance is necessary but not sufficient enough to enhance trade.

The implementation of the project was further challenged by delayed launching of the project activities, movement restrictions imposed due to COVID-19, poor security situation in some parts of the country, the frequent change in the government structure. These caused significant delays in the implementation of the project activities and hence three NCEs were requested and granted.

4- To what extent were horizontal issues (particularly related to gender and environment) adequately addressed in the project?

The evaluation did not result in clear evidence of quantified environmental effects, but the balance of information suggests that there are positive environmental impacts, as activities related to development of national residue monitoring plan and supporting the quality control laboratory on residue testing contributed to safer use and application of pesticides and veterinary drugs and enhance effective control and mitigation of the impact of environmental contaminates. This impact might be less at this time as the laboratory is not accredited. In the future when the lab get accredited, fuller acceptance of results in greater trust of the system will have a better impact.

The project implementing partners tried to represent equal gender representation specially during trainings and workshops, but the representation of women in this regard was not satisfactory due to the poor representation of women in government and non-governmental institutions. However, both men and women benefit from the outcomes of this project in that both genders have important role in livestock rearing and production in the project implementation areas. The impact of the project on the meat export sector might be felt in the future and would benefit women in that they are engaged in managing small ruminants which is the dominant species in the meat and live animal export market.

5- FAO was the implementing agency of the project. Did this set-up contribute to the achievement of the project's objectives?

The project proposal was elaborated under an STDF-funded PPG. As detailed in the final PPG report, all relevant public and private stakeholders were actively involved in the development of the project proposal. The Ministry of Agriculture was the lead organization in the formulation of the project. However, it was finally agreed to have an international organization as Implementing Agency.

For obvious reasons, giving responsibility to international organization to manage such projects brings efficiency in project execution, but also affects ownership and post project sustainability in the long term. Generally, Government institutions have weak project implementation capacity. Seeking ways to promote and support developing countries project implementing capacity is paramount important and this can only be achieved through learning by doing.

Despite the above-described shortcomings in implementation arrangements, it should be highlighted that the implementing agency was quite efficient in coordinating, planning and synchronizing activities carried out by various partners, including by mobilizing external partners such as Wageningen University, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise G Caporale (IZSAM), Centre de Coopération International en Recherche Agronomique pour le Développement (CIRAD), that were not part of the initial project partners, but added value to the implementation.

EQ4. Efficiency:

1. To what extent did the project deliver results in an economic and timely way, based on the project document?

There is evidence of a meaningful scale of activity level delivery. Most activities were conducted but with delays. However, few crucial activities which impact on the overall outcome and goal of the project were not implemented. Planning, budgeting, monitoring and management of financial, human and other resources were generally good and all appropriate management tools were used.

The quality of the documents produced and of trainings provided is judged as generally of high quality in terms of relevance and usability. With regard to the trainings, participants react or respond to the training in strongly positive way and the trainees take what they learned and put it into practice on-the-job. This is notably the case for the trainings related to residue analysis, QMS and risk analysis.

2. What changes and risks, if any, occurred during project implementation, and how was the project able to adapt to these changes and manage risks?

The project budget and time-frame has been off-track because of the following reasons:

- Delayed start-up of the project activities. The implementation of the project was supposed to start in July 2018 but the project was actually started in November 2018. This was caused by the long time taken to get the project document signed by the government
- The poor security situation in most parts of the country and the northern conflict affected the implementation of the project activities at field level
- The COVID-19 pandemic and the associated movement/meeting restriction limited the implementation of the project activities at all levels
- The endorsement and enforcement of the animal health, welfare and public health proclamation did not progress as expected due to delay in the establishment of the current government because of postponement of the national election due to COVID-19, shift in government priorities, restructuring of government ministries. This affected also implementation of activities such as review of secondary legislations.

The following corrective measures were taken to ensure continuity of the implementation of the project activities

- Reallocation of the 2018 and 2019 budgets to 2020 and 2021 was requested and approved
- The project was extended four times with no-cost in consultation with government partners and STDF to give more time for the implementation of the project activities
- Overseas trainings for laboratory staff planned to take place in Netherlands at the SWR could not be achieved due to travel restrictions caused by the COVID-19 pandemic. Project funds and resources were nevertheless effectively channeled to build the analytical testing capability of laboratory staff using online demonstrations. The On-line training was an effective and efficient use of resources that helped to achieve most of the training objectives that would otherwise have been stalled as a result of the COVID-19 pandemic travel restrictions.
- The Project worked through implementing partners, managed and funded by FAO mainly through Letters of Agreement. This was the most feasible alternative during Covid-19 whereby FOA rules were restrictive on the number of persons to gather for face-to-face meetings.

3. Was the project a cost-effective contribution to addressing the needs of the beneficiary?

The project budget was USD 795 450 from which USD 569 827 was spent. Cost-effectiveness of the project was satisfactory to addressing the need of the beneficiary. Project interventions were not achieved within the intended timeframe already indicated in the report and it was reasonably adjusted during the intervention. Efforts were made to overcome obstacles and mitigate delays as the situation evolved.

Human and financial resources used as planned and appropriately utilized. Activities Implemented are within planned budget. Appropriate choices were made and trade-offs addressed during project implementation.

4. How well was the project managed?

FAO was quite efficient in coordinating, planning and synchronizing activities carried out by various partners. National SPS Steering Committee played a role in monitoringproject implementation and giving overall guidance.

The Project worked through implementing partners, managed and funded by FAO mainly through Letters of Agreement. The major implementer of the project activities was Ministry of Agriculture of the Ethiopian Government, which implemented most of the activities under Output 1 and all the activities of Output 2. AHI and IZSAM were involved in capacity enhancement trainings and technical backstopping activities to introduce LIMS in the quality control laboratory and Regional Veterinary Laboratories. SWR from the Netherlands supported the quality control laboratory in the development of National Residue Monitoring Plan and enhancing its capacity to test residues in foods of animal origin. CIRAD supported the establishment of risk assessment unit by the MoA/Ethiopian Agricultural Authority.

These working arrangements have forged effective and efficient partnership and collaboration to part the much-needed knowledge and skill on residue analysis, risk assessment and laboratory information management systems to local beneficiaries. The LoAs with local institutes were instrumental to ensure country ownership, leadership and long-term sustainability of project outputs.

