

UNDP Malawi

End of Project evaluation: “Development of a Robust Standardization, Quality Assurance, Accreditation and Metrology (SQAM) infrastructure project in Malawi”

Final Evaluation Report

Project Number 54110

September 2019

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List of Acronyms & Abbreviations

COMESA	Common Market for Eastern and Southern Africa
CTA	Chief Technical Advisor
EIF	Enhanced Integrated Framework
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
IAF	International Accreditation Forum
ILAC	International Laboratory Accreditation Cooperation
ISO	International Organization for Standardization
ITC	International Trade Centre
LDC	Least Developed Country
MATCB	Market Access and Trade Capacity Building support for Agro-industrial products
M&E	Monitoring and Evaluation
MBS	Malawi Bureau of Standards
MDG	Millennium Development Goal
MGDS	Malawi Growth and Development Strategy
MoITT	Ministry of Industry, Trade and Tourism, Malawi
MoAFS	Malawi Ministry of Agriculture, Food Security and Natural Resources
MSME	Micro, Small and Medium Size Enterprise
NASFAM	The National Smallholder Farmers' Association of Malawi
NMI	National Metrology Institute
NQP	National Quality Policy
NQS	National Quality Strategy
Norad	Norwegian Agency for Development Cooperation
NSB	National Standards Body
OIML	International Organization for Legal Metrology
PCU	Project Coordination Unit
SACU	Southern African Customs Union
SADC	Southern African Development Community
SADCA	SADC Cooperation in Accreditation
SADCAS	Southern African Development Community Accreditation Service
SADCMEL	SADC Cooperation on Legal Metrology
SADCMET	SADC Cooperation on Measurement Traceability
SADCSTAN	SADC Cooperation in Standardization
SC	Steering Committee
SMTQ	Standards, Metrology, Testing and Quality
SPS	Sanitary and PhytoSanitary
SQAM	Standardization, Quality Assurance, Accreditation and Metrology
STDF	Standards and Trade Development Facility
TBT	Technical Barriers to Trade
TCB	Trade Capacity Building
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization

1. EXECUTIVE SUMMARY

1. UNDP commissioned this end of project Evaluation to provide an independent assessment of the Development of a Robust Standardization, Quality Assurance, Accreditation and Metrology (SQAM) infrastructure project in Malawi, and help UNDP and UNIDO improve the performance and results of future programmes and projects.

1.1 Evaluation purpose and methodology

2. The purposes of this end of project Evaluation were to:
 - Determine the extent to which the outcome and outputs of the project have been achieved, and the potential impact the project has made on the targeted beneficiaries.
 - Assess the contribution of funders, implementing partners and responsible parties to the project outcome, and their cooperation and contributions towards success of the project.
 - Document the achievements, recommendations and lessons learnt from the project to inform future decisions in design, implementation and management of similar interventions.
3. The end of project Evaluation commenced in May 2019 with a team contracted by UNDP and led by International Evaluation Expert, Mr. Tom Pengelly, supported by regional expert, Mr. Paul Kalenga, and assisted by Ms. Claudia Scuriatti. The approach was based on application of the OECD-DAC+ evaluation criteria with reference to UNDP evaluation guidelines.
4. The main data-collection and analysis methods used for the Evaluation included the following:
 - A document and literature review.
 - Two country missions for on-site visits and interviews.
 - Telephone interviews with key stakeholders not based in Malawi.
 - Email surveys of SMEs & UNIDO experts.
 - Triangulation and synthesis of data collected to generate findings and conclusions.
5. The Evaluation Team was able to complete the Evaluation in line with its specified objectives, and there was generally a high level of information provided by UNDP, UNIDO and MBS, and very good co-operation with the Evaluation Team.

1.2 Findings and conclusions

6. **Relevance:** Overall, the SQAM project was strongly relevant and supportive of Malawi's national development policies and export development plans as well as the development strategies of UNDP and the EU in Malawi. At the multilateral level the project was very relevant to implementing Malawi's commitments under the WTO TBT and SPS agreements; whilst at the regional level the project complemented different initiatives among which the SADC SQAM programme. The Evaluation Team found that although the SQAM project design was very ambitious, the good level of consultation and co-operation between MBS, UNIDO and UNDP allowed for project management decisions to be tailored to beneficiaries needs throughout the project cycle, adapting the initial project design through the annual work plans to increase its relevance to current needs. Under Result 6, all beneficiary stakeholders (SMEs) surveyed or interviewed by the Evaluation Team found that the project was relevant to their business, with the potential to contribute to increased business opportunities and the reduction of costs of doing business related to conformity assessment and quality management/food safety management systems, through reducing the need for re-testing, re-inspection or re-certification abroad.

7. **Effectiveness:** The Evaluation Team found that the SQAM project has effectively improved the country's National Quality Infrastructure (NQI) in significant ways, even if the NQI upgrading can be regarded as "a work in progress" in some respects and Malawi was starting from a very low base. A National Quality Policy and National Quality Strategy are now in place, and so far, MBS has received two certifications of accreditation at ISO 17025 for laboratories and there is a common belief that further accreditations will be achieved in the near future. Today, MBS is more proactive and responsive in performing its functions with the information and notification requirements functions under the WTO TBT and SPS agreements. However, under Result 6, the level of achievement was moderately unsatisfactory, with some significant shortcomings related to limitations in the number of beneficiary SMEs who participated, as well as the gender and youth dimension. Overall, the combination of training activities and advisory support to increase knowledge and skills; procurement of modern laboratory equipment; physical infrastructure upgrading; and high-level political buy-in through the National Quality Policy and National Quality Strategy made a positive contribution to the overall effectiveness of the project. The main limitations to project effectiveness were the delays experienced during the implementation period and the weak design and performance of Result 6. The extended project implementation period was due to a number of factors, such as the first payment instalment to UNIDO being only received in June 2013, the late construction of the new MBS building and the late mobilization of the first CTA. These affected project delivery and adaptive measures had to be taken, notably the extension of the project implementation period.
8. **Efficiency:** Overall, the project was efficiently managed and coordinated by UNDP, UNIDO and MBS. Although they did not play an active role in project delivery, the EU and MoF also contributed to its efficient implementation through their timely investments and willingness to adjust the implementation timeframes when necessary. However, as noted above, several delays adversely affected efficient delivery of the project's activities. The Evaluation findings regarding project management were mixed. On one hand, the cumbersome financial management arrangements between UNDP and UNIDO, the adoption of three different CTAs during the project cycle and the short-term contracts of the UNIDO international experts compromised the efficiency of the project delivery somewhat by increasing transaction costs. On the other hand, the adaptive management of MBS, UNDP and UNIDO was a key element enabling the most efficient use of resources within the constraints. The ability to adapt to changing circumstances led to a positive result in this case, such as MBS gaining ISO 17025 accreditation from SADCAS for two of its laboratories even though construction of the new premises had not been completed. The Evaluation found that the quantity of resources was generally adequate, and procurement by UNIDO of equipment and technical advisory services demonstrated good value for money.
9. **Outcomes & Impact:** Overall the performance of the project at these levels was judged at this time to be moderately satisfactory, although there is considerable scope for improving these ratings in the short to medium term with relatively little additional effort or investment and with collection of better data from businesses in Malawi. The Evaluation Team found that there has been substantial progress and achievement at Intermediate Outcome level, even though in some Result Areas of the project, full completion of some activities is incomplete, and outputs as envisaged in the original project document have not been fully delivered as of June 2019. The Evaluation found that is too early to draw strong conclusions about the impact of the SQAM project on broader development objectives such as poverty reduction, employment, income generation and pro-poor private sector growth. Moreover, the lack of baseline or reporting data at Impact-level amounts to a significant challenge for measuring project impacts and the cohort of businesses actively participating in the project was far too small for extrapolating sound conclusions about economy-wide effects. However, efforts can be made to identify the types of potential impacts the project might take on target beneficiaries and what progress there has been toward realising them, among which:
- MBS laboratory accreditation for the testing of aflatoxin could contribute significantly to ensuring Malawi exports of groundnuts enjoy continued access to more lucrative markets for instance, in EU and South Africa.

- Improved metrology services at MBS are likely to convey tangible positive economic impacts through improving the business climate. For instance, the new mobile weighbridge could help speed up trade and ensure correct quantities are sold and purchased.
 - Four SMEs in Malawi have obtained international quality management systems certification (ISO 9001) and three have reached the final stage of ISO 22000 certification, with potential direct effects on productivity and trade performance through efficiency gains (considerable time and cost savings) and quality signalling.
10. **Sustainability:** The National Quality Policy and National Quality Strategy in conjunction with the Metrology Law have created a strong institutional backdrop for continued strengthening of the NQI in Malawi. However, the sustainability of these outcomes is strictly dependent on the commitment of the Government of Malawi to implement the NQP, NQS and related legislation. The Evaluation Team found that although the SQAM project has delivered a good standard of capacity building activities in terms of upgrading services at MBS, there is also an awareness amongst MBS staff that maintaining these service levels will entail additional costs that will fall to MBS to cover from now on, and that this does present risks that need to be addressed and managed. Overall, the Evaluation found that the level of achievement in terms of sustainability of the project was moderately satisfactory. The MBS sustainability plan has been developed; MBS has built up a relatively strong position in terms of human resources and financial reserves to sustain the improved services developed as a result of the project; and most of the enterprises who participated in Result 6 have put in place mechanisms to institutionalise improved quality management systems, with some shortcomings related to resource availability.
11. **Cross Cutting issues:** The Evaluation Team found that the project's performance was mixed regarding cross cutting issues such as gender equality, human rights and good governance. On the one hand, the SQAM project has positively contributed to good governance in Malawi. The improved NQI is already improving the daily lives of Malawian citizens and businesses in terms of enhancing transparency, certainty and fairness in trade and commerce through a more accurate and efficient metrology infrastructure. On the other hand, however, limited attention was paid to the gender dimension of the project. Whilst Result 6 mentioned women and youth as target beneficiaries of the activities planned, in the end their participation was minimal. No gender expertise was engaged by UNDP–UNIDO in designing and delivering the project, and no gender-specific indicators were listed in the project's logical framework. An in-depth needs assessment along with a defined gender strategy would have been beneficial to promote women's involvement in the project.

1.3 Lessons Learned

12. **Lesson #1:** For large scale SQAM projects which involve substantial investment in laboratory equipment, undertaking national market and laboratory surveys prior to finalizing procurement plans (as was done successfully by this project) is essential for ensuring value for money and tailoring purchasing of equipment to best meet current and expected needs. The market survey on the demand for testing and calibration services and the mapping of the laboratory landscape in Malawi were crucial to determine accurately the requirement for upgrading SQAM services and laboratories. Such surveys also provide an excellent foundation for wider stakeholder engagement in NQI upgrading projects, including identification and sensitization of new beneficiaries (for example, quality managers in laboratories which are outside the project scope but may still be able to benefit from technical skills training offered).
13. **Lesson #2:** Upgrading SME capacities at scale (and measuring the costs and benefits of such upgrading) is a very challenging area for SQAM projects to get right in low income developing countries, often working in isolation. At the same time, this is an area of potentially greatest development impact. Development Partners such as UNIDO and the World Bank should invest in gathering best-practices and development of practitioner toolkits for most-effective models of SME capacity building for future SQAM projects in low income developing countries.

14. **Lesson #3:** Automation of business services in NQI institutions in low-income developing countries can be highly valuable in increasing productivity and efficiency but requires very careful planning and management to align with the target institution capacities and experience. In particular, adoption and implementation of institution-wide ERM systems can overwhelm small and inexperienced management teams and is best done module-by-module as far as possible, with testing, de-bugging and user training completed on one module before implementation of another module is attempted.
15. **Lesson #4:** In designing, implementing and sustaining large scale, long-term SQAM projects, combining international-national capacities through partnerships is likely to generate the best results and value for money. Examples here include (i) the joint responsibility and accountability of national agencies and international development partners for project design management, procurement and MEL; and (ii) combining international and national technical experts in quality management and food safety, where the former is best-placed to bring wider global industry expertise and experience, and the latter is best-placed to provide continuing on-the-ground support to SMEs and local firms cost-effectively.

1.4 Recommendations

16. **Recommendation #1:** MBS, MoITT, and MoF should agree a solution to the financing of the required customized air-conditioning for the new MBS HQ and complete the construction and furnishing of the building as soon as possible. MBS should provide regular updates (publishing news items 3-4 times per month) on the progress with completion of the new HQ, and what facilities it will offer, to its stakeholders in government, business, and development partners via social media channels, and should design and carry out a marketing campaign on the new HQ.
17. **Recommendation #2:** As new staff are hired and laboratories are moved to the new HQ building, MBS and MoITT, as its supervisory ministry, should carefully monitor the implementation and performance of the sustainability plans prepared by MBS. Until December 2021, MBS should provide 6 monthly update reports on the performance of the sustainability plans to MoITT and copy these to the EC Delegation in Malawi, UNDP Malawi and UNIDO as its partners in the Malawi SQAM project. MBS should also look to collect and analyse data on the impact of its improved services and infrastructure for businesses and consumers in Malawi over time.
18. **Recommendation #3:** Looking forward beyond the move to the new HQ building in 2020, MBS should collaborate with MoITT and its Development Partners to develop a new 5 year programme focused on increasing awareness, knowledge and utilisation of the upgraded NQI in Malawi with the private sector, industry associations, academia and consumers in the country as part of implementing the NQS. A key element of this programme should be supporting businesses and exporters in Malawi to upgrade the quality and safety of production at enterprise level, utilising MBS services for calibration, testing, quality assurance and conformity assessment. To encourage women's participation a gender and social inclusion strategy should be designed and implemented as part of this new programme, including gender-disaggregated monitoring.
19. **Recommendation #4:** To encourage women's participation a GESI (gender and social inclusion) specific strategy should be designed and implemented, including gender-disaggregated monitoring. A specific gender expertise should be consulted by UNDP–UNIDO during the design and implementation of the project. Moreover, gender-specific indicators should be listed in the project's logical framework as well as an in-depth needs assessment should be carried out.
20. **Recommendation #5:** Again, once the new MBS HQ building is completed and occupied in 2020, MBS, MoITT and other ministries and agencies, should come together to take-stock of progress with the implementation of the NQS, and develop detailed action plans and accountabilities for other outstanding priority areas, including the proposed institutional reforms at MBS (separation of functions). Development Partners should stand ready to continue to provide necessary financial and technical support for the implementation of the NQS over the medium term, and encourage the Government of Malawi to follow through the whole-of-government approach to SQAM (as an example, building capacity at MBS to offer internationally

accredited ISO 9001 conformity assessment services + supporting Malawian businesses to work towards and achieve ISO 9001 certification + updating government procurement policy to phase in a requirement for vendors to have ISO 9001 certification in place).