EQ5.Impact:

Overall judgement on impact

The project did not bring any significant impact on the country's meat export trade. However, it has laid the necessary foundation for this to happen when other conditions related to SPS and non-SPS issues are addressed and gradually mitigated.

1. To what extent did the project generate, or is expected to generate, significant positive or negative, intended or unintended, higher-level effects linked to the STDF's theory of change? These may cover an improved domestic and/or regional SPS situation, measurable impact on trade, contribution to sustainable economic growth, poverty reduction and food security, etc.)?

Measurable impact on trade: It is difficult to confirm that the project has contributed to improve higher level objectives of the STDF programme in terms of enhancing market access. Perhaps, the project has made some improvement in the institutional environment for trade through awareness creation and capacity building.

On the domestic SPS situation: development and use of a wide range of SoPs along the live animal and meat value chain and awareness creation carried by the project on the SoPs should have improved the country's situation. However, because of the lack of monitoring mechanism on the level of adoption and application of the SoPs, the impact is still unclear on the ground. Moreover, improvement on the domestic SPS situation stemming from the project had not been contemplated in the project log-frame and is not captured by any indicator.

On poverty: In the absence of increased trade, no significant change can be expected on poverty reduction.

2. What real difference (expected and/or unexpected) has the project made, or is likely to have, on the final beneficiaries including on people's well-being, gender equality and the environment?

From economic and welfare point of view, there is no substantial evidence demonstrating that the project made tangible difference on final beneficiaries. However, if the project final goal related to increase export revenues of value chain actors along the meat export value chain happen to become reality, the situation could change and some concrete benefits could be felt, especially for producers, traders, feedlot operators and exporters.

Activities related to development of national residue monitoring plan and supporting the national residue testing lab contributed to safer use and application of pesticides and veterinary drugs and enhanced effective control and mitigation of the impact of environmental contaminants.

Moreover, if the pursuit for accreditation of the quality control laboratory turns out to be successful, besides its role in promoting export trade for meat it would further support the export of honey to high priced markets including Europe. Currently, Ethiopian honey is increasingly exported to European market complying with strict EU requirements for residue test for honey. However, this test is currently done by a laboratory in Germany and the accreditation of the quality control laboratory will create local capacity to overtake this role.

3. How did the project catalyze any other action or change, for instance raising awareness on SPS challenges and/or mobilizing additional resources for SPS capacity development?

Project interventions in areas of capacity development, stakeholders engagement and raising awareness of value chain actors, Government officials and partners was instrumental in fostering partnership, mobilization of financing and technical support from own and other sources to support SPS activities.

- The quality control laboratory is consolidating the QMS and accreditation for ISO 17025 through continued partnership with international partners including SWR and own source of funding.
- Of the three regional veterinary laboratories that took LIMS training, two of them secured funding from development partners and develop the IT infrastructure necessary for LIMS deployment.
- Development partners are further consolidating project outcomes through development of SPS website, training of certified meat inspectors, support the Government in drafting meat inspection and safety legislation etc.(UNIDO, IGAD, HEARD).

EQ6. Sustainability:

1. To what extent are the benefits of the project continuing, or are likely to continue over the longer term, after the end of STDF funding?

Awareness: the awareness of officials on SPS issues, which is one of the factors that will ensure proper investments in the domain, remains high after the project closure. This level of awareness is not expected to be eroded in the future since it is maintained by other initiatives.

Capacities: Some of the capacities built by the project will be sustained by own resources and support from development partners. For instance, the QMS and residue testing capacity would be further consolidated by securing ISO 17025 accreditation. The laboratory is on the right track and has forged close working relationship with Wageningen University for help in trouble shooting and with National Metrology Institute of Germany (PTB) for getting reference material, verification and PT supply.

Whereas establishment of LIMS at Kality Quality Control Laboratory has faced serious setback and is not currently operational. The lab staff think that the system is not fitting the workflow of the lab and should have been done after careful mapping and analysis of the laboratory system and needs. The National Residue Monitoring Plan document developed through project support and validated by stakeholders is not properly implemented and put into productive use due to lack of follow-up and budgetary reasons.

SoPs and regulatory frameworks: the 15 Standard Operating Procedures developed for the meat and live animal value chains are solid assets that will last and serve the purpose for a long time. The plan by UNIDO to put the SoPs on the web portal and further develop them into e-learning modules will further enhance their usability. However, taking into account the high staff turnover in the public services, there is need for refresher courses for existing staff and initial trainings for newcomers in the near future to ensure the maintenance of the awareness and capacities.

Regarding the primary and secondary legislations, they are yet to be approved and promulgated. Throughout much of the last two decades, draft legislations have been in existence, however the process of editing and commenting by various institutions and higher authorities has been prolonged. Promulgation of legislation in Ethiopia is a very slow and an un-dynamic process. All possible efforts should be made by MoA and EAA, to convince decision makers, legislators and any other appropriate representative of the government of Ethiopia the urgency of adopting current draft legislations.

2. To what extent was sustainability addressed at the design stage and during the project, and what are the major factors (including risks) influencing sustainability?

It is very important to sustain the assets laid by the project by engaging government institutions, private sector actors and development partners to make sure that project impact is optimal. Further support is required by the government and/or development partners to sustain the SPS capacity, coordination mechanism and awareness creation built by the project and this require continuous advocacy and lobbying to ensure that they are sustainably financed.

Sustainability and exit planning were inadequately considered during project design and implementation. From the documentation analyzed, there is no indication on the existence of clearly articulated exit strategy for the project. There is a risk that the benefits arising from the project interventions will be minimal without ongoing investment and a carefully planned handover of responsibility and control to the Government of Ethiopia.

Once the project evaluation is completed, it is worth to consider organizing meetings with key stakeholders and development partners on how best to sustain project outcomes and the roles each stakeholder plays in achieving this.

3. Are the necessary capacities and systems (financial, social, institutional, etc.) in place to sustain the project results over time?

The main factors that influenced, positively or negatively, the sustainability of the project, are the following:

- The existence of other programs and initiatives that could continue or build on project activities: on this, the post project context has been quite favorable, and several national and regional programs contribute to consolidate or build on project outcomes (see on next question).
- Although some of these resources may be availed by development partners to fill some of these gaps, the financing of day-to-day operations of SPS institutions remains a major issue. For instance, regular supply of reagents and other laboratory specific consumables remains a major bottleneck for Kality Quality Control Laboratory. The majority of these consumables and supplies are not locally produced but imported from abroad and the purchase of these items depends upon the availability of scarce resources.
- The national SPS committee revitalized through the support of the project is not institutionalized and heavily depend on support from development partners. The mechanism has never been appropriated by any institution, and its operations have never been financed. As a result, currently the SPS committee is not active and operational due funding problems.

4. What follow-up activities or programmes, if any, could help sustain these results over time?

After the project closure, there were several follow up activities implemented either by the Government, implementing partners and regional organizations that sustain the project results, for instance:

- The Kality Quality Control Laboratory is sustaining the establishment QMS through a set of policies, procedures, and practices implemented in the laboratory to ensure consistent quality and accuracy in its operations. Consultants were recruited from own institutional budget to support in the Document control and record keeping for ISO 17025:2017 accreditation. According to the officials of the laboratory, the institute will submit its application for Ethiopian Accreditation Service (EAS) for selected quality control tests.
- UNIDO in close collaboration with the Government of China and Ethiopia is implementing the "Upgrading the Livestock Value Chain Programme of Ethiopia" (ULVCP-ETH). Improving the quality and safety of livestock products to ensure human nutrition and health is one of the major objectives of the project. Assessing the country's status of livestock safety and quality

system with support from the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) of China, undertake Ethiopian meat sector mapping and baseline study, updating and standardizing the national meat inspector training program and delivering the first round of certification training, animal handling and welfare training, development of SPS web portal for the Ethiopian Livestock Authority are some of the major interventions by the project. Most importantly, the project is facilitating negotiations between Ethiopia and China's competent authorities for accessing the potential meat market in China.

- IGAD/ICPALD and or AU-IBAR are supporting member states including Ethiopia in development of standard methods and procedures, development of national SPS strategies, regularly conducting joint technical meeting with MENA importing countries and IGAD exporting countries, training of livestock and meat trades, export abattoirs, regulatory officers, trade counsellors on SPS issues related to meat and live animal export trade.
- World Bank funded "De-risking, Inclusion, and Value Enhancement of Pastoral Economies in the Horn of Africa (DRIVE)" Project is recently launched and is working to enable the region to adapt to the impacts of climate change, commercialize livestock production in pastoralist communities, and ensure inclusion of the marginalized and vulnerable groups such as women in the sector.

Cross-cutting issues

1. Overall judgement on crosscutting issues

Generally, the contribution of the project to crosscutting issues, especially gender and environment, can be considered as marginal; this can be explained mainly by the fact that these issues were included in the initial project document, but there were no specific targets or activities on these areas.

2. Women and youth inclusion

Recognizing the key role that women perform in managing livestock in the smallholder household, the project was supposed to place special emphasis on engaging women through the project interventions. The inclusion of women was to be ensured through the specification of targets for their participation in all key activities. The project was supposed to maintain a gender balance in training, with women comprising of at least 30 percent of the trainees. However, the participation of women in different aspects of the project implementation was not as planned due to their low representations in the different stakeholders involved in the implementation of the project.

However, both men and women benefit from the outcomes of this project in that both genders have important role in livestock rearing and production in the project implementation areas. Any likely future impact of the project on the meat export sector would benefit women in that they

are engaged in managing small ruminants which the dominant species in the meat and live animal export market.

There was no specific action targeting inclusion of youth despite the importance of this aspect in Ethiopia, where the country has large youth population and the youth are also subject to a very high rate of unemployment.

3. Environmental protection and adaptation to climate change

Activities related to development of national residue monitoring plan and supporting the national residue testing lab contributed to safer use and application of pesticides and veterinary drugs and enhance effective control and mitigation of the impact of environmental contaminants.

4. Conclusions and recommendations

Conclusions

The main conclusions of the evaluation could be summarized as follows:

- The project was highly relevant and addressed practical SPS issues that impact the meat export trade of Ethiopia. Initiating a project that sets the institutional basis of a modern SPS system was a genuine need of Ethiopia.
- The project had strong policy coherence and is aligned with the wider policy frameworks of the Government, both at federal and regional states level. The project goal of enhancing the capacity of national institutes, expand export market access for meat fit well with existing policy of the country aimed at assisting the country to maintain and expand current markets and penetrate new potential export markets for meat. The project activities were as well complementary with supports provided by other development partners to improve SPS compliance.
- Delayed start-up of the project activities, unprecedented challenges such as the global COVID-19 pandemic occurring in the middle of the project, the poor security situation in most parts of the country and northern conflict which affected the implementation of the project activities at field level and the restructuring of the government ministries were significant contextual factors which affected the potential for timely and efficient delivery of project interventions.
- The project has played a significant role in the establishment of QMS and residue testing capacity at the quality control laboratory and succeeded in making a huge step forward. The laboratory has got the experience, knowledge and skills required to do residue analysis on livestock products and will be able to extend the scope of current methods to implement new ones as long as they have all resources needed. The laboratory is ready to apply for accreditation of its microbiological and physiochemical facility in compliance with ISO 17025.

Achieving accreditation will provide a measurable impact on safe domestic and export trade of meat, but also for other products such as milk and honey.

- Whilst there was a significant volume of activity-based reporting and progress reporting to the donor, much was prepared in isolation and without adequate consideration of achievement against targets at the outcome and goal levels. A mid-term evaluation should have been implemented to capture this and recommend remedial action which would have improved project outcomes, and the ability to set, measure and report against project targets at the outcome and goal levels. This was a significant oversight, the reasons for which remain unclear.
- Sustainability and exit planning were inadequately considered during project design and implementation. From the documentation analyzed, there is no indication on the existence of clearly articulated exit strategy for the project. There is a risk that the benefits arising from the project interventions will be minimal without ongoing investment and a carefully planned handover of responsibility and control to the Government of Ethiopia.
- The project made a limited contribution to the stated goal and outcomes. Since the project goal and outcome indicators were mainly geared toward exports, the project goals and outcome cannot be considered as achieved: they were probably too ambitious and their achievement was conditioned by the increment in meat export that did not occur. Setting less ambitious goal and outcomes, less dependent on risks as well, would have been a more reasonable framing. It is worth to note that the achievement of set goal and outcome indicators is influenced for the most part by several factors which are beyond SPS compliance.
- This does not mean that the project has failed. In most cases, the stakeholders decide if the project was a success or a failure based on their judgment and satisfaction with the outcome. Some interviewees noted that the project has laid the necessary foundation and conducive institutional environment to promote meat export trade. This coupled with fulfilment of other conditions, both SPS and non-SPS, is expected to enhance meat export trade in the very near future.