21. **Recommendation #6:** Future programmes should pay more attention to efficiency issues through improved design and avoiding implementation delays since some results took considerably longer to accomplish than initially expected. A stronger focus during project inception and implementation should be on ensuring suitable SMART indicators are in place across all levels of the project results framework, including outcome and impact levels, and establishing appropriate baselines and monitoring data collection protocols.
22. **Recommendation #7:** On sustainability, whilst the level of achievement was moderately satisfactory, it is recommended that this should go beyond resource mobilisation targeting development partners. Sustainability of project outcomes will depend on the commitment of the Government of Malawi to implement the NQP, NQS and related legislation as well as towards increasing demands for MBS services from local industries, research and related users. Cross-cutting issues such as gender and youth should also be enhanced in the development of a sustainable national quality infrastructure in Malawi.

1.5 Project ratings

	Evaluation criteria	Rating
A	Impact (or progress toward impact)	4
B	Project design	4
	Overall design	4
	Logframe	4
C	Project performance	5
	Relevance	5
	Effectiveness	4
	Efficiency	3
	Sustainability of benefits	4
D	Cross-cutting performance criteria	4
	Gender mainstreaming	1
	M&E <ul style="list-style-type: none"> • M&E design • M&E implementation 	3
	Results-based management (RBM)	4
E	Performance of partners	5
	UNDP/UNIDO	5
	National counterparts	5

	Donor	5
F	Overall assessment	4

Score		Definition	Category
6	Highly satisfactory	Level of achievement clearly exceeds expectations and there is no shortcoming.	SATISFACTORY
5	Satisfactory	Level of achievement meets expectations (indicatively, over 80-95 per cent) and there is no or minor shortcoming.	
4	Moderately satisfactory	Level of achievement more or less meets expectations (indicatively, 60 to 80 per cent) and there are some shortcomings.	
3	Moderately unsatisfactory	Level of achievement is somewhat lower than expected (indicatively, less than 60 per cent) and there are significant shortcomings.	UNSATISFACTORY
2	Unsatisfactory	Level of achievement is substantially lower than expected and there are major shortcomings.	
1	Highly unsatisfactory	Level of achievement is negligible and there are severe shortcomings.	

2. DESCRIPTION OF THE SQAM PROJECT

2.1 The context

23. Malawi is a landlocked densely populated country that faces internal and external barriers that prevent it from benefitting from the international trade system. Due to poor infrastructure, weak regulatory infrastructure and limited capacities at firm-level to tap export opportunities, Malawi's standardization, quality assurance, accreditation and metrology infrastructure has been regarded as inadequate. Moreover, Malawi is a member of the WTO and signatory of a number of bilateral trade agreements, such as the SADC trade protocol, COMESA, the Malawi–South Africa bilateral agreement, Malawi–Zimbabwe bilateral agreement and the US-AGOA initiative. The country's commitment to many different trading regimes agendas and rules results in a very complex trade regime that challenges Malawi's trade expansion.
24. The Malawi Bureau of Standards (MBS) is the national enquiry point required by the World Trade Organization (WTO) under the Agreement on Technical Barriers to Trade. The MBS is a parastatal Institution and it's divided into four technical departments namely Standards Development, Quality Assurance Services, Technical/Testing Services and Metrology Services. The main duty of the MBS is to set and implement standards as well as to conduct conformity tests on imports and exports. However, certificates from MBS are only accepted in the region and exporters face high costs to obtain certification overseas.

2.2 Project origination, timeline and design

25. Against this background, the SQAM project aimed at improving the ability to export goods from Malawi by reducing the need for re-testing, re-inspection, and re-certification abroad through acceptance of the measurements, tests, and conformity assessment results issued in Malawi.
26. The implementation of the project started in 2012 and ended in December 2018 with an intention of achieving internationally recognized accreditation of the conformity assessment services of the MBS, contributing to an efficient and adequate National Quality Infrastructure (NQI) in Malawi by 2018. This was to have direct benefits for Malawian enterprises, and indirect, long-term benefits for Malawian citizens in terms of improved protection of consumer rights and safety (see Box 1).

Box 1. SQAM project objectives

- Equip the Malawi Bureau of Standards with the critical soft and hard assets needed to fully execute its mandate.
- Improve systematic accessibility to all aspects related to Technical Regulations and associated enforcement institutions.
- Achieve international recognition of national certificates of conformity for product and management systems standards.
- Support SMEs to implement quality management systems and build capacity for export in enterprises that grow and process agricultural products for which the practice of HACCP and ISO 22000 standards will be a great asset for its competitiveness in doing business with customers abroad.

Source: SQAM Project Support Document signed 2012

27. The SQAM project was supported with external funding by the European Union (EU) and United Nations Development Programme (UNDP). The project was financed by the EU to the amount of EUR 3,912,620 (equivalent to 5,162 310 USD) and UNDP allocated its own resources to the amount of USD 500,769 USD. In addition, the Government of Malawi contributed USD 7,200,000 for the construction of the new HQ for the Malawi Bureau of Standards (MBS). The project was implemented by MBS and the EU support was delivered by the UNDP together with the United Nations Industrial Development Organisation (UNIDO) as the technical partner, according to the Contribution Agreement signed in 2012.
28. The project was conceived alongside the UNIDO/NORAD Market Access and Trade Capacity Building support for Agro-industrial products (MATCB) project. The SQAM project put emphasis on export led economic growth is fully aligned to the Malawi Growth and Development Strategy II (MGDS II) as well as outcomes in the United Nations Development Assistance Framework (UNDAF) 2012-2016. Considering the SQAM project's overall objective, the project was intended to contribute to poverty reduction through the achievement of UNDAF Outcome 1.2 "Women, youth, people with disability and households benefit from decent employment, income generation and pro-poor private sector growth by 2016" and UNDAF Output 1.2.2 that aims at contributing to improving access to markets, both international and regional.

Box 2. SQAM project result areas

1. Strengthened capacity of the Malawi Bureau of Standards to deliver business services and to achieve financial sustainability.
2. Technical Regulations reviewed to promote efficient, effective and accountable delivery of information in accordance with SQAM legislation and regulations.
3. Structurally enhanced capacity of the Malawi Bureau of Standards for conformity assessment services.
4. Strengthened, proactive and responsive National Enquiry Points (NEP) to the information and notification requirements of WTO/TBT/SPS agreements.
5. Sanitary and Phytosanitary (SPS) infrastructure improved and mainstreamed into National policies.
6. Capacity of Small and Medium sized Enterprises (SME), and particularly women and youth led enterprises, strengthened to comply with quality requirements.
7. MBS compliant with International Regulations established.

Source: SQAM Project Support Document signed 2012

29. Following UNDP procedures, the selected National Implementing Partner (IP) was the MBS and it was responsible for the project implementation during the entire project life cycle and across the different Result Areas of the project (see Box 2), with technical support from UNIDO and project management support (e.g. in financial reporting and some types of procurement) from UNDP.
30. A Project Steering committee with key stakeholders of the SQAM project was set up to meet four times a year and undertake the following tasks:
 1. Discuss, assess, advise, validate and oversee the overall strategy, management and implementation of the various project activities;
 2. Provide policy guidance;
 3. Review, approve and endorse all Reports and Annual Workplans (AWPs).

2.2.1 Mid-Term Review

31. In April 2015, the Mid Term Evaluation (MTE) of the EU-GoM Capacity Building Programme towards Trade and PSD was carried out by the EU and included the SQAM Project as Component 2. The MTE expressed concerns regarding delays in the project implementation and recommended an extension of the implementation period, as well as streamlining of project management capacity and efficiency (see Box 3).

Box 3. Summary of recommendations from the 2015 SQAM Project Mid-Term Evaluation

1. Increasing the commitment and project management capacity of MBS
2. UNDP–UNIDO to clarify and streamline financial management issues
3. Construction of (new) MBS Building
4. Grant an extension to the project implementation period.
5. Streamlining current work-plan / consideration of a “Phase II”
6. Sufficient space for wider Involvement of other donors, international and bilateral organizations through joint programming and planning to make more effective use of financial and human resources.

Source: Mid - Term Evaluation of the EU-GoM Capacity Building programme towards Trade and PSD

2.3 Scope & objectives of the evaluation

32. The purpose of the end of the project Evaluation is, according to the Terms of Reference (ToR), to assess the effectiveness of the intervention in terms of the five standard evaluation criteria of OECD/DAC, to determine its relevance, effectiveness, impact, efficiency and sustainability. The scope of the evaluation will encompass all the activities and design of the project.
33. The Evaluation Team assessed the progress made towards achieving the outcome and outputs and what can be derived in terms of good practices, lessons learned and recommendations for future interventions and support together with other development partners, in the field of National Quality Infrastructure. Furthermore, progress and contributions to gender equality, women’s empowerment and other cross-cutting issues were assessed by analysing impacts and outcomes in the context of human rights, gender and social inclusion and by adding equity considerations into evaluation criteria and questions.

3. METHODOLOGY

34. The end of project Evaluation commenced in May 2019 with a team contracted by UNDP and led by International Evaluation Expert, Mr. Tom Pengelly, supported by regional expert Mr. Paul Kalenga and assisted by Ms. Claudia Scuriatti. The approach was based on OECD-DAC+ evaluation criteria, with reference to UNDP's own Evaluation Policy and a mixed-methods approach was used, incorporating the following main data-collection methods:
- **Document Review.** The Evaluation Team analysed the documents and data available for the scope of the Evaluation (see Annex 6), and compiled a Stakeholder Mapping (see Annex 4).
 - **Country visits.** Two field missions were undertaken to evaluate SQAM project. One during the Inception phase and the second mission during the data gathering phase. For the Inception mission, meetings in Lilongwe and Blantyre were scheduled with the support of the UNDP to meet SQAM key stakeholders and to carry out in depth interviews and analysis of project activities. For the programme of meetings during the Inception Mission, see Annex 3a. On the second field mission, during the data gathering phase, the Evaluation Team organised meetings both in Lilongwe and Blantyre with key stakeholders of SQAM project, among which: MBS staff, EU delegation in Malawi, UNDP, and SMEs. 18 Face to face interviews were carried out. A semi-structured questionnaire was used as instrument for the stakeholder interviews. See Annex 3b for the agenda of Mission 2.
 - **Telephone interviews.** Phone/Skype interviews were scheduled with the former CTA and key stakeholders that contributed to the SQAM project, in order to gain a richer understanding of how the project was designed and implemented, any issues in implementation and to gain any additional evidence of impact beyond what is available in written evidence. Five telephone interviews were undertaken by the Evaluation Team. See Annex 5 for the phone interviews conducted.
 - **SMEs & UNIDO technical experts' surveys.** Surveys were designed to get feedback from specific SQAM project stakeholder groups, namely the SME cohort and the UNIDO technical experts. In terms of sample, the Evaluation Team contacted the list of all UNIDO experts provided by UNIDO and the list of SMEs involved provided by UNDP. We received 9 responses from the UNIDO technical surveys and 5 responses from the SMEs survey. Please see Annex 8 for the list of people contacted and responses.
35. During the Inception Phase, the Evaluation Team drafted questionnaires on which stakeholder interviews and surveys were based and these are included in Annex 7.
36. The findings from the above-mentioned data collection instruments were synthesized and triangulated by the Evaluation Team following the completion of the second field mission.

3.1 Evaluability assessment

37. During the Inception Phase, the Evaluation Team conducted an evaluability assessment. The purpose of an evaluability assessment is to examine the evaluability of the SQAM project's interventions and the systems in place that manage it. The structure used is a condensed version of the framework proposed by Rick Davies.¹
38. The evaluability assessment showed that there is a wealth of data on the content, reach, quality and stakeholder feed-back in relation to the SQAM project's activities and outputs, and that it

¹ See Davies, R. 2013. Planning evaluability assessments: a synthesis of the literature with recommendations. Working Paper, 40. London: DFID.

was feasible to conduct the Evaluation in line with the Terms of Reference. The full Evaluability Assessment can be found at Section 2.1 of the Evaluation Team's Inception Report.

3.2 Reconstructing a Theory of Change for the evaluation

39. During the Inception Phase of the Evaluation, the Evaluation Team found that no Theory of Change had been prepared during the design or implementation of the SQAM project. Accordingly, the Evaluation Team reconstructed the project's Theory of Change (ToC) by reviewing the main documents provided and by undertaking telephone interviews from UNDP, UNIDO and the former CTAs.
40. The ToC is provided in Annex 2 and it traces the many steps involved in linking the SQAM project's outputs to higher outcomes and overall impact. It also considers the assumptions, as reported in the project's Log Frame, that are necessary in order to achieve the expected changes envisaged in the project's results chain.

3.3 Evaluation matrix

41. The Evaluation Matrix is a core tool for our Evaluation Team, laying out the evaluation questions and methods by which the Evaluation Team will seek to address these questions. The matrix is based on the evaluation questions listed in the Terms of Reference, developed from OECD-DACs criteria of Relevance, Effectiveness, Efficiency, Impact and Sustainability. Cross-cutting issues such as poverty, gender and environment dimensions, are also taken into consideration.
42. During the Inception Phase, the Evaluation Team prepared an Evaluation Matrix and this acted as the analytical 'spine' of the evaluation to ensure the evaluation was rigorous, transparent and verifiable in its approach. The Evaluation Matrix is provided in Annex 1, detailing the evaluation questions, indicators, main data collection activities and main data availability.