Recommendations

Recommendation 1: FAO/STDF organize exit workshop:

There is a risk that the benefits arising from the project interventions will be minimal without ongoing investment and a carefully planned handover of responsibility and control to the Government of Ethiopia. Once the project evaluation is completed, it is worth to consider organizing a meeting with key stakeholders and development partners on how best to sustain project outcomes and the roles partners can play in achieving this. Some of the key issues that require follow-up include:

Institutionalize the national SPS committee

- Support continuation and consolidation of the residue testing capacity of the quality control laboratory and its accreditation
- Ratify the National Residue Monitoring plan (RMP) and ensure its operationalization to facilitate international trade in animal-derived food products
- Strengthen the risk assessment unit of the MoA
- Follow-up the promulgation of the draft primary and secondary legislations

Recommendation 2: Government should address non-SPS issues which are seriously impacting the meat export trade

Any future increment in meat export depends on rigorous work on the part of the Government to enhance competitiveness in meat trade through addressing inefficiencies in the value chain, commercialize the livestock sector that can consistently supply suitable quality and quantity of live animals for the export market, curb informal livestock trade and comply with the stringent halal requirements of importing countries etc. Having a clear and focused strategy that actively involve the private sector is critically important to address these issues. Otherwise, let alone increase meat export it would be increasingly difficult to maintain current level of meat export.

Recommendation 3: Government should create strong linkage and coordination between federal Level and state level institutes f to support implementation of SPS measures

Under the current federal arrangement, regional states are autonomous and are accountable to their respective states. As a result, linkages and coordination between federal and regional institutes mandated for SPS measures are not adequate. Joint planning, joint monitoring and evaluation of SPS and activities and transboundary animal disease prevention and control are very limited in scope and application. This is also the case with linkages among federal institutes working on SPS issues.

The project-initiated coordination meetings between federal and regional institutes have improved both vertical and horizontal linkages, collaboration and harmonization of SPS interventions. However, this initiative was discontinued after project closure. Similar projectbased coordination mechanisms were established in the past and ceased after project termination. Therefore, Government should consider institutionalization of the coordination mechanism through incorporating it into a structured and formalized system.

Recommendation 4: Kality Quality Control Laboratory introduce Fee charge for service in the Quality Control Laboratory to Ethiopian Government: The quality control laboratory must pursue a funding model that will help meet the cost of laboratory operations. Establishing self-sustaining laboratory service through introduction of cost recovery for laboratory services provided for the commercial sector and export testing is a plausible approach. Revenue generated from the quality control laboratory should be able to sustain the accreditation activities and test methods. The laboratory management has studied a cost recovery scheme and submitted the recommendation to the relevant government authorities for approval.

Recommendation 5: FAO Support implementation of LIMS at the quality control laboratory and regional laboratories: The support from FAO through USAID funded GHSA programme was instrumental for the establishment of LIMS at AHI to automate the process of collecting, tracking, analyzing, reporting, and storing specimen data. The project support further expansion of LIMS to the quality control laboratory, but its functionality encountered problems which have to be fixed in consultation with IZSAM. FAO has the experience and comparative advantage to lead this process including the LIMS expansion to the three regional laboratories.

Recommendation 6: STDF strongly encourage implementers design a plausible exit strategy: STDF should encourage project implementers to design project exit strategy to avoid haphazard termination of projects and ensure sustainability of project outcomes. It should be the joint responsibility of the implementer and the beneficiary, and should be addressed initially in the design stage, updated regularly and well addressed in the final project report.

Recommendation 7: STDF consider enhanced role for the private sector in future SPS projects

A private sector perspective can add valuable understanding and reality checks, and underpin sustainability. In early project design there was adequate consultation and participation of the private sector. However, this was not maintained in project implementation except their participation in few SPS committee and coordination meetings and awareness creation trainings. In future SPS projects, the funding agency and the implementing organization should seek active public private partnership and innovative ways to foster private sector participation. A robust private sector participation and dialogue can add valuable understanding of the reality on the ground, and reinforce sustainability.

5. Lessons learned

What lessons can be learned from the project regarding the process of project design and implementation?

One lesson learnt regarding the implementation of the project is the need for enhanced role and responsibilities of national institutes to ensure country ownership, leadership and long-term sustainability of project outputs. This is also in agreement with Paris Declaration and Accra Action plan principles.

Some of the project activities were executed through national experts and institutes. This principle of implementation will enable country partners to build their capacity and continue to provide relevant and effective support services even beyond the project life, further expanding the impact and sustainability of the project results. The quality control laboratory bench marked its QMS from Animal Health Institute and the latter provide series of trainings on QMS to the quality control laboratory.

Another important lesson from this project is that it is not advisable to build a project log-frame based on an over-optimistic outcome and goals which depends on several risks beyond the

control and influence of the project. This is especially the case in a country such as Ethiopia where the trade situation is very unstable due to SPS and most importantly non-SPS issues. As a result, the outcome of the project was only partially accomplished and the project goal has not been achieved. Probably, the goal could have been framed from the outset or revisited during implementation to make it more realistic, easy to gauge and track.

What lessons can be learned from the project, which may be of importance to the broader donor community and which should be disseminated more widely?

Some of the project activities have not been rolled out and sustained (e.g., Residue Monitoring Plan, NSPSC, joint bi-annual coordination mechanisms, Laboratory Information Management System). For future projects relevant ministries and beneficiaries should clarify in writing the respective institutional post-project commitment to the sustainability of key outputs. This could be part of approval processes, and should be reflected in the design and the exit strategy. Sustainability aspects need to be better incorporated into the project at the planning stage and updated regularly in order to ensure post-project continuity and consolidation of results. It is important to strongly encourage implementers of projects to include a plausible exit strategy in the inception documents, update it regularly and give it prominence in the final project report.