3.4 Ethical considerations

43. The Evaluation Team acknowledges the UNEG Ethical Guidelines for Evaluation. During all the stages of the Evaluation we considered the ethical participation of human participants, including children and other vulnerable groups.
44. We conducted a risk assessment during the Inception Phase. During the Evaluation exercise, all participants were fully informed about the purpose of the Evaluation, their requested involvement and only participants that had given their consent were included in the Evaluation.
45. Our data collection instruments were designed to be culturally appropriate, and we ensured that interviews were conducted at appropriate locations and times that did not present risks to respondents.

3.5 Limitations

46. During the Evaluation, the main limitations experienced were in terms of availability of informants for interview, response rates to the two surveys, access to some project reporting documentation (notably the Final Report, which was only received on the 28th June 2019), and gender-disaggregated data for training activities (these were eventually submitted on the 28th June 2019). The Evaluation Team tried to schedule interviews with representatives of the SADC and COMESA secretariats, however no responses have been received so far.
47. Given that the project has only been completed relatively recently (and the new MBS HQ building is not finished at this stage), there were also some limitations for the Evaluation Team in terms of availability of evidence for generating findings for the sustainability and impact criteria. In addition, there was very little reporting by the project management team of outcome-level performance against the project's logical framework: neither the UNDP Final Project Report (February 2019)

or the UNIDO Project Final Report (June 2019) discuss or cover outcome-level or impact-level performance explicitly against the indicators in the project's logical framework.

48. The Evaluation Team recognised that different terminology between UNDP, UNIDO and the EU has been adopted throughout the project cycle. For the purpose of this Evaluation, we have agreed with the UNDP to adopt the terminology used in the agreement signed between the EU and UNDP in 2012.

4. FINDINGS

4.1 Relevance

49. The Evaluation Questions under the Relevance criteria were as follows:
- *Whether the problem the project addressed was clearly identified and the approach soundly conceived?*
 - *Whether the project was relevant to the development priorities of the country and fostering inclusive and sustainable economic growth in Malawi?*
 - *Did the design of the project adequately take into account scaling up and sustainability?*
 - *Whether the outcome and outputs of the project were stated explicitly and precisely in verifiable terms with SMART indicators*
 - *Whether the relationship between outcome, outputs, activities and inputs of the project are logically articulated and relevant to address the problem addressed in the project?*
 - *Whether the target beneficiaries of the project were clearly identified?*
 - *The quality of the participatory needs' assessment with intended partners and target beneficiaries prior to the development of the project.*
50. At the time of project identification and design, there was a compelling need to strengthen the National Quality Infrastructure (NQI) in Malawi, since the country's services and facilities for standardization, quality assurance, accreditation and metrology were inadequate for the needs of local business and not able to support national objectives for industrialization, export development and consumer protection. No laboratories of any kind were internationally accredited in Malawi. Malawian firms were facing internal and external barriers to profit from international trade due to the need for conformity assessment of products and calibration of equipment abroad to access international markets. In addition, there was a general lack of transparency and information for national firms and trading partners about technical regulations, which meant that Malawi was not compliant with its obligations under the WTO Agreements on SPS/TBT.
51. The SQAM project fitted well into the MGDS II that prioritised export-led economic growth and into Malawi's National Export Strategy (NES) 2013-2018. Also, one of the objectives of MGDS II is poverty reduction and the SQAM project aimed to contribute to poverty reduction through the achievement of UNDAF Outcome 1.2 "Women, youth, people with disability and households benefit from decent employment, income generation and pro-poor private sector growth by 2016" under Theme 1 "Sustainable and equitable economic growth and food security. The National Quality Policy (approved in 2013) and the National Quality strategy (approved in 2016) paved the way for the Government of Malawi to promote a sustainable industrial modernization process that is expected to contribute to an increase in Malawian exports, and that will support the overall socioeconomic development of the country.
52. In addition, the SQAM project complemented regional initiatives such as the SADC Standardisation, Quality Assurance, Accreditation and Metrology (SQAM) Programme; SADC Industrialisation Strategy and Roadmap (2015–2020) and SADC Industrial Upgrading and Modernisation Programme (IUMP), as well as the COMESA Strategic Plan for Standardization

and Quality Assurance (SQA), as it sought to provide support *inter alia* to selected SMEs to obtain ISO 9001 and 22000 certifications

53. The project objectives were designed in consultation between UNDP, UNIDO and MBS and SQAM's key stakeholders were highly committed to the project during the implementation period. Interviewees from MBS reported consistently to the Evaluation Team how they had been closely involved in project design, and that this continued in the formulation of annual workplans during the implementation period.
54. The SQAM project's Logical Framework explicitly pointed out the objectives, outcomes and outputs of the projects and the activities planned to achieve them. Annual work plans that specify the main activities and budget planned for each year were diligently submitted together with annual progress reports. These documents were frequently consulted by the Evaluation Team to track the interventions and understand the rationale between activities conceived and output expected. However, no Theory of Change was prepared during the design or early implementation stages to examine or stress-test the causal chains between project interventions, external assumptions and the various expected results.
55. The Evaluation Team identified some inconsistency between the indicators listed in the original project Logical Framework at the design stage and those that were actually used for project reporting during the implementation period. As mentioned in the evaluability assessment, some indicators listed in the project Logical Framework were not precisely measurable according to the SMART criteria. Eventually, analysing the UNIDO Final Report for the SQAM project (June 2019), the Evaluation Team concluded that the choice of some monitoring indicators by the project team was tailored to the scope of the project during the implementation period in an *ad hoc* but pragmatic manner (no formal revisions to the project Logical Framework were recorded).
56. From the document review and interviews conducted, the Evaluation Team found that the SQAM's project design was quite broad with a lot of components and wide range of demanding and complex activities to implement simultaneously in a limited timeframe (for example, the construction of new premises for MBS as well as upgrading laboratories and quality management systems to internationally accredited standard). The overall project objective was challenging to achieve and manage in an LDC like Malawi, and some interviewees argued that timeframes were too short given that MBS staff were still required to undertake business-as-usual-service delivery in addition to their SQAM project implementation duties. Despite the ambition of the overall SQAM project's objectives, the relationship between project outcome, outputs, activities and inputs was logically articulated and relevant to address the problems identified.
57. The project design addressed the needs and priorities of beneficiaries to a great extent and the target beneficiaries of SQAM project were also clearly identified. MBS was the main beneficiary along with Malawian enterprises. In the long run, Malawian consumers will benefit from a robust national quality infrastructure by increasing protection of consumer rights and fair trade. In particular, considering the past groundnut aflatoxin contamination in Malawi and Zambia, the MBS aflatoxin testing laboratory accreditation issued in late 2018 can be seen to be very relevant towards the goal of improving food safety for consumers. Finally, Malawi's trading partners, in the region and further afield, would also benefit from the greater transparency on Malawi's SPS and TBT regimes provided through the improved operation of the National Enquiry Point and timely, comprehensive notification of measures to the WTO.
58. The quality of the participatory need's assessment prior to the development of the project added significant value to project implementation. Moreover, the market survey on the demand for testing and calibration services and the mapping of the laboratory landscape in Malawi were crucial to determine accurately the requirement for upgrading SQAM services and laboratories. These activities helped to set up the right foundation for the project, avoiding time and financial waste, and increasing value for money significantly in procurement of laboratory equipment.

4.2 Effectiveness

59. The Evaluation Questions under the Effectiveness criteria were as follows:

- *Whether the management arrangements of the project were appropriate and analyze the institutional arrangements put in place, including coordination arrangements, financing arrangements and actual implementation?*
- *What major factors affected project delivery and were appropriate interventions taken to address them, and how might these factors be incorporated into any planned interventions in support of NQI in future?*
- *Assess the responsiveness of project management to significant changes in the environment in which the programme functioned (did these facilitate or impede project implementation)?*
- *Determine whether or not lessons learnt from other relevant programmes/projects were incorporated into the project?*
- *To what extent did the project prioritize gender equality in its implementation? To what extent are both women and men accessing the benefits/results of the project?*
- *Assess effectiveness of monitoring and technical support of the programme as expected by the Government, UNDP, EU, and UNIDO.*
- *What are the major achievements of the project vis-à-vis its outputs, performance indicators and targets? Did the project meet the success criteria as outlined in the project document?*
- *Whether there is evidence of UN's contribution (alone and with the financial support from the EU) to the outcome of the project? The effectiveness of the UNDP Country Office and its impact (positive and negative) on project delivery?*
- *Given the capacity building objectives of the project, how effective were the project's capacity building interventions?*
- *The effectiveness of the project's collaboration with the public and private sector.*

60. This section of the Evaluation Report reviews the performance of the project activities and accomplishment towards the respective Outputs. It draws mainly on the telephone and field interviews as well as on the UNDP Final Progress Report, the UNIDO Final Report and the MBS Sustainability Plan.

4.2.1 **Result 1:**² **Increased efficiency and sustainability of the Malawi Bureau of Standards.**

61. Activities under this result area focused primarily on building the delivery capacity of MBS and aimed at reviewing its internal organisation, training MBS staff, operationalizing the National Quality Policy (NQP), setting up a marketing unit within MBS and conducting a market survey to determine the demand for MBS services. This Result area was the second largest in terms of resource allocation, with an initial allocation of 11% of the overall project budget (inclusive of direct and indirect costs), although this was subsequently revised slightly downwards (see Table 1 in Section 4.3 below). Triangulating the evidence from across the evaluation data instruments, the Evaluation Team found that the activities and objectives under this Result were achieved, except the MBS Enterprise Resource Planning activity. Overall, there has been a significant and marked increase in the efficiency and sustainability of MBS, although there is considerable room for improvement and even greater gains could have been made by MBS if all of the activities

² **Output 1:** Strengthened capacity of the MBS to deliver business services and to achieve financial sustainability. (UNIDO SQAM Final Report June 2019)

under Result 1 had been fully implemented. Equally, there are good prospects for some of these potential gains to be realized in the future if MBS follows-through with continued implementation of outstanding activities (such as the full operationalizing of the MBS Enterprise Resource Planning solution procured under Activity 1.2).

62. Activity 1.1 (National Quality Policy) was effectively and successfully carried out. The Evaluation Team's document review demonstrated that the NQP was successfully approved by the Cabinet of the Government of Malawi in 2013 and the National Quality Strategy (NQS) – the implementation plan for delivering the NQP – was developed and launched in 2016 by the Ministry of Industry, Trade and Tourism (MoITT). This represented a very good accomplishment for the SQAM project at the national policy level in Malawi, and was an important foundational step in building a well-organized and motivated SQAM stakeholder community across government and outside.
63. The Evaluation Team found that Activity 1.2 (the review and set-up of organizational structures, service delivery procedures and knowledge management within MBS) was implemented, with the exception of the ERP. The Evaluation Team's interviews with MBS staff reported that a significant re-organisation within MBS had happened as a result of the project. However, this activity also included the wholesale automation of MBS business process via an Enterprise Resource Planning (ERP) solution, and this has only been partially implemented to date (MBS staff reported that only one of six ERP modules had been fully implemented to date although work was continuing to finalize and launch the remaining modules).
64. As noted in the Section 4.1, the Activity 1.3 (market survey on the demand for testing and calibration in Malawi) was successfully implemented and added concrete value to other components of the project by identifying the priorities in terms of requirements for upgrading MBS testing, conformity assessment and calibration services. Activity 1.4 (preparation of a business plan and monitoring system for MBS) was partially implemented. The Evaluation Team's document review showed that the new MBS Strategic Plan (2017-2022) was formulated based on the recommendations of the international expert provided under the SQAM project and it was launched in November 2018. However no evidence was provided to the Evaluation Team that the updated MBS corporate monitoring system had been established and was operational as of June 2019.
65. Activity 1.5 (development of a "marketing unit" within MBS) has not completed yet. According to the Evaluation Team's document review, an international expert provided by the SAQM project undertook a mission to MBS and recommended the establishment of a new marketing unit. However the UNIDO SQAM Project Final Report and telephone interviews by the Evaluation Team confirmed that the Marketing Specialist to develop the MBS Marketing and Communication Strategy has yet to be recruited. MBS may also be constrained in recruiting staff for a new marketing due to lack of physical office space until its new HQ premises are completed.
66. Activity 1.6 (enhancement and updating of the MBS website) was successfully implemented. The Evaluation Team explored the new MBS website and found it to be of good quality with a high standard of content, presentation and navigation. The updated MBS website can be publicly accessed at www.mbsmw.org.
67. The Evaluation Team found that Activity 1.7 (preparation and implementation of a "training plan" for MBS") was successfully implemented, with the following trainings successfully planned, organized and delivered
 - Seven out-of-country training courses for the Testing Service Department
 - Three out-of-country training courses and one study tour for the Metrology Service Department
 - Six in-country training courses were sub-contracted to BSI Group in 2015.
68. The Evaluation Team's in-field interviews with MBS staff highlighted that training activities provided under the SQAM project were a crucial element for the overall effectiveness of the

investments in the capacity building of MBS. In particular, out-of-country training and study tours often had a significant impact on MBS staff, radically shifting their expectations in terms of establishing and operating international standard quality management systems and facilities at MBS laboratories.