The unprecedented COVID 19 pandemic was impossible to anticipate and prevented crucial in person training and guidance for the quality control laboratory staff and relevant stakeholders. The project was able to adapt to the challenge by delivering practical online training by experts from the Wageningen University. The highly innovative approach was even found to be more impactful as it afforded a longer training period where the abilities of the trainees could be better assessed for consistency compared to a shorter term in-person training. Although the benefits of online training cannot effectively replace in-person training the experiences and lessons provided are very relevant for future lab capacity development projects. The experiences and methods used should be documented and disseminated to other STDF projects.

Key outputs of the project related to enactment and enforcement of primary and secondary legislations involves approval of policies and legislative framework by government at very senior level, which seems to be beyond not only the control but also the influence of the project. In future it would be advisable to define deliverables in terms of submission rather than approval.

What actions have been taken by the beneficiary, STDF partnership or others to disseminate, learn and follow-up on the outcomes of the project?

The Ethiopian Agricultural Authority and MoA are engaging other partners to sustain and scale up some of the outcomes of the project. There are several initiatives through collaboration with development partners and regional organizations to build the SPS capacity of the livestock value chains in Ethiopia. The initiatives are expected to further enhance the capacity of the sector, especially the potential to enter international markets. Some of the activities which follow-up the outcomes of the STDF project include:

 Development of SPS web site where important documents such as legislations, importing countries SPS requirements, SoPs etc. will be uploaded. Moreover, there is also a plan to further develop the SoPs into easy to learn training modules to ensure their wider use and adoption by all value chain actors.

- Meat safety and inspection legislation is under development to replace the old laws currently in use since 1972. There is a plan to make the SoPs mandatory through provision of this new law.
- The quality control laboratory under the Ethiopian Livestock Authority is strengthening the QMS initiated with support from the project through its own public funding and collaboration with AHI, National Metrology Institute of Germany (PTB), Stichting Wageningen Research (SWR) and Texas A&M university. Most of the international partners are supporting the lab through provision of proficiency testing (PT) which is an essential tool for helping to ensure that the laboratory gets its results right. Participating in a PT scheme would bring several benefits to the lab including ISO Accreditation, verifying methods and equipment calibration, managing risks, training laboratory teams and Comparing results. The lab is in the process to apply for accreditation for selected test methods with Ethiopian Accreditation Service (EAS), the sole national accreditation body for conformity assessment bodies in Ethiopia.
- IGAD/ICPALD is organizing Training of Trainers (ToT) on Risk Analysis, Transparency, Equivalence and Other Key Provisions of the SPS Agreements to enhance the capacity of competent authorities in member states including Ethiopia. This expected to further enforce the training provided by the project.

Annexes

Annex 1- Project Evaluation matrix

Evaluation question		Judgement criteria and Indicators	Source of data and/or methods for collecting data	
of the project needs, policie beneficiaries, involved (pub regional, inte	nt did the objectives and design t respond to: (i) the SPS-related es and priorities of the as well as other stakeholders olic and/or private sector, rnational partners, etc.); as well OF's goal to facilitate safe trade?	 domestic and regional trade context in MENA, southeast Asia and beyond export potential and constraints food safety, animal health contexts alignment with national policies and strategies - capacities (incl. gaps) of stakeholders and institutions Alignment with global goals such as the Sustainable Development Goals (SDGs) and STDF's goal to facilitate safe trade. Target stakeholders views whether the interventions are useful and valuable. 	 Project design document Interviews with stakeholders Sector analysis and studies National and regional policies and strategies SPS assessments (produced by project) STDF strategy SDGs relevant to the project 	
processes and	cal contexts, ownership, d stakeholders taken into e design and implementation of	 Consultation of stakeholders during design Consultation of stakeholders during implementation Project implementation arrangements Alignment with local institutional processes (e.g., policy processes) Involvement of national institutions in implementation of activities 	 Steering committee minutes Workshop reports Interviews with stakeholder Project reports 	

Evaluation question		Judgement criteria and Indicators	Source of data and/or methods for collecting data	
3.	To what extent did the project remain relevant, even if the circumstances changed over the course of implementation?	 Extent to which the objectives reflected priority SPS goals and problems over the course of the project Extent to which the design and strategy addressed concrete evidence-based SPS issues over the course of the project Need assessment on SPS carried over time 	 Interview with stakeholders Project document and workplan SPS needs assessment documents 	
COHER	RENCE: how well did the project fit within the br	oader development and SPS landscape?		
1.	To what extent did other interventions (including policies) support or undermine the project, and vice versa?	 Review of other SPS projects and ascertain whether they undermine or support the project Government policies, strategic plans and programmes for the livestock sector and SPS 	 Review national and regional SPS projects Interviews with stakeholders Interviews with development partners GTP I, II and Ethiopia's 10-year perspective plan Animal health strategy document 	
2.	What were the synergies and interlinkages between the project and other interventions carried out by the same institution/government, as well as with the relevant international (Codex, WOAH) standards?	 Coherence with international SPS objectives. Coherence with international standards. Coherence with the countries' multilateral and regional trade and other SPS commitments. Coherence with past and current SPS programs at regional /national level (at time of design, during implementation and currently) 	 STDF Strategy SPS Agreement Codex, WOAH documentation, esp. regarding Africa Interviews with stakeholders Project Documents and Reporting 	