4.2.2 Result 2:³ Better technical regulations - Support to the review and development of technical regulations.

69. Result 2 was a relatively small component of the project in terms of its share of the overall project budget and resources, with an initial allocation of just over 2% of the overall project budget (inclusive of direct and indirect costs), although this was subsequently revised slightly downwards (see Table 1 in Section 4.3 below). Activities under this component focused on existing technical regulations and aimed at raising awareness in Malawi about the importance of the OECD "Better Regulation" initiative. Overall, the Evaluation Team found that the effectiveness of Result 2 was mixed. From reviewing the international expert's mission report and from our field mission interviews, the Evaluation team found that Activity 2.1 (Documentary and field survey of the Malawian situation with regards to technical regulations and enforcement) was undertaken effectively together with Activity 2.2 (Awareness campaigns and training on "Better regulation") and Activity 2.3 (Data gathering on technical regulations, analysis and consolidation).
70. However, the Evaluation Team found that Activity 2.4 (Preparation of a strategy and a plan for the institutionalization of "Better Regulation" in Malawi) has not been fully implemented yet as at this stage, the plan has not been finalized. From one interview at MBS, it was suggested that the MBS was the lead executing institution for Result 2, however, considering the specificity of the topic it would have been preferable if another Government Ministry was also involved, namely the Ministry of Justice. A further issue reported from field mission interviews under this Result Area was that activities were not executed in the sequence planned at the project design stage and that this created some confusion during the implementation stage.

4.2.3 Result 3:⁴ Enhancement of the Malawi Bureau of Standards capacity

71. This Result area was by far the largest in terms of resource allocation, with an initial allocation of 44% of the overall project budget (inclusive of direct and indirect costs), although this was subsequently revised upwards (see Table 1 in Section 4.3 below). The activities under this component were mainly focused on upgrading the facilities, equipment and quality management systems (and human resources) to facilitate the ability of MBS conformity assessment services and laboratories to achieve the ultimate goal of being the first in Malawi to gain an internationally recognized accreditation. Whilst overall the achievements in this Result Area were not fully achieved by the end of the project, the Evaluation Team noted that by June 2019 the MBS had received accreditation certificates for two of its laboratory services in ISO 17025 and this was a very significant accomplishment. Moreover, based on the field visits, interviews and document review, the Evaluation Team supports the view that, thanks to the capacity building achieved under this Result area of the SQAM project, MBS is very well-placed to gain accreditation for additional services in the future.⁵

³ Output 2: Technical Regulations reviewed to promote efficient, effective and accountable delivery of information in accordance with SQAM legislation and regulations UNIDO SQAM Final Report 2019

⁴ Output 3: Structurally enhanced capacity of the MBS for conformity assessment services. UNIDO SQAM Final Report 2019

⁵ The Evaluation Team was informed by UNIDO via email on 23rd August 2019 that MBS had just received a certificate of accreditation from SADCAS for a third laboratory service (potable water) to ISO 17025.

72. Activity 3.1a (Construction of the new MBS building) was subject to several delays for a number of reasons.⁶ During the two field missions, the Evaluation Team visited the building site and it appears that construction works are well-advanced and to a high standard, with completion scheduled for the end of 2019. However one issue pointed out to the Evaluation Team was that additional funding for the custom-built air conditioning systems in the building had still not been secured as of June 2019. It was frequently mentioned to the Evaluation Team during the field mission interviews that the delays in the construction of the new MBS building had not arisen from late or inadequate funding tranches provided by GoM, and instead the very substantial national funding for the new building (over USD 7 million) demonstrated a serious commitment on behalf of the Government to upgrading the NQI in Malawi.
73. Activity 3.1b (Develop within MBS an accredited product certification body) related to a pilot project for MBS to be accredited in ISO/IEC 17065 as a Product Certification Body. Several international experts hired by UNIDO were involved in this activity. From the Expert Survey carried out by the Evaluation Team, the Evaluation Team found that the activities were effective in contributing to the outputs, especially the provision of in-class and on-the-job training, and have contributed towards MBS becoming “ready for accreditation” in ISO/IEC 17065.⁷ It was suggested to the Evaluation Team that there is great potential in introducing certification of Good Agricultural Practices and organic processes in Malawi as an extension of the product certification system in the future, and that this may lead to new economic opportunities for women and young people in the agriculture/agri-processing sector in Malawi.
74. The implementation of Activity 3.2 (Develop within MBS a management systems certification body for ISO 9001 and ISO 22000/HACCP) was again run as a pilot for MBS to be accredited to ISO/IEC 17021 for ISO 9001 management system certification. The evidence from the Evaluation Team’s Experts Survey suggests that this activity was well implemented by a small team of international experts hired by UNIDO and that beneficiaries were well informed by the on-site UNIDO staff and were available and actively engaged throughout. The UNIDO SQAM Project Final Report notes that to respond to the requirement for MBS to expand the eventual scope of management system certification services to ISO 22000 (Food Safety Management), UNIDO hired a further international expert to conduct a Lead Auditor training course for 20 MBS auditors. Subsequently another international expert was hired to guide and advise MBS on the accreditation process according to the SADCAS requirements. MBS commenced its application to SADCAS for full assessment of ISO 9001 certification and for pre-assessment of ISO 22000 as this scope was already at an advanced stage of implementation. As of June 2019, MBS has not received the accreditation certificate from SADCAS in ISO 17021 for 9001 management systems certification, but it is reasonable to expect that formal accreditation will be achieved before the end of 2019.⁸
75. The Evaluation Team found that Activity 3.3 (Upgraded and accredited testing laboratories in MBS) was effectively implemented overall. The activities under this component involved capacity building training for MBS staff related to ISO 17025 as well as the procurement of new laboratory equipment. The Evaluation Team was informed by survey responses and interviews that UNIDO organized in-country trainings provided by BSI Group in 2015 to facilitate the MBS testing laboratories accreditation process. The UNIDO SQAM Project Final Report specifies that the trainings provided were as follows:

⁶ The SQAM Project Annual Progress Report 2017 identifies five factors as the causes of delays to the construction of the new MBS building: (i) heavy rainfall during November/December 2016 affected the progress of the foundation works, and required drainage of water that was not foreseen at the design stage of the project; (ii) delays to install ESCOM power during the initial stages of the project; (iii) persistent absenteeism of construction work force; (iv) high turnover in construction workers; and (v) low supply of cement from manufacturer due to power shortages.

⁷ As at June 2019, MBS had not gained accreditation in ISO/IEC 17065.

⁸ Indeed, the Evaluation Team was informed by UNIDO via email on 23rd August 2019 that MBS had just received the certificate of accreditation from SADCAS for ISO 17021 for 9001 management systems certification.

- One training course on ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories (combined with metrology) for total of 17 MBS officers.
 - One training course on Uncertainty of Measurement - Testing Laboratories for 12 MBS officers.
 - In addition, a further training course on ISO 17025:2017 was conducted for 29 MBS laboratory officers in August 2018
76. The UNIDO SQAM Project Final Report confirms that during mid-2016, UNIDO successfully supported the procurement and installation of some high priority equipment for the MBS testing laboratory, including the following items:
- High-Performance Liquid Chromatograph (HPLC)
 - Photochemical Reactor
 - Certified Reference Materials (CRMs);
 - Universal Testing Machine
 - High Pressure Capillary Ion Chromatograph (picture in Annex 9)
 - Automated Atmospheric Distillation Analyzer
77. In addition, between 2017 and 2018, UNIDO supported the final cycle of procurement and installation of equipment, including the following items:
- Ultra-high Performance Liquid Chromatography - Tandem Mass Spectrometer (UHPLC MS/MS)
 - Certified Reference Materials (CRMs) and Peripherals
 - Accessories to the Universal Testing Machine (UTM)
 - X-Ray Florescence Spectrometer (X-RF)
 - Inductively Coupled Plasma Mass Spectrophotometer (ICP –MS)
 - Oil Analysis System for the analysis of oil for contamination, chemistry and machinery wear through particle characterization
78. The Evaluation Team found that in October 2018, MBS received a certificate of accreditation in ISO 17025 from SADCAS for its testing laboratory for the testing of aflatoxin in cereals, pulses and related products. The application of a second scope for testing in Microbiology, covering E-coli, Total Plate Count and Coliform was submitted by MBS to SADCAS in June 2018. So far, this accreditation certificate has not been received yet, but again it is reasonable to expect that this will be received before the end of 2019. During the second field mission, the Evaluation Team visited the MBS testing laboratories and inspected the new equipment provided by the SQAM project, and it was apparent that these laboratories now have the right foundational capacities to expand their accreditation in ISO 17025 to other scopes of work in the future.
79. Under Activity 3.4, to assist the MBS in the ISO 17025 accreditation process for their metrology calibration laboratories, UNIDO provided several in-country and out-of-country trainings under the SQAM project, among which were the following⁹:
- 1 MBS staff training on Metrology at the Korean Research Institute of Standards and Science (KRISS).

⁹ These trainings were complemented by study tours to institutions in South Africa for a number of MBS metrology staff financed under the Norad-MATCB project which was also implemented by UNIDO.

- 1 MBS staff training on Legal Metrology at the National Measurement Office (NMO) in London.
 - 4 MBS metrology officers received at the end of 2015 training at the Botswana Bureau of Standards (BoBS).
80. Between 2014 and 2015, UNIDO combined financing from the SQAM and MATCB projects to enable the procurement of mobile metrology equipment for MBS including the following items:
- Vehicle and weight handling equipment (comprising truck 10 with cargo capacity of 35 tons and with a rear-mounted forklift)
 - Weights (comprising of reference and working standards)
 - Mass Comparator (picture in Annex 9)
 - Prover Tank System (picture in Annex 9)
 - Master Flow Meter System
81. The Mass Calibration laboratory at MBS received an ISO 17025 accreditation certificate from SADCAS in the scopes of mass balances (0-200g) and mass pieces with range 1mg to 2Kg in January 2019. The Evaluation Team formed the view that MBS has the foundational capacities in place to go onto gain ISO 17025 accreditation in other scopes of metrology/calibration, and this is evidenced by the fact that, during the field mission interviews, the Evaluation Team was informed that in June 2018 MBS had submitted to SADCAS an application for accreditation of the mass laboratory scope extension of mass pieces with range 1 mg to 500 mg, Class E2, which was then further extended to 1 mg to 2kg due to the readiness of the scope.
82. Regarding Activity 3.5 (Develop a training business unit), the Evaluation Team found that this has activity has not been fully implemented and the training business unit has not been established yet by the MBS. The Evaluation Team was informed by interviews with MBS that the unit would be established once more of the MBS services had received formal accreditation.
83. Regarding Activity 3.6 (Establish a pool of Malawian auditors), the Evaluation Team found from the document review together with an MBS auditor interview that the activity has been successfully implemented, and that the MBS has implemented an auditing management system. The MBS staff had been trained according by international experts provided by UNIDO to international requirements related to transparency and impartiality, although some criticisms were pointed out regarding the short timeframes for the training courses.¹¹
84. Activity 3.7 (Collaboration with the Malawi Laboratory Association to strengthen the association as an integral part of the national quality infrastructure, notably in view of testing and calibration services) was not substantively discussed nor highlighted during the interviews with MBS and UNIDO staff that the Evaluation Team conducted. The Evaluation Team notes, however, that the UNIDO SQAM Project Final Report states that his activity was a national implementation activity led by MBS and was implemented during 2014. It is not clear to the Evaluation Team whether there has been a significant strengthening of the MLA as a result of the SQAM project and whether this can be evidenced.

¹⁰ Funded under the Norad-MATCB project.

¹¹ The annexes of the UNIDO SQAM Project Final Report provide detailed information on number of persons attending and completing training courses under the project related to auditing quality management systems and food safety management systems.

4.2.4 **Result 4:**¹² **Enhanced capacity of National Enquiry Points (NEP).**

85. This Result Area focused on operationalizing the National Enquiry Points in Malawi required under the WTO Agreements on SPS and TBT, whose function is to act as a two-way gateway: submitting notifications to the WTO to inform trading partners on new measures adopted by Malawi; and tracking and disseminating new notifications from trading partners to local industry in Malawi. This Result area was the smallest in terms of resource allocation, with an initial allocation of less than 0.5% of the overall project budget (inclusive of direct and indirect costs), (see Table 1 in Section 4.3 below). Overall, the activities undertaken under this Result Area were effective to enhance the capacity of MBS as National Enquiry Points.
86. The Evaluation Team found that Activity 4.1 (Identify, store, update, create and use the information on foreign technical regulations, standards and conformity assessment dispositions of countries that import from Malawi) was implemented effectively and successfully, in that these core NEP functions are now undertaken properly and consistently by MBS. From MBS interviews, the Evaluation Team found that the NEPs, located in MBS, have become fully more operational and more responsive and pro-active after the SQAM project interventions. A particularly effective element of this Result area, reported to the Evaluation Team in one of our field mission interviews, was a study tour for MBS staff to observe and learn from the NEPs at the Uganda National Bureau of Standards (UNBS) that was organized by UNIDO. MBS interviews confirmed to the Evaluation Team that work on SPS & TBT WTO Agreement notifications has been incorporated into the day to day routine of the NEPs at MBS, and that they have an established system for sharing and explaining new notifications relevant to Malawi's export markets with a broad network on national stakeholders.
87. The Evaluation Team found that the target identified under this Result Area (*an internet-based public information service on national technical regulations and standards*) was successfully achieved. The Evaluation Team was able to examine evidence of the improved operation of the NEPs at MBS in terms of notifications to the WTO under the TBT and SPS Agreements. In terms of TBT, there has been a clear increase and consistency in notification of measures by Malawi to the WTO since the SQAM project began implementation. Indeed, as of June 2019, Malawi has notified significantly more of its TBT measures to the WTO than some higher income countries in Africa: Malawi has notified a total of 39 TBT measures while Ghana has only notified 13. Improvements are evident also in the case of SPS, considering that before the start of the SQAM project, Malawi had notified just 1 SPS measure to the WTO (in 2001 on poultry and poultry products) whereas as of June 2019, 15 other SPS measures have now been notified by Malawi. The last TBT notification from Malawi was made in 2019 (measures on packaged, dry, combined materials for mortar and concrete), which is evidence to support the assertion from MBS that the improved functioning of the NEPs has become institutionalised and sustainable.¹³

4.2.5 **Result 5:**¹⁴ **Strengthened Sanitary and Phytosanitary (SPS) infrastructure.**

88. The activities under this Result aimed at the formulation of an action plan for Malawian food products used for domestic and foreign consumption. This Result area was the second smallest in terms of resource allocation, with an initial allocation of less than 1% of the overall project budget (inclusive of direct and indirect costs), (see Table 1 in Section 4.3 below).