Evaluation question		question Judgement criteria and Indicators	
3.	To what extent was the project complementary to and/or coordinated with relevant interventions supported by other actors in the same context, including how did it add value while avoiding duplication of effort?	 Cross-government co- ordination If intervention is using existing systems and structures such as coordination mechanisms at the country or sector levels If the interventions complement each other Whether there is duplication of efforts or inconsistencies in approaches 	 Minute of coordination meetings Minutes of SPS committee Project reports and other documents Interviews with stakeholders
EFFEC1	TVENESS: What outcomes - both intended outco	omes and unintended outcomes - are bein	g achieved?
1.	To what extent were the project objectives achieved or are likely to be achieved (based on the indicators for expected outputs and outcomes identified in the project's logframe) including any differential results across groups?	 Percentage increment in real average annual meat export value at national level by addressing importing countries' requirements within 3 years SPS certification system of Ethiopia accepted by 100% of the existing importing countries in MENA and at least 60% of the identified potential importing countries in SE Asia. At least 60% of export abattoirs in Ethiopia expand their export volumes/values by entering into new markets and 	 Project document and reports Statistics on meat export value and volume over the project years from livestock authority, customs, Ministry of Trade and Economic Integration, Ethiopia Meat producers and Exporters Association, Export abattoirs Interview with stakeholders- satisfaction with Project services, outputs, results Policy & legislation changes documentation. Observation on the adoption and application of QMS, LIMS

Evaluation question	Judgement criteria and Indicators	Source of data and/or methods for collecting data	
	expanding their customer base in SE Asia and MEANA.	 Observation in the adoption and application of SoPs developed 	
	 A total of 1 proclamation and 8 regulations enacted and enforced that address both large and small ruminants to address gender equity and empowerment Four regional veterinary laboratories and Kality Quality Control lab implementing LIMS & QMS. Negotiation carried out and trade agreement concluded with three new importing countries Quantity SOP and guidelines applied along the value chain Strong and functional risk analysis unit established 		
2. What were the major factors influencing the achievement or non-achievement of the project objectives, outcomes and outputs?	 Risk management strategies and actions vs actual risks encountered Policy measures Participation of stakeholders Political and institutional context (including in particular institutional reforms) Economic and social context 	 SC meeting minutes project reports Project workplans Interviews with stakeholders 	
 To what extent were horizontal issues (particularly related to gender and 	 Project's contribution to crosscutting objectives 	 Project documents Interview with stakeholders 	

Evalua	tion question	Judgement criteria and Indicators	Source of data and/or methods for collecting data
4.	environment) adequately addressed in the project? FAO was the implementing agency of the project. Did this set-up contribute to the achievement of the project's objectives? Did the international partner add value to the project implementation? What worked well in this alliance and what not so well? What would be the recommendations for the future?	 Mainstreaming of gender and environment in design Implementation delays due to administrative issues Implementation difficulties (overlapping of activities, confusion of stakeholders) or successes (synergies, clear segregation of duties based on mandates and comparative advantages) 	 SC minutes Project reports Interview with implementing agency Interview with stakeholders
EFFICI	ENCY: how well were resources used?		•
1-	To what extent did the project deliver results in an economic and timely way, based on the project document?	 Timeliness of fund disbursements Extent to which activities, outputs, and services were delivered on time, and within Budget, as per Plan monitoring activities and corrective measures Expenditure against budget and activity schedule Quality of financial procedures and controls 	 Project document and initial implementation schedule Successive work plans implementation reports Requests for extension Financial reporting Project-related correspondence Interview with stakeholders
2-	What changes and risks, if any, occurred during project implementation, and how was the project able to adapt to these changes and manage risks?	 Were there contextual factors which affected the potential for timely and efficient delivery? If so, what were they and what was the effect? 	 -Project reports - Interview with project team and stakeholders

valuation question	Judgement criteria and Indicators	Source of data and/or methods for collecting data	
	 Changes in context (policy, institutions, trade, other projects) Mitigation measures taken to address occurring risks and changes in context 		
5. Was the project a cost-effective contribution to addressing the needs of the beneficiary?	 How well appropriate choices were made and trade-offs addressed in the design stage and during implementation. T How well resources are used during implementation (misallocated, budgets underspent, overspent, redirected) Stakeholders' perception 	 Project reports and reviews. Financial reports. Budget Revision reports Stakeholder interviews 	
6. How well was the project managed?	 Project staffing and organizational structures with TORs. Government of Ethiopia structure and counterparts. Project/Government meeting attendance, frequency and minutes/outputs. Reports and any revised structures. strategies to overcome challenges measures to correct shortcomings 	 Operational plans. Meeting records. Project reports and reviews. Financial reports. Budget Revision reports 	

Evaluation question		Judgement criteria and Indicators	Source of data and/or methods for collecting data
1.	To what extent did the project generate, or is expected to generate, significant positive or negative, intended or unintended, higher- High level effects linked to the STDF's theory of change?	 Export revenues of producers and feedlot and export abattoir operators along the meat export value chain in Ethiopia Reduced export rejections Emergence of new market 	 - Trade statistics from customs, MoTRE, EMPEA, abattoirs - Competent authority - Interview with stakeholders
2.	What real difference (expected and/or unexpected) has the project made, or is likely to have, on the final beneficiaries including on people's well-being, gender equality and the environment?	 Better public and animal health outcomes Increased incomes due to better market access 	 Stakeholders interview project reports document review
3.	How did the project catalyze any other action or change, for instance raising awareness on SPS challenges and/or mobilizing additional resources for SPS capacity development?	 Increased financing of SPS issues (development partners, government, regional organizations such as IGAD, AU- IBAR, AU) Strengthened inspection and controls Level of awareness of producers 	 Review of public expenditure on SPS Review of expenditure on SPS by development partners and regional organizations Inspection data Report of food safety awareness trainings/campaigns
SUSTA	NABILITY		
1.	To what extent are the benefits of the project continuing, or are likely to continue over the longer term, after the end of STDF funding?	 Increased public financing of SPS issues after project Continuation of activities by beneficiaries, on their own resources Adoption and implementation of policy and regulatory frameworks developed during the project 	 Review of public expenditure Interviews with development partners Interviews with public institutions involved in project implementation