¹² Output 4: Strengthened, proactive and responsive National Enquiry Points to the information and notification requirements of WTO/TBT/SPS agreements. UNIDO SQAM Final Report 2019

¹³ All of Malawi's TBT and SPS notifications can be publicly accessed on the WTO website.

¹⁴ Output 5: Sanitary and Phytosanitary infrastructure improved and mainstreamed into National policies. UNIDO SQAM Final Report 2019

89. During the second field mission, it was reported to the Evaluation Team that Activity 5.1 (Review the national SPS infrastructure), Activity 5.2 (Develop a road map to improve the Malawian SPS infrastructure) and Activity 5.3 (Review and upgrade the legislation for the SPS infrastructure) had been implemented outside of the SQAM project as it was decided that the Ministry of Health, with assistance from FAO, was better placed to lead in this area than MBS. Accordingly, beginning in 2014, the activities under this Result area were undertaken by the FAO as it was actively engaged in the assessment of the status of SPS legislation and delivered a report on food safety legislation in Malawi in 2015. The MBS sustainability plan reports that the Ministry of Health will coordinate the activities under this Result area following the end of the project.

4.2.6 **Result 6:**¹⁵ **Small and medium enterprises (SME) meet quality requirements.**

90. This Result area was the third largest in terms of resource allocation, with an initial allocation of over 7% of the overall project budget (inclusive of direct and indirect costs) although this was subsequently reduced, (see Table 1 in Section 4.3 below). The activities under this component were mainly planned and managed by UNIDO and involved:

- An initial target group of 35 selected SMEs in Malawi was planned to be given technical assistance to set up management systems complying with quality management standards (ISO 9001) and food safety management standards (HACCP/ ISO 22000). However, only 7 SMEs participated in the project. The reasons given were that some SMEs could not be selected on account of not meeting the criteria for participation. Others dropped out as a result of limited resources required to upgrade their quality systems such as those related to enhanced documentation systems and required equipment. The Steering Committee agreed to reduce the target, and as a result, resources were shifted to Output 3 as per Addendum 2 of the EU-UNDP Contribution Agreement dated 21 December 2016. The beneficiary SMEs were:
 - Capital Oil Refining Industries (CORI), located in Chirimba, Blantyre – now ISO 9001 certified
 - Promat Limited, located in Kanengo, Lilongwe, now ISO 9001 certified
 - Mzuzu Coffee Planters Cooperative Union, located in Luwinga, now ISO 9001 certified
 - Flowtech, Limited, located in Chirimba, Blantyre, now ISO 9001 certified
 - Linga Winer, located in Lilongwe, reached stage 1 audit, awaiting ISO 22000 certification
 - Ethanol Company, located in Dwanga, reached stage 1 audit, awaiting ISO 22000 certification
 - Project Peanut Butter, located in Lunzu, Blantyre, reached stage 1 audit, awaiting ISO 22000 certification
- Training of trainers-cum-counselors and auditors on the application and auditing management systems standards (ISO 9001 and HACCP/ ISO 22000).

91. As the two case studies on SMEs undertaken by the Evaluation Team and reported in Box 4 and Box 5 demonstrate, this Result area has registered mixed results, largely on account of a limited size of the group of SMEs that participated. Only seven (7) SMEs out of the target group of 35 companies participated in the project. This severely limited the main outcomes and impact from

¹⁵ Output 6: Capacity of Small and Medium Enterprises, and particularly women and youth led enterprises, strengthened to comply with quality requirements. UNIDO SQAM Final Report 2019

this Result area, although it can be regarded as having benefits for those 7 companies that did participate and offering some learning benefits for MBS, MoITT and development partners as a pilot. Considering that the national policy on gender which requires 50/50 ratio, the expected gender and youth dimensions of this Result Area were partially achieved as two (2) of the seven (7) beneficiary enterprises that participated in the project were women-led. The majority of workers in all of the beneficiary SMEs are made up of young people, with an average age of 30.

Box 4: Linga Winery reaches final stage of ISO 22000 certification

Linga Fruit Winery is a woman-led SME enterprise in Lilongwe, involved in fruit wine production. The company has five employees, four males and one female. Linga sources its seven varieties of fresh fruits from rural farm families across Malawi. These are further processed into fruit wines. Production capacity is around 20,000 litres, sold in 750 ml glass bottles. It is certified by the Malawi Bureau of Standards and holds MS178. It distributes seven varieties of Linga Fruit Wines nationally through Shoprite and Spar branches and some smaller outlets. The company has been exporting wines on a limited scale to the United Kingdom. It has been receiving requests to export to the USA under the African Growth and Opportunity Act (AGOA) as well as in regional markets. This requires that it improves its ability to comply with international standards. Therefore, its participation in the EU-UNDP funded SQAM project was primarily to assist the enterprise to comply with ISO 22000 Food Safety Management Systems, a critical requirement for any organization in the export food chain.

The activities that Linga participated in the SQAM project were highly relevant. However, the duration of the assistance from the project was too short for Linga to complete the ISO 22000 certification process. The process was long and demanding. Activities were reasonably organized. However, the company believes that there were long gaps between the visits of the international expert which exerted some stress and duplication of efforts. They also had to spend additional resources on the required production process modifications and winery equipment upgrading. The staff has now achieved the level of proficiency required and sustained efforts will be made to obtain certification. Nevertheless, the company has managed to internalise the ISO 22000 system such that they have reached the final stage and are committed to sustain the process towards certification. The firm believes this will be an important marketing tool to improve export performance. Certification is also expected to assist the firm to gain orders from upmarket local hotels and restaurants.

92. The reasons advanced for not meeting the planned target of beneficiary SMEs suggest that most small businesses have inadequate resources to allow the required investments in quality management systems. Project design could have been tailored to respond to these resource gaps, as was done in the MATCB project. The Evaluation Team found that enterprises that were relatively medium in size could manage better to take advantage of the technical assistance compared to the smaller ones.
93. On the positive side, four (4) of the SMEs that participated in the project have achieved ISO 9001 certification. Those firms who have participated suggested that achievement of ISO 9001 certification has been an effective marketing tool as they can now compete in tendering processes (public and private). Three (3) enterprises have successfully passed stage 1 audits in the ISO 22000 certification process, and are now recommended for stage 2 audits. Enterprises that engaged on ISO 22000 have also experienced improvements in food safety management systems and are optimistic to gain certification in the near future. For the HACCP/ISO 22000 food safety management systems, the project has promoted value chain participation in existing agricultural products (fruits for winery, peanut butter, sunflower oils, soya animal feed, etc), with noticeable export potential. Six enterprises exports goods to African markets (mostly Zambia, Mozambique, Tanzania) and two export to overseas markets (USA, Asia and Europe). One enterprise has entered a new export market (Zambia) as a result of ISO 9001 certification.

Box 5: CORI obtains ISO 9001: 2015 certification

Capital Oil Refining Industries (CORI) is a wholly Malawian company engaged in the refining of vegetable oil and processing of oil seeds. The company is situated in Chirimba Industrial Site on the outskirts of Blantyre. It produces sunflower cooking oil and soya meal. Soya meal is a feed ingredient

used to add protein to poultry feed. The company employs 452 workers, of which 306 are males and 146 are females, with an average age of 31. The company has been exporting soya meal to Zambia. Cooking oil has been mainly for the domestic market. To export cooking oil, the company was convinced there was a need to improve its quality management system and gain ISO 9001 certification.

The rationale for CORI's participation in the EU-UNDP funded SQAM project was to address significant gaps in its quality management system. This would improve the marketability of its products in regional markets, especially to Zambia, Zimbabwe and Mozambique. Participation in this project, has enabled the company to obtain ISO 9001 certification. This has improved its operational quality systems and corporate image. The company's Quality Assurance Manager confirms that: "expectations have been met and now we can use our ISO 9001 certification as a marketing tool and a competitive edge over competitors". He further asserted that as a result of the SQAM project's interventions: "quality systems have improved; human resource skills have developed; and profitability is improving".

The company agreed that the activities in the areas of internal auditing; risk management and documentation were effectively organized and delivered by both the international and national technical experts. They have now permanently employed the project national expert to provide closer technical support. They have realised that there was need for more time to provide long-term mentorship instead of a one-off technical assistance. On business impact, the company emphasized factors such as production efficiency; and more enquiries from customers as a result of ISO certification. They are now working towards implementation of ISO 22000. There is now more quality awareness among the employees. Sustainability of the gains made is now part of its management mission. A key lesson is that the activity life cycle was too limited: a three-year engagement period with the company and more use of national expertise could have been preferred.

4.2.7 Result 7:¹⁶ Preparation of the organisational and operational internal bylaws and business plan for a national Malawian accreditation body.

94. From the document review and telephone interviews with UNIDO staff, the Evaluation Team found that this Result area was dropped from the project in 2015, following a decision by the Project Steering Committee. Instead, the strategy for an accreditation body to serve Malawi was switched to draw on the regional accreditation services provided by SADCAS
95. In the view of the Evaluation Team, this was a very sensible and more cost-effective strategy for the project in line with the objectives of developing the NQI in Malawi, given that it would be expensive and challenging to create an internationally recognized accreditation body from scratch in the country and there would be very low demand for its services. By drawing on the services of SADCAS, Malawi benefits from regional co-operation as a SADC member and helps to promote the financial sustainability of the accreditation services that SADCAS provides.

4.3 Efficiency

96. The Evaluation Questions under the Efficiency criteria were as follows:
 - *Whether the project resources (financial, physical and manpower) were adequate in terms of both quantity and quality?*
 - *Whether the project resources were used effectively to produce planned results (were the disbursements and project expenditures in line with expected budgetary plans)? Whether the project resources were used cost-effectively compared to similar interventions? Were the project activities delivered on schedule?*

¹⁶ Output 7: Preparation of the organizational and operational internal bylaws and business plan for a national Malawian accreditation body. UNIDO SQAM Final Report 2019

- *The efficiency of delivery by Government counterparts in terms of inputs such as personnel, equipment, and in-kind contributions such as office space.*

97. Overall, the Evaluation Team found that the project resources were efficiently managed by UNDP, UNIDO and MBS and that positive synergies were achieved between other NQI sector actors and development partners that contributed to the efficient implementation of the project activities. UNDP mobilized the financial resources, provided the main project delivery, monitoring and reporting platforms; UNIDO provided the technical assistance in terms of international experts, procurement of equipment and coordination with SADCAS; and MBS acted as the national implementing partner, proactively engaged in the planning, delivery and monitoring of the activities and undertaking procurement for a number of inputs (such as the ERP). However, this was the first co-operation of its kind between UNDP and UNIDO using EU funding, and the inter-agency financial management arrangements were reported as being quite challenging and inefficient between UNDP HQ and UNIDO HQ (for example, UNDP had to report and manage budgets with UNIDO in USD, but the contribution agreement with the EU was stipulated in Euro). For future programmes involving multiple UN agencies and an external donor, streamlined financial management arrangements would be more efficient including the common use of a single currency.
98. The engagement of the MoF, MoITT, Ministry of Health, and other development partners such as Norad and FAO facilitated the realization of the project in an efficient way reallocating resources to avoid wastage and duplication, and improve value for money. For instance, Result 5 “*Sanitary and Phytosanitary infrastructure improved and mainstreamed into National policies*” was dropped in 2014 since it was agreed that the FAO would be better placed and resourced to undertake the work. The Ministry of Finance was highly committed and entirely financed the infrastructure of the new MBS building with all payment tranches being made on time to MBS and the building contractors. As highlighted in section 2.3, the SQAM project was implemented in parallel to the Norad-funded MATCB project which was also implemented by UNIDO. UNIDO and MBS worked well to ensure the efficient use of resources and to avoid duplication between the two projects, as can be observed in the joint-funding of the MBS mobile weighbridge equipment.
99. The Evaluation Team’s telephone and field mission interviews reported that although the MCCI was a committed member of the Steering Committee, the domestic private sector overall could have been more actively involved in, and engaged by, the SQAM project. Under Result 6, the project team did seek to recruit 35 SMEs to participate in the project’s activities for enterprise level quality management system upgrading, but as already noted in Section 4.2, only 7 SMEs were able to join. Whilst it was clear from the Evaluation Team’s field missions and the SME survey that these 7 firms did participate actively and fruitfully in the project, the overall level of participation was disappointing and did not meet expectations. One representative from MoITT interviewed by the Evaluation Team was of the view that SQAM project could have been more efficiently targeted at larger firms. Engagement from larger sized firms in the project was in fact very limited, although MBS and UNIDO did organize two seminars aimed at this cohort.
100. The main challenge in terms of efficiency during project implementation reported to the Evaluation Team was complying with the established timelines for the different Result Areas and the project as a whole, particularly the construction of the new MBS HQ building. As a matter of fact, evident delays were reported even during the project inception phase. Overall, the most significant slowdowns of the project were experienced in the construction of the new MBS building (which is still not completed as of June 2019); in the selection of the first CTA; in the approval of the National Quality Policy; in the receipt of the first funding instalment to UNIDO (which was only received in June 2013); and to a lesser extent in the delivery of laboratory equipment and the implementation of the ERP. In addition, there has been a knock-on effect in terms of delays to the expected accomplishment of results and outcomes, for example in

accreditation of MBS laboratories and certification services, and the certification of SMEs in ISO 9001 and ISO 22000.¹⁷

101. To address these delays, the 2015 Mid Term Evaluation of the wider EU-Malawi trade sector programme recommend an extension of the implementation period of the SQAM project. The first extension was agreed in May 2016 through the amendment of the UNDP-UNIDO interagency agreement. This No-Cost Project Extension granted an additional 24 months, ending May 2018. A second extension was agreed in June 2016 where the SQAM Project was granted a Cost Extension until 15 December 2018 through Addendum No. 3 to the EU-UNDP Contribution Agreement. Although projects extensions should be generally avoided, in the specific context of the SQAM project, these extensions were crucial to implement all the prerequisites required for achieving MBS accreditation and progress accomplishments in other Result Areas towards the overall project objectives.

Table 1: SQAM Project budget and expenditure breakdown

EUROs €	Original Budget *	Changes to Budget	Revised Budget	Total Expenditure	Delivery %
Result 1	438,134	-50,000	388,134	386,752	97%
Result 2	85,904	-10,000	75,904	72,726	96%
Result 3	1,757,324	+138,759	1,896,083	1,890,562	99.7%
Result 4	11,824	-720	11,104	10,389	94%
Result 5	32,872	-1,000	31,872	35,738	112%
Result 6	300,201	-45,000	255,202	238,486	93%
Result 7	0	0	0	219.58	0%
Operational Management	992,157	-32,039	960,118	1,042,639	109%
Sub-Total (Direct Costs)	3,618,417	0.00	3,618,417	3,677,512	102%
Contingency	96,562	0.00	96,562	14,525	15%
Indirect Costs	260,049	0.00	260,048	260,216	100%
GRAND TOTAL	3, 975,028	0,00	3, 975,028	3,952,253	99%

* As per Contribution Agreement, Signed Addendum no 3

Source: SQAM Project Interim Progress Report for July-December 2018 (February 2019)

102. The final SQAM project budget and expenditure breakdown (see Table 1 above) demonstrates that the quantity of resources was adequate and that the disbursements and project expenditures were in line with expected budgetary plans. The majority of the activities were completed within budget, with the exception of the activities planned under Results 5 (expenditure was 12% over budget) and Result 7 (expenditure was 0% of budget as this component was dropped). The combined costs for operational management and administrative indirect costs was quite significant at 26.4% of total expenditure. The costs of the CTA were split 70% paid by the SQAM project and 30% paid by MATCB project. The CTA was entirely funded by the SQAM project after MATCB project ended.
103. Building on the document review, interviews and surveys conducted by the Evaluation Team, it appears that stakeholders regarded the project monitoring and technical support of the programme by UNDP, UNIDO and MBS positively. Interviewees consistently remarked that the Steering Committee sessions were essential to support the smooth running of the project. One aspect that was less efficient and negatively regarded was the need for UNIDO to recruit three different CTAs during project implementation. The Evaluation Team was consistently told during

¹⁷ It was reported to the Evaluation Team that a key factor negatively affecting achievement of ISO 22000 certification of SMEs in the project was that the Stage 3 interventions only commenced towards the end of the project. This was found to have adversely affected efficient delivery of the technical assistance, and one enterprise mentioned that it also suffered from long gaps between the visits of the international experts.

its stakeholder interviews, that although each CTA was a competent and professional expert, adding valuable technical knowledge to the project, the slow recruitment of the first CTA and the need to use three different CTAs compromised the efficiency of the project by causing delays as each new CTA got up to speed and built relationships with counterparts.

104. From the surveys and field mission interviews, some concerns were recorded over the management of the international technical experts. It was suggested to the Evaluation Team that the short-term contracts of international experts represented a risk for the efficiency of the project, given that the handover from one expert to the subsequent one required additional time and knowledge management for the implementation of the activities. Counterparts suggested that this could have been mitigated by a better balance between national and international experts during the project implementation period.
105. The Evaluation Team found that the quality of the inputs was good overall. Under Result 1 *“Strengthened capacity of the MBS to deliver business services and to achieve financial sustainability”* SQAM’s beneficiaries underlined the significant efficacy of the out-of-country trainings, especially the ones in the USA, South Africa and Botswana. Our interviews with MBS staff along with the MBS Sustainability plan 2019 reported that the new metrology infrastructure is already increasing the revenue streams, with the new mobile equipment making the weighbridge calibration services faster and more efficient, allowing many more weighbridge visits to be undertaken during each year. MBS staff reported a similar situation in the MBS microbiology laboratory, with greatly improved efficiency levels enabled by the new equipment purchased by the SQAM project.
106. The Evaluation Team’s surveys and interviews found that over the implementation period the SQAM project management team were responsive to changes in the environment and were able to adapt the project significantly to the context in order to implement the activities planned in the most effective and efficient way. This was a key element enabling the efficient use of resources during the project implementation period. The SQAM project’s adaptive management can be observed in several management choices, for instance in the decision of installing new laboratory equipment into the old MBS building when it became clear that the new building would not be completed in time. The ability to adapt to changing circumstances led to very positive outcomes in this case, namely the accreditation of MBS laboratories, and there is very good prospect that these can be sustained with the move to the new MBS building.
107. During the Evaluation exercise, the Evaluation Team examined the Value for Money dimension of the project. The Evaluation Team found that there was no explicit policy on Value for Money for the project *per se*, and no framework or set of metrics was in place for defining or measuring this aspect of project performance during implementation. With this context, the Evaluation Team decided to focus its data collection and analysis efforts related to Value for Money through looking at the procurement by UNIDO of equipment and technical advisory services under the SQAM project, since this was a significant area of expenditure. The Evaluation Team requested UNIDO to provide information on the fee rate bands used for its international experts, equipment procurement procedures, and a case study analysis of an actual equipment procurement under the SQAM project.
108. In the view of the Evaluation Team, having analysed the information received from UNIDO, the UNIDO fee rate bands for international experts seem very reasonable within the consultancy market and demonstrate good value for money compared to other possible delivery solutions. Moreover, additional value is generated by UNIDO’s extensive work in the SQAM sector worldwide and from recruiting its international experts from an internal database, which provides information on past performance and matches skills for assignments. In relation to equipment procedures, the view of the Evaluation Team is that UNIDO had strong procurement systems in place to deliver value for money. In the case study provided (for a plasma mass spectrophotometer), there was clear evidence that the UNIDO procurement process delivered economy savings for the project with this high value purchase, as the selected supplier’s price was lower by USD 87,000 compared to the next best-priced technically compliant offer received, and lower by USD 162,000 compared to the most expensive technically compliant offer received.

4.4 Outcomes and Impact

109. The Evaluation Questions under the Outcome and Impact criteria were as follows:

- *What was the outcome level performance of the project?*
- *What impacts have been achieved, or that may be expected, as a result of the project?*
- *What are positive and negative changes that the project produced, directly or indirectly, intended or unintended?*

4.4.1 General observations

110. From the document review, the Evaluation Team found that there was very little reporting by the project management team of outcome-level or impact-level performance against the project's logical framework: neither the UNDP Final Project Report (February 2019) or the UNIDO SQAM Project Final Report (June 2019) discuss or cover outcome-level or impact-level performance explicitly against the indicators in the project's logical framework. Moreover, no baseline or monitoring information was collected at Impact level. It is also relatively early to expect evidence at the outcome and impact levels, given the nature of the project. These factors were clearly limitations for the Evaluation Team in evidencing findings at the level of Outcomes and Impact of the SQAM project.

4.4.2 Outcome-level performance

111. The SQAM project Intermediate Outcome aimed at *"An adequate, effective and sustainable National Quality Infrastructure (NQI) in Malawi in harmony with international and regional principles and practice like those of COMESA and SADC, by supporting the implementation of the strategic plan of MBS"*. By synthesising and triangulating the data collected from the document review, interviews and surveys, the Evaluation Team found that the NQI in Malawi has improved substantially thanks to the capacity building activities, technical assistance and by the new equipment and laboratory facilities upgrading provided under the SQAM project. In the view of the Evaluation Team that there has been substantial progress and achievement at Intermediate Outcome level, even though in some Result Areas of the project, full completion of some activities is incomplete and outputs as envisaged in the original project document have not been fully delivered as of June 2019.

112. Some of the key evidence supporting the findings of the Evaluation Team in terms of the performance of the SQAM project at Intermediate Outcome level are as follows:

- The National Quality Policy, which was approved by the Cabinet in 2013, and the National Quality Strategy, launched in 2016 to guide policy implementation, are important foundations for a robust NQI and an official statement of the Government of Malawi's commitment this modernization process. The public and private consultative processes through a National Quality Strategy Coordination Committee (NQSCC) that led to the formulation and launching of this national quality policy framework holds potential gateway towards an improved quality culture in Malawi. Such a framework is also consistent with Malawi's regional and international obligations, thereby exerting positive effects towards the ability of the country to meet its wider obligations.
- MBS has achieved internationally recognized accreditation of selected testing and calibration laboratories and conformity assessment services. MBS has also managed to procure, install and operationalize state-of-the art equipment and laboratory facilities supportive of rendering effective conformity assessment services. This is a major achievement for Malawi. There are also good grounds to believe that accreditation of further MBS testing and calibration laboratories and conformity assessment services will be gained in the future, with the capacities built by the SQAM project continuing to make a significant contribution to these accomplishments even after its completion.

- The project has strengthened Malawi's ability to institutionalise better technical regulation using international best practices, and has helped to implement Malawi's obligations under the WTO TBT and SPS Agreements and the SADC Trade Protocol, with particularly positive effects on transparency and good economic governance. The National Enquiry Points in Malawi responsible for notifications to the WTO under the TBT and SPS Agreement have been made operational and strengthened by the SQAM project, and even though it is a Least Developed Country (LDC), Malawi has significantly improved its WTO notifications performance, out-stripping more developed countries in Africa such as Ghana and Nigeria. Again, this is an important achievement for Malawi and something that the country should take pride in, as it enhances Malawi's reputation for honouring its commitments it has entered into under global/regional trade agreements and for being a reliable trading partner.

113. The Evaluation Team found that the SQAM project has also contributed, or will contribute, significantly to the achievement of the project Outcome "*Enhanced ability to export goods from Malawi by reducing the need for re-testing, re-inspection or re-certification abroad through the acceptance of measurements, tests, conformity assessment results issued in Malawi and improvement of the protection of consumer rights of Malawi citizens*". The Evaluation has found clear evidence from the document review and stakeholder surveys and interviews that demonstrate that the need for re-testing products abroad has been substantially reduced due to new MBS accreditations in the scopes of aflatoxin and in the scopes of mass balances. As the accreditation process is completed for MBS certification services related to ISO 9001 and ISO 22000, a similar outcome should be demonstrated in this area.
114. Similarly, protection of consumers and business operators has significantly increased thanks to the development of a more adequate metrology infrastructure in Malawi as part of the overall NQI. As mentioned in previous sections, the new equipment procured under the SQAM and MATCB projects is increasing the accuracy of calibration, weights and measurement leading to higher transparency and consequently fairer trade particularly in relation to farm-gate weighbridges in the agricultural sector and in relation to pre-packed goods such as bags of cement. The substantial capacity building gained by MBS in legal and industrial metrology gained from the two projects also provides a strong foundational for the upgrading of services to internationally recognized levels for services related to testing and calibration of meters for water, electricity and taxi vehicles, which would offer benefits to very large numbers of businesses and consumers in the country.
115. Beyond the accreditation of MBS laboratories and certification services, some of the other evidence supporting the findings of the Evaluation Team in terms of the performance of the SQAM project at Outcome level are as follows:
- The UNIDO SQAM Project Final Report recorded that the MBS Testing Services Department has experienced a 30 % increase in services/per year. The UNIDO SQAM Project Final Report records that MBS revenue increased from 626million MKW in the financial year 2011/2012 to about 3.9billion MKW in the financial year 2017/2018 showing an average annual increase of 30% over the last 5 years. This was confirmed to the Evaluation Team through in-field interviews with MBS staff.
 - During the field mission interviews with MBS staff, it was reported to the Evaluation Team that as a result of the SDCAS accreditation gained, major Malawian agri-businesses in the key tobacco and sugar export sectors were now switching away from providers abroad to use MBS metrology services for calibration of weighing equipment.
 - In one of the telephone interviews, it was reported to the Evaluation Team that after the MBS aflatoxin laboratory gained accreditation, UNICEF and WFP approached the MBS proposing a possible collaboration as they are currently facing severe delays in receiving test results from testing laboratories located in South Africa and other countries.

4.4.3 Impact-level performance

116. The Evaluation Team notes that it is too early to draw effective conclusions about the impact of the SQAM project on broader development objectives such as poverty reduction, employment, income generation and pro-poor private sector growth as envisaged under the United Nations Development Assistance Framework (UNDAF) Outcome 1.2 (which was referenced in the Impact level objective of the SQAM project's logical framework). In addition, the lack of baseline or reporting data at Impact-level amounts to a significant challenge for an evaluation to make evidence based findings, and was also a weakness in the monitoring and evaluation framework and reporting of the project.
117. That said, attributing impacts to interventions is a universal challenge when assessing capacity NQI infrastructure building projects. This is because of the complex social, political and economic context that can interact with the linear results framework. Contribution analysis should be undertaken before drawing conclusions about the impact of interventions and on results. Furthermore, the macro level of these indicators means that conclusions cannot be drawn before sufficient time has passed for results to change noticeably.
118. However, efforts can be made to identify the types of *potential* impacts that the project might make on targeted beneficiaries and what progress there has been towards realizing them. Outcome indicators can also be useful as they measure the changes that occur over time, notwithstanding the fact that transition of outcomes into impacts is not immediate. A number of types of potential impacts from the SQAM project can be identified from the available evidence at this time, noting that it is not possible to quantify these accurately because of a lack of baseline data, and out-turn data over a sufficient period of elapsed time:
- *Prima facie*, the upgraded NQI should act as an important catalyst for export-oriented growth and economic competitiveness in Malawi. This should have direct implications in terms of benefits for Malawi enterprises through availability of improved business services provided by the NQI and indirectly, and in the long term, in terms of attracting investment through improving the overall business environment. This is an important positive change for business through the reduction of costs associated with avoiding the need for the re-testing, re-inspection and re-certification of goods produced in Malawi outside the country.
 - MBS accreditation for the testing of aflatoxin could contribute significantly to ensuring Malawi exports of groundnuts enjoy continued access to more lucrative markets in the EU and South Africa. Studies have suggested that the repeated interruption of Malawian groundnuts exports from EU bans related to aflatoxin levels in the period 2005-2008 have had a chilling-effect on overseas buyers and domestic producers. One 2012 study projected that this chilling-effect could have reduced Malawian exports of groundnuts to the EU by as much as USD 10m over a five-year period.¹⁸
 - As a result of the project, four SMEs in Malawi have obtained international quality management certification (ISO 9001) and three have reached the final stage in the ISO 22000 certification process, with potential direct effects on productivity and trade performance through efficiency gains (considerable time and cost savings) and quality signalling (see sample SME case studies in Text Boxes 4 and 5). If the number of SMEs in Malawi obtaining these certificates could be scaled-up in future through publicity of the new services offered by MBS, the economic impact could be significant on employment, particularly in the agri-business sector.
 - There are also likely to be tangible positive economic impacts from upgrading of the metrology component of the NQI in Malawi. MBS reported that the mobile weighbridge is

¹⁸ Study cited in *Advancing Collaboration for Effective Aflatoxin Control in Malawi*, Malawi Programme for Aflatoxin Control (MPAC), September 2013.

used 90% of the time for servicing private sector agricultural trade at farm gates and 10% of the time to test the overloading of trucks which would otherwise damage road surfaces. The efficiency gain from this new equipment will help to speed up trade particularly in cotton, macadamia and tobacco, and ensure correct quantities are sold and purchased. Similarly, the large volume prover tank is expected to bring significant savings for the local petroleum industry, reducing losses to firms significantly.