Evaluation question	Judgement criteria and Indicators	Source of data and/or methods for collecting data	
2. To what extent was sustainability addressed at the design stage and during the project, and what are the major factors (including risks) influencing sustainability?	 Stakeholder consultation on post project sustainability Existence of project exit strategy Measures taken by project to ensure sustainability 	 Interviews with resource persons and project beneficiaries Project reports Minutes of SC Minutes of consultation meetings with stakeholder 	
3. Are the necessary capacities and systems (financial, social, institutional, etc.) in place to sustain the project results over time?	 Extent of beneficiaries' commitment, ownership, willingness and ability to maintain and build on the outputs and outcomes of the Project Budgets allocated to SPS activities by public institutions, private sector organizations, regional and continental organizations Awareness and understanding of SPS issues by project beneficiaries 	 Review of public expenditure Interviews with public institutions involved in project implementation Interviews with project beneficiaries (all categories) Interview with regional organizations such as IGAD and AU-IBAR etc. 	
4. What follow-up activities, if any, are planned and/or required to sustain these results over time?	 Sustainability aspects included in project design, or in successive workplans Existence of project exit strategy Measures taken by project to ensure sustainability 	 Project design document Work plans Project reports Exit strategy (if exists) Interviews with FAO and implementing partners 	
LESSONS LEARNED		_	

Evaluation question		Judgement criteria and Indicators	Source of data and/or methods for	
1.	What lessons can be learned from the project regarding the process of project design and implementation?	 Challenges in implementation Successes in implementation Issues that stood out in project documentation and reporting Issues that arose in interviews 	 collecting data Project reports Steering committee minutes Interviews with implementing partners and beneficiaries 	
2.	What lessons can be learned from the project, which may be of importance to the broader donor community and which should be disseminated more widely?	 Success stories best practices Implementation challenges Project efficiency, effectiveness, impact, sustainability (from respective sections) 	 Project reports Internal evaluation Evaluation of efficiency, effectiveness, impact, sustainability 	
3.	How could the resource and implementing partners increase the sharing of good practices on SPS capacity building coming out of this project?	 Documentation of lessons learned Awareness of stakeholders and partners on project outcomes 	 Project reports Communication material Interviews with stakeholders and partners 	

Annex	2-	Project	Log frame
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Result level	Objectives	Indicators
Goal/ Impact Objective/ Outcome	To increase export revenues of producers, feedlot operators and export abattoir owners along the meat export value chain in Ethiopia improve SPS compliance and linkage for market access in the meat export industry.	 15% increase in real average annual meat export value at national level by addressing importing countries' requirements within 3 years SPS certification system of Ethiopia accepted by 100% of the existing importing countries in MENA and at least 60% of the identified potential importing countries in SE Asia. At least 60% of export abattoirs in Ethiopia expand their export volumes/values by entering into new markets and expanding
Output 1	Strengthened capacity of the Competent Authority to apply and monitor SPS measures along the export meat value chain	 their customer base in SE Asia and MEANA. A total of 1 proclamation and 8 regulations enacted and enforced that address both large and small ruminants to address gender equity and empowerment Four regional veterinary laboratories and Kality Quality Control lab implementing LIMS & QMS. Negotiation carried out and trade agreement concluded with three new importing countries 14 SOP and guidelines applied along the value chain -Strong and functional risk analysis unit established
Output 2	Increased coordination and linkages among the sector value chain actors including destination markets.	 Coordination and collaboration on SPS measures improved nationally through Development of a national communication strategy Conducting biannual joint planning workshops Conducting quarterly SPS committee meeting, At least 8 trade deals concluded between Ethiopian meat exporters and importers in MENA and SE Asia

Annex 3- Semi structure interview questions

FAO (Implementing agency)

- 1. Do you have reflections on the project approach (including project structures and management)?
- 2. Challenges in management and implementation
- 3. did partners know their mandates & duties and adequately collaborate?
- 4. Was there a FAO support to the project on technical issues? (e.g., backstopping from SFE, RAF, FAO HQ?).
- 5. Was there a capacity needs assessment conducted at the start of the project?
- 6. Was there base line assessment conducted at the start of the project?
- 7. How did you ensure gender inclusion
- 8. Were the training approaches chosen by the project technically and financially effective/efficient and sustainable?
- 9. In case of not achieving the results, what are the causes, what can be learnt from the experiences?
- 10. Was an Exit Strategy prepared and rolled out?
- 11. Was the budget adequate to achieve the planned results?
- 12. Was the cash flow adequate? Any delays in payments? Were there any serious delays in provision of funds that have affected the implementation?
- 13. Changes/modifications in project activities from the original plan in the project document, reasons & consequences

Livestock Authority

- 1. Overall impression of the project
- 2. How relevant was the project design to the needs? Aligned with government priorities, policies, strategies?
- 3. Do you have reflections on the project approach (including project structures and systems)?
- 4. Challenges in management and implementation
- 5. Did the project achieve its objectives?
- 6. Is there increment or decrease in real average annual meat export value at national level? What is the trend?
- 7. Actual value and volume of meat export over the last few years, disaggregated by abattoirs and product type (sheep and goat met. Beef, offal)
- 8. Does the country penetrate new markets and able to expand its customer base?
- 9. If yes, which countries and for which products?
- 10. Was there negotiation carried out and trade agreement concluded with new importing countries?
- 11. What is the status of primary and secondary legislations and SoPs developed with support from the project?

- 12. Is the national SPS committee active and operational?
- 13. Who is supporting the operationalization of the SPS committee?
- 14. What are the major challenges including SPS issues hampering market expansion?
- 15. Sustainability of the project activities? Does your office/unit have the resources and capacity to continue with similar activities after the project ends? (Government allocations per annum?)
- 16. In case of not achieving the results, what are the causes, what can be learnt from the experiences?

Ethiopian Meat Producers and Exporters Association (EMPEA)

- 1. Do they know about the project?
- 2. If you do, how did you get to know?
- 3. Have you participated in any project activities? If so, which)
- 4. Does the project address your needs?
- 5. Who identified the needs and how were they identified?
- 6. Has the project made any difference in SPS compliance and market access?
- 7. How satisfied is the association and its members with the activities carried by the project?
- 8. Is there increment or decrease in real average annual meat export value at national level? What is the trend?
- 9. Actual value and volume of meat export over the last few years, disaggregated by abattoirs and product type (sheep and goat met. Beef, offal)
- 10. Does the country penetrate new markets and able to expand its customer base?
- 11. If yes, which countries and for which products?
- 12. What are the major challenges including SPS issues hampering market expansion?
- 13. What are the necessary measures that have to be taken to address the challenges and enhance market access and meat export?