4.5 Sustainability

119. The Evaluation Questions under the Sustainability criteria were as follows:

- *Assess whether or not the project's achievements are sustainable.*
- *Assess the robustness of the exit strategy for all elements of the project.*
- *What should be done to strengthen sustainability of programme outcomes by MBS and other stakeholders?*
- *Provide specific recommendations for future potential interventions beyond the current project with regard to impact and sustainability of recent support.*

120. Under the Sustainability criteria, the Evaluation Team collected and analysed data from the document review, field mission interviews and surveys on a Result by Result basis.

121. Under Result 1, the NQP and NQS in conjunction with the Metrology Law issued under the MATCB project have created a strong institutional backdrop for continued strengthening of the NQI and National Metrology Infrastructure in Malawi. However, the sustainability of these outcomes is strictly depended on the commitment of the GoM and especially of the MoITT to implement the NQP, NQS and related legislation. One interviewee suggested that the sustainability results achieved under this component of the SQAM project could be at risk from political, institutional and economic factors. Key risks here were the availability of continued financial and political capital to lead and resource the implementation of the NQS across government, and a successful process for managing the institutional reforms of MBS (i.e. the separation of functions without undermining the performance or development of any of them).

122. Under Results 2-4, issues around sustainability are centered on the commitment and resources of MBS, and in May 2019, MBS submitted a SQAM project sustainability plan where each department indicated their exit strategy in order to sustain the results achieved under the SQAM project interventions. From the survey results and interviews during the field missions, the Evaluation Team found that although the SQAM project has delivered a good standard of capacity building activities in terms of upgrading services at MBS, there is also an awareness amongst MBS staff that maintaining these service levels will entail additional costs (for example in staffing, maintenance and continued proficiency testing) that will fall to MBS to cover from now on, and that this does present risks that need to be addressed and managed. The relocation of laboratories and other facilities to the new MBS building in 2020 will also incur additional costs (both one-off and recurrent as the existing MBS buildings are relatively cheap to run), and making this relocation as seamless as possible will be key to ensure the sustainability of programme outcomes.

123. The Evaluation Team found that MBS departments had measures in place to support the sustainability of the upgraded capacities developed under Results 2-4, for example in terms of the depth of staff who had received training and the participation of accredited laboratories in on-going regional proficiency testing schemes. The other key dimension of the ability of MBS to sustain project results relates to its corporate financial position and performance. As noted above, MBS is expecting an increase in operational costs from moving to the new building and running the improved laboratory, quality assurance, inspection and metrology services. The additional costs will mainly involve the insurance for the equipment procured under the SQAM project, recruitment of additional staff, and improvement of corporate business systems.

124. MBS generates revenue from fees for its services and from collection on a levy on the import of containers into the country. MBS has an arrangement with MoF which allows it to retain surplus operating income as reserves, whilst paying back some of this surplus as a “dividend” to MoF as with other statutory corporations and agencies in Malawi. Table 2 shows that both revenue and expenditure levels at MBS have risen significantly during the implementation of the SQAM project, but the impact on the overall financial performance of MBS has been positive (Table 2 does not include financial resources from the SQAM project), adding to the level of reserves and strengthening the balance sheet.
125. This is encouraging, but looking forward, a key issue for sustainability at MBS will be the growth of revenue from increased demand for its improved service levels. There is an recognition amongst MBS senior management that this in turn will require an extensive and enhanced marketing effort with local industry (for which detailed plans and staffing have not yet been put in place); and that managers will need to monitor the growth in demand for specific services carefully and tailor expenditures accordingly. On the latter point, the Evaluation Team found that during the SQAM project, MBS managers have so far demonstrated a good ability to prioritise upgrading of services where there is likely to be strong demand growth in the Malawian economy (for example, the mobile weighbridge, the prover tank, the aflatoxin testing laboratory and services for enterprise certification in ISO 9001 and ISO 22000).

Table 2: MBS Corporate Financial Performance Overview 2013-2018 (in MK 000s)

	2013	2015	2015	2016	2017	2018
Total Revenue	1 250 848	1 974 090	2 312 248	2 482 878	3 720 347	4 636 748
Total Expenditure	929 396	1 565 014	1 943 627	2 085 301	2 664 757	2 880 811
Surplus	321 452	409 076	368 621	397 577	1 055 590	1 755 937

Source: MBS Sustainability Plan, May 2019

126. Under Result 6, risks to sustainability exist as the level of institutionalization of quality management systems in the enterprises that participated in the project. From the SME survey and field mission interviews, the Evaluation Team found that some enterprises have clear strategies to sustain the gains achieved through acquisition of dedicated quality managers and personnel. Some will still need to address sustainability requirements. Follow up investments will be required. Future support interventions in this area with SMEs funded by the Government and/or Development Partners will need to consider this issue carefully from the outset, and strike a balance between the use of international experts and national experts in order to further develop sustainable domestic human resource capacity in quality management systems that is more accessible and affordable for local enterprises.

Table 3: Summary of Sustainability Measures & Risks (by Result Area)

Result Area	Measure	Risks
R1	Building a strong institutional backdrop for continued strengthening of the NQI and National Metrology Infrastructure in Malawi.	Level of commitment of the GoM and especially of the MoITT to implement the NQP, NQS and related legislation.
R2	Draft strategy in place	Level of commitment and resources of MBS
R3	Sustainability strategies are defined by the MBS, among which:	Level of commitment and resources of MBS
	Competence development initiatives for personnel	Retention of trained technical staff and management at MBS
	Increase in number of certification	Level of demand for MBS services from businesses in Malawi

	clients Increase in number of scopes for accreditation Expansion of Legal metrology Scope Maintenance and Expansion of Accreditation Scope Equipment Sustenance Technical Signatories Management	
R4	Training workshop on how to prepare and submit notifications (on draft new and revised mandatory standards) to the World Trade Organization (WTO) Training on how to run a WTO TBT/SPS Enquiry Point	Level of commitment and resources of MBS
R5	N/A	N/A
R6	Sustainability strategies are defined by SMEs	The level of institutionalization of quality management systems in the enterprises that participated in the project. Level of resources available in SMEs for quality management systems upgrading and continuous training of staff
R7	N/A	N/A

Source: MBS Sustainability Plan, May 2019

4.6 Cross-Cutting Issues

127. The Evaluation Questions under the Outcome and Impact criteria were as follows:

- *Did the SQAM project take the gender dimension into account?*
- *Was there a good-governance dimension to the project?*

128. Following the objectives of the Evaluation stipulated under the ToR, the Evaluation Team assessed the progress and contributions that the SQAM project's interventions contributed towards the goals of gender equality, women's empowerment and human rights. The Evaluation Team also looked into the question of whether there was a dimension of the project that contributed towards progress in regards to good-governance in Malawi.

129. At the project design level, the gender dimension was mentioned in the design of the SQAM project, especially in regard to Result 6 "*capacity of small and medium sized enterprises (SME), and particularly women and youth led enterprises, strengthened to comply with quality requirements*". However, from the document review carried out by the Evaluation Team, it appears that women's participation rate in trainings organized under Result 6 was significantly inferior to men. Moreover, among the SMEs that benefited from the SQAM project, just 2 out of 7 were female-led enterprises.

130. From the Experts survey as well as from the interviews conducted by the Evaluation Team, it seems that limited efforts were made by the SQAM project to collect gender disaggregated data and no targeted activities were designed to address gender issues in Malawi in relation to the SQAM sector. No gender expertise was engaged by UNDP–UNIDO in designing and delivering the project, and no gender-specific indicators were listed in the project’s logical framework. An in-depth needs assessment along with a defined gender strategy would have been beneficial to promote women involvement in the project, and this is an important lesson for UNDP–UNIDO in designing and executing similar projects in the future.
131. There was no specific mention of good-governance included in the project design, however, the one aspect of the overall SQAM project’s objectives was to improve daily lives of Malawian citizens and businesses in terms of enhancing transparency, certainty and fairness in trade and commerce through the availability of improved metrology services from MBS. During the field missions, the Evaluation Team heard that an accurate and efficient metrology infrastructure is already having a positive impact on consumer protection and fairer trade by ensuring that the right quantity of goods is delivered and by avoiding fraud. For example, training on use and operation of the new mobile weighbridge verification system provided under Result 3 “*Enhanced capacity of the Malawi Bureau of Standards*” has decreased the calibration times for weighbridges from 4 hours to 1 hour, reducing the cost and increasing the availability of these services for agri-businesses throughout the country. Also, the procurement of the prover tank system and master meter system has improved petroleum volume verification services, leading to increased transparency, fairness and certainty across a large range of commercial fuel transactions in Malawi.

5. CONCLUSIONS

5.1 Relevance

132. Overall, the Evaluation Team concluded that the SQAM project was strongly relevant and supportive of Malawi’s national development policies and export development plans, as well as the development strategies of UNDP and the EU in Malawi. At the multilateral level, the project was very relevant to implementing Malawi’s commitments under the WTO TBT and SPS Agreements; whilst at the regional level, the project complemented initiatives such as the SADC Standardisation, Quality Assurance, Accreditation and Metrology (SQAM) Programme; SADC Industrialisation Strategy and Roadmap (2015–2020) and SADC Industrial Upgrading and Modernisation Programme (IUMP).
133. The SQAM project design was undoubtedly ambitious, with many components to implement in a limited timeframe and starting from a very low level of NQI development. However, good levels of consultation and co-operation between MBS, UNIDO and UNDP allowed for project management decisions to be tailored to beneficiaries needs throughout the project cycle, adapting the initial project design through the annual work plans to increase its relevance to current needs (for example, through the use of the market survey to finalize the laboratory upgrading specifications) and to the activities and investments of other development partners (such as the financing from Norad for the MATCB project and handing-over of work on SPS to FAO).
134. Under Result 6, all beneficiary stakeholders (SMEs) surveyed or interviewed by the Evaluation Team concluded that the project was relevant to their business, with the potential to contribute to increased business opportunities and the reduction of costs of doing business related to conformity assessment and quality management/food safety management systems, through reducing the need for re-testing, re-inspection or re-certification abroad.

5.2 Effectiveness

135. Overall, the Evaluation Team concluded that the SQAM project has effectively improved the country’s NQI in significant ways, even if the NQI upgrading can be regarded as “a work in progress” in some respects and Malawi was starting from a very low base. An NQP and NQS are

in place, and so far, MBS has received two certifications of accreditation at ISO 17025 for laboratories and there is a common belief that further accreditations will be achieved in the near future. These are the first ever laboratory services in Malawi to receive internationally recognized accreditation, and the Evaluation Team's view is that the achievement of this benchmark in regulatory institutional capacity development in one of the poorest countries in the world represents a major success story in Aid-for-Trade.

136. As a result of the SQAM project, MBS is today more proactive and responsive as the NEP in performing its functions with the information and notification requirements functions under the WTO TBT and SPS agreements, out-performing some more developed countries in Africa like Ghana and Nigeria. In this respect, Malawi has become a more active participant in the multilateral trading system and also in the regional trade arrangements of SADC and COMESA, bringing benefits for exporters in Malawi but also for the country's trading partners in terms of better trade information. Under Result 6, the Evaluation Team concluded that the level of achievement was moderately unsatisfactory, with some significant shortcomings related to limitations in the number of beneficiary SMEs who participated, as well as the gender and youth dimension.
137. The Evaluation Team concluded that overall, the project design played an important role in laying the foundations for effective delivery, with multiple activities reinforcing outputs and outcomes. There was very a positive contribution to the effectiveness of the project through the combination of training activities and advisory support to increase knowledge and skills; procurement of modern laboratory equipment; physical infrastructure upgrading; and high-level political buy-in through the National Quality Policy and National Quality Strategy. The strong project design was backed-up by a committed, competent and adaptive project management team across MBS, UNDP and UNIDO.
138. The main limitations to project effectiveness were the delays experienced during the implementation period and the weak design and performance of Result 6. Delays in the receipt of the first funding instalment and in the construction of the new MBS building as well as in the mobilization of the first CTA (one year after the UNDP-UNIDO interagency agreement was signed) did affect project delivery and adaptive measures had to be taken, notably the extension of the project implementation period. Finally, whilst the overall conclusion of the Evaluation Team is that the SQAM project has substantially achieved its objectives in terms of upgrading the NQI in Malawi, it is important to also point out that (i) some results took considerably longer to accomplish than initially expected; and that (ii) a number of project activities are still to be fully implemented and completed, such as the new MBS building, the roll-out of the full ERP at MBS, the establishment of the new marketing unit at MBS, and the proposed re-organization of MBS (separation of functions).