Animal Health Institute (former NAHDIC)

- 1. Overall impression of the project
- 2. What are the outcomes of the tasks you took from FAO under LoAs?
- 3. What are the follow-up activities needed to get the Kality lab accredited?
- 4. What are the follow-up activities needed to ensure full operationalization of LIMS and QMS in the regional and Kality labs?
- 5. What are the major challenges in introduction of LIMS and QMS in the three regional and Kality laboratory?
- 6. What are your suggestions and recommendations to alleviate these challenges?
- 7. Does AHI have the means and plan to sustain these interventions in regional labs and Kality lab?

Kality quality control laboratory

- 1. Overall impression of the project
- 2. What are the supports you received from the project?
- 3. Were the objectives of the trainings on QMS, LIMS and Analysis of antibiotics on food products met and was up to your expectations?
- 4. Do the trainings address your capacity development needs?
- 5. What was the feedback from the trainees?
- 6. Where do you stand in terms of introducing LIMS in the laboratory?
- 7. What are the challenges for operationalization of LIMS in the laboratory?
- 8. What the measures taken by the lab to address the challenges?
- 9. Where do you stand in terms of introducing QMS in the laboratory?
- 10. What are the challenges for operationalization of QMS in the laboratory?
- 11. What are the measures taken or need to be taken to address the challenges?
- 12. Where do you stand in getting the lab accredited?
- 13. What challenges did your institution face as you worked towards achieving accreditation?
- 14. Is the Residue Monitoring Plan developed through the support of the project approved by the government?
- 15. Is the RMP adopted and operational?
- 16. What are the activities performed in line with the RMP?

Regional laboratories (Jigjiga, Semera and Yabello)

- 1. Overall impression of the project
- 2. What are the supports you received from the project on LIMS and QMS?
- 3. Were the objectives of the trainings on QMS and LIMS met and was up to your expectations?
- 4. Do the trainings address your capacity development needs?
- 5. What was the feedback from the trainees?
- 6. Where do you stand in terms of introducing LIMS in the laboratory?
- 7. What are the challenges for operationalization of LIMS in the laboratory?
- 8. What the measures taken by the lab to address the challenges?
- 9. Where do you stand in terms of introducing QMS in the laboratory?
- 10. What are the challenges for operationalization of QMS in the laboratory?
- 11. What the measures taken by the lab to address the challenges?

For epidemiology desk, Ministry of Agriculture

- 1. Overall impression of the project
- 2. Were the objectives of the training on qualitative and quantitative risk analysis met and was up to your expectations?
- 3. Does the training address your capacity development needs?
- 4. What was the feedback from the trainees?
- 5. Have you established a risk analysis unit in epidemiology desk
- 6. If yes, who are the members and its professional mix?
- 7. What are the roles and responsibilities of the unit?
- 8. Is the unit operational and what have been done in terms of export and export risk assessment?
- 9. What are the challenges for effective functioning of the unit?
- 10. What has to be done to address these challenges

Regional organizations (IGAD/ICPALD, AU-IBAR)

- 1. What type of support are you proving to countries such as Ethiopia in areas of SPS and trade promotion?
- 2. Are these supports based on the needs and priorities of the country and complement with national initiatives?
- 3. What are the impacts of these supports on SPS compliance and market access?
- 4. What challenges did your institution face as you worked towards achieving SPS compliance and trade promotion in the region?
- 5. What are the measures you are taking to address these challenges?

No	Name	Role/Title	Organization/Department
1	Ayalew Shumet	Director of Export Abattoir Inspection and Certification Directorate	Ethiopian Agricultural
2	Gedeon Yilma	Senior expert	Ethiopian Agricultural Authority
3	Seifu Hailu Garedew	Director of Quarantine Import Export inspection and Certification Directorate	Ethiopian Agricultural Authority
4	Sentayehu Menda	Expert	UNIDO
5	Alemayehu Mekonen	Advisor for State Minister	Ministry of Agriculture
6	Amsalu Demissie	Consultant	FAO STDF consultant on reviewing SoPs
7	Belachew Tefera	Head, Quality Control Laboratory	Animal Products and Inputs Quality Testing Center, Ethiopian Agricultural Authority
8	Belachew Bacha	Physiochemical laboratory Director	Animal Products and Inputs Quality Testing Center, Ethiopian Agricultural Authority
9	Nardos Tefera	Microbiology Director	Animal Products and Inputs Quality Testing Center, Ethiopian Agricultural Authority
10	Binyam Mulugeta	Residue Team Leader	Animal Products and Inputs Quality Testing Center, Ethiopian Agricultural Authority
11	Zerihun Abegaz	Head, Quality Management	Animal Products and Inputs Quality Testing Center, Ethiopian Agricultural Authority
12	Getahun Bahiru	Epidemiology Desk Head	Ministry of Agriculture
13	Yesmashewa Wogayehu	Expert	DRIVE project, MoA
14	Abera kebede	Quality Control manager	Animal Health Institute
15	Takele Worku	Laboratory Information Management Desk Head	Animal Health Institute
16	Salim Hassen	ICT Executive	Animal Health Institute
17	Smauel Mulat	Expert	HEARD project, MoA

Annex 4- List of people interviewed

18	Ameha Sebsibe	Head Livestock and Fisheries	IGAD/ICPALD
19	Wubishet Zewdie	Executive lead, animal health and veterinary public health	Ministry of Agriculture
20	Kassaw Amsalu	Desk head, disease prevention and control desk	Ministry of Agriculture
21	Belete	Legal expert	Ministry of Agriculture
22	Gedlu Mekonen	Former project coordinator	former FAO Ethiopia consultant
23	Golo Debasso	Head, Yabello veterinary laboratory	Oromia Agricultural Bureau
24	Dawud yassin	Head, Semera veterinary laboratory	Afar Livestock, Agriculture and Natural Resource Development Bureau
25	Yahya Maidane	Head, Jigjiga veterinary laboratory	Somali Regional State Livestock, Crop & Rural Development Bureau
26	Hassan Chaka	Former project coordinator	former FAO Ethiopia consultant
27	Ercole Del Negro	ICT Engineer	IZSAM
28	Gashaw Beyene	Senior veterinarian	Epidemiology desk, MoA
29	Getachew Dinede	Research fellow	ILRI
30	Abebaw Mekonen	Secretary General	Ethiopian Meat Producers and Exporters Association