5.3 Efficiency

139. The Evaluation Team concluded that overall, the project was efficiently managed and coordinated by the key partners (UNDP, UNIDO and MBS). Although they did not play an active role in project delivery, the EU and MoF also contributed to its efficient implementation through their investments and willingness to adjust the implementation timeframes when necessary. Technical assistance from UNIDO was generally of good quality and MBS staff took an active role in planning and managing day-to-day project activities.
140. However, several delays adversely affected efficient delivery of the project's activities. Under Result 3, the late completion of the new MBS building meant that existing laboratory infrastructure had to be upgraded before new equipment and training towards ISO 17025. Under Result 6, the achievement of ISO 22000 certification by SMEs was missed as the Stage 3 interventions commenced only towards the end of the project.
141. Regarding project management, the Evaluation Team's conclusion was mixed. On the one hand, negative factors such as the cumbersome financial management arrangements between UNDP and UNIDO, changing the CTA three times during the project cycle, and the short-term contracts

of the UNIDO international experts compromised the efficiency of project delivery by increasing transaction costs. On the other hand, the adaptive management of MBS, UNDP and UNIDO was a key element enabling the most efficient use of resources within the constraints. This adaptive management was reflected in several project management choices, for instance in the decision of delivering new laboratory equipment into the existing MBS premises when it became clear that the new building would not be completed in time. The ability to adapt to changing circumstances led to a positive result in this case, such as MBS gaining ISO 17025 accreditation from SADCAS for two of its laboratories.

5.4 Outcomes and Impact

142. In terms of Intermediate Outcome and Overall Outcome, the Evaluation Team concluded that overall the performance of the project should be rated as moderately satisfactory at this point in time, although there is considerable scope for improving these ratings in the short to medium term with relatively little additional effort or investment and with collection of better data from businesses in Malawi. For instance, by the end of 2020, it may well be the case that there is substantially better performance at Outcome level, and better evidence available, as additional MBS laboratories and services gain formal accreditation based on capacity built under the project, and as more enterprises in the country gain awareness of the currently upgraded and internationally recognized services available at MBS and switch to using them rather than service-providers based abroad.
143. At Impact level, the Evaluation Team's main conclusion is that it is too early to draw strong conclusions about the impact of the SQAM project on broader development objectives such as poverty reduction, employment, income generation and pro-poor private sector growth. The lack of baseline or reporting data at Impact-level amounts to a significant challenge here, and the cohort of businesses actively participating in the project was far too small for extrapolating sound conclusions about economy-wide effects. Even so, the Evaluation Team did conclude that a number of types of potential impacts and positive changes from the project could be identified (for example in benefits to the agribusiness, construction and fuel wholesale sectors from improved metrology services at MBS), and there was some anecdotal evidence of progress towards realising these, or at least what their potential significance to the economy could be in Malawi (for example, in relation to continued access to EU markets for Malawi's groundnut exports as a result of the internationally recognized accreditation of the aflatoxin testing laboratory at MBS).

5.5 Sustainability

144. On sustainability, the Evaluation Team concluded that the level of achievement was moderately satisfactory. This conclusion was based on the fact that the MBS sustainability plan has been developed; MBS has built up a relatively strong position in terms of human resources and financial reserves to sustain the improved services developed as a result of the project; and most of the enterprises who participated in Result 6 have put in place mechanisms to institutionalise improved quality management systems, with some shortcomings related to sustainable resource availability.
145. However, the evaluation found that there are a number of risks for sustainability. At MBS, even though the overall impact of the project on the corporate financial performance of the project to date has been positive, the costs for running its operations and improved services are substantially higher than pre-project levels and are forecast to rise further as the new MBS building is completed and occupied, and additional staff are recruited up to its approved establishment. Secondly, the projections for growth in MBS revenue levels are based on assumptions about increasing demand for its services from local industry, which are to be created in part thanks to an extensive marketing campaign, which has not yet been put in place. These assumptions will need to be closely monitored, and if increases in revenues are less than expected, MBS management will have to be ready to align its expenditures accordingly.

146. Under Result 6, there are also some risks to sustainability, as the level of institutionalization of quality management systems in the 7 enterprises varies. Some enterprises have clear strategies to sustain the gains achieved through acquisition of dedicated quality managers and personnel. On the other hand, some of the firms still need to address sustainability requirements, and follow up investments will be needed.

5.6 Cross Cutting Issues

147. The Evaluation Team concluded that project's performance was mixed regarding cross cutting issues such as gender equality, human rights and good governance. On the one hand, the SQAM project has positively contributed to good governance in Malawi. The improved NQI is already improving the daily lives of Malawian citizens and businesses in terms of enhancing transparency, certainty and fairness in trade and commerce through a more accurate and efficient metrology infrastructure. The potential scale and reach of these benefits are nationwide, and for all levels of the population (as consumers) and business community. This is a considerable achievement in terms of improving commercial governance in the country, and there is potential for this to amplified further if MBS is able to carry out it plans for improving calibration and inspection services for water, electricity and taxi meters.
148. On the other hand, however, limited attention was paid to the gender dimension of the project and this was unsatisfactory. Whilst Result 6 mentioned women and youth as target beneficiaries of the activities planned, in the end their participation was minimal. Across the project, there was no policy or strategy on gender to increase women's involvement in, or beneficitation from, the project, and no gender-disaggregated indicators or data were included in the monitoring and reporting framework. This was disappointing, given the importance that UN system agencies such as UNDP and UNIDO attribute to the goal of women's economic empowerment, and their ready access to in-house and external expertise in this field.

6. RECOMMENDATIONS & LESSONS LEARNED

6.1 Lessons Learned

149. **Lesson #1:** For large scale SQAM projects which involve substantial investment in laboratory equipment, undertaking national market and laboratory surveys prior to finalizing procurement plans is essential for ensuring value for money and tailoring purchasing of equipment to best meet current and expected needs. Such surveys also provide an excellent foundation for wider stakeholder engagement in NQI upgrading projects, including identification and sensitization of new beneficiaries (for example, quality managers in laboratories which are outside the project scope but may still be able to benefit from technical skills training offered).
150. **Lesson #2:** Upgrading SME capacities at scale (and measuring the costs and benefits of such upgrading) is a very challenging area for SQAM projects to get right in low income developing countries, often working in isolation. At the same time, this is an area of potentially greatest development impact. Development Partners such as UNIDO and the World Bank should invest in gathering best-practices and development of practitioner toolkits for most-effective models of SME capacity building for future SQAM projects in low income developing countries.
151. **Lesson 3:** Automation of business services in NQI institutions in low-income developing countries can be highly valuable in increasing productivity and efficiency, but requires very careful planning and management to align with the target institution capacities and experience. In particular, adoption and implementation of institution-wide ERM systems can overwhelm small and inexperienced management teams, and is best done module-by-module as far as possible, with testing, de-bugging and user training completed on one module before implementation of another module is attempted.
152. **Lesson #4:** In designing, implementing and sustaining large scale, long-term SQAM projects, combining international-national capacities through partnerships is likely to generate the best

results and value for money. Examples here include (i) the joint responsibility and accountability of national agencies and international development partners for project design management, procurement and MEL; and (ii) combining international and national technical experts in quality management and food safety, where the former is best-placed to bring wider global industry expertise and experience, and the latter is best-placed to provide continuing on-the-ground support to SMEs and local firms cost-effectively.

6.2 Recommendations

153. **Recommendation #1:** MBS, MoITT, and MoF should agree a solution to the financing of the required customized air-conditioning for the new MBS HQ and complete the construction and furnishing of the building as soon as possible. MBS should provide regular updates (publishing news items 3-4 times per month) on the progress with completion of the new HQ, and what facilities it will offer, to its stakeholders in government, business, and development partners via social media channels, and should design and carry out a marketing campaign on the new HQ.
154. **Recommendation #2:** As new staff are hired and laboratories are moved to the new HQ building, MBS and MoITT, as its supervisory ministry, should carefully monitor the implementation and performance of the sustainability plans prepared by MBS. Until December 2021, MBS should provide 6 monthly update reports on the performance of the sustainability plans to MoITT and copy these to the EC Delegation in Malawi, UNDP Malawi and UNIDO as its partners in the Malawi SQAM project. MBS should also look to collect and analyse data on the impact of its improved services and infrastructure for businesses and consumers in Malawi over time. In particular, MBS should continue to scale-up technical services to more businesses in Malawi to gain international quality management standards as the economic impact could be significant on industrialization and employment, particularly in the agri-business sector.
155. **Recommendation #3:** Looking forward past the move to the new HQ building in 2020, MBS should collaborate with MoITT and its Development Partners to develop a new 5 year programme focused on increasing awareness, knowledge and utilisation of the upgraded NQI in Malawi with the private sector, industry associations, academia and consumers in the country as part of implementing the National Quality Strategy. A key element of this programme should be supporting businesses and exporters in Malawi to upgrade the quality and safety of production at enterprise level, utilising MBS services for calibration, testing, quality assurance and conformity assessment.
156. **Recommendation #4:** To encourage women's participation a GESI (gender and social inclusion) specific strategy should be designed and implemented, including gender-disaggregated monitoring. Specific gender expertise should be consulted by UNDP–UNIDO during the design and implementation of the project. Moreover, gender-specific indicators should be listed in the project's logical framework as well as an in-depth needs assessment should be carried out.
157. **Recommendation #5** Again, once the new MBS HQ building is completed and occupied in 2020, MBS, MoITT and other ministries and agencies, should come together to take-stock of progress with the implementation of the National Quality Strategy, and develop detailed action plans and accountabilities for other outstanding priority areas, including the proposed institutional reforms at MBS (separation of functions). Development Partners should stand ready to continue to provide necessary financial and technical support for the implementation of the National Quality Strategy over the medium term, and encourage the Government of Malawi to follow through the whole-of-government approach to SQAM as envisaged in the National Quality Strategy (as an example, building capacity at MBS to offer internationally accredited ISO 9001 conformity assessment services + supporting Malawian businesses to work towards and achieve ISO 9001 certification + updating government procurement policy to phase in a requirement for vendors to have ISO 9001 certification in place).
158. **Recommendation #6:** Future programmes should pay more attention to efficiency issues through improved design and avoiding implementation delays since some results took considerably longer to accomplish than initially expected. A stronger focus during project

inception and implementation should be on ensuring suitable SMART indicators are in place across all levels of the project results framework, including outcome and impact levels, and establishing appropriate baselines and monitoring data collection protocols.

159. **Recommendation #7:** On sustainability, whilst the level of achievement was moderately satisfactory, it is recommended that this should go beyond resource mobilisation targeting development partners. Sustainability of project outcomes will depend on the commitment of the Government of Malawi to implement the NQP, NQS and related legislation as well as towards increasing demands for MBS services from local industries, research and related users. Cross-cutting issues such as gender and youth should also be enhanced in the development of a sustainable national quality infrastructure in Malawi.

Annex 1: Evaluation Matrix

NB: This is based on the indicative Evaluation questions provided in the ToR. In some cases, duplicate questions have been removed and combined.

Questions	Project Indicators	Main data collection activities	Main data availability
Relevance			
1. Whether the problem the project addressed was clearly identified and the approach soundly conceived?	<p>Increase in volume and value of Malawian exports.</p> <p>% of national technical regulations actually being enforced.</p>	<p>Document review</p> <p>Experts + SMEs Surveys</p>	<p>Project Support Document</p> <p>Log frame</p>
2. Whether the target beneficiaries of the project were clearly identified?	<p>Number of private and public organisations, accredited or certified</p> <p>MBS's reviewed and formalised organisational structure, service delivery, procedures, responsibilities, knowledge management and monitoring.</p>	<p>Document review</p> <p>Interviews</p> <p>Country visits</p>	<p>Project Support Document</p>
3. Whether the outcome and outputs of the project were stated explicitly and precisely in verifiable terms with SMART indicators?		<p>Document review</p> <p>Interviews</p>	<p>Project Support Document</p> <p>Log frame</p>
4. The quality of the participatory needs' assessment with intended partners and target beneficiaries 192. prior to the development of the project.	<p>Variation in % between the project inception and end of project in the following quantified profiles for NQI:</p> <p>Performance profile for the</p>	<p>Document review</p>	<p>Project Support document</p> <p>Log frame</p>

	basic principles.		
	Performance profile for the practice.		
5. Whether the project was relevant to the development priorities of the country and fostering inclusive and sustainable economic growth in Malawi?	Increase in volume and value of Malawian exports.	Country visits	Project Support Document
	Increased demand and offer of MBS business services: standards, training services, testing and calibration.	Interviews SMEs Survey	Annual Progress report
6. Whether the relationship between outcome, outputs, activities and inputs of the project are logically articulated and relevant to address the problem addressed in the project?	increase in volume and value of Malawian exports.	Document review	Project Support Document
	Availability of National Quality Policy (NQP), consensual amongst its stakeholders and approved by the Minister of Industry and Trade.	Interviews Experts Survey	Log frame
	Increased demand and offer of MBS business services: standards, training services, testing and calibration.		
7. To what extent did the project consider gender equality in its design?	Gender disaggregated data of the SQAM trainings and the rate of female led SMEs involved in the SQAM project	Documents review Interviews	Project Support Document
8. Did the design of the project adequately take into account scaling up and sustainability?	Assurance that the architectural drawings and construction documents will comply with specific requirements for the laboratories, before handed over to contractors.	Document review Interviews	Project Support Document
	Availability of National Quality Policy (NQP), consensual		

	amongst its stakeholders and approved by the Minister of Industry and Trade.		
Effectiveness			
1. Whether the management arrangements of the project were appropriate and analyze the institutional arrangements put in place, including coordination arrangements, financing arrangements and actual implementation?	<p>Percentage of financial autonomy of MBS's budget from GoM and donors.</p> <p>MBS's reviewed and formalised organisational structure, service delivery, procedures, responsibilities, knowledge management and monitoring.</p>	<p>Document review</p> <p>Portfolio review</p> <p>Surveys</p> <p>Interviews</p>	<p>Annual Progress Reports + Annual Work plan</p>
2. What major factors affected project delivery and were appropriate interventions taken address them, and how might these factors be incorporated into any planned intervention in support of NQI in future?	<p>Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice.</p>	<p>Document review</p> <p>Interviews</p> <p>Experts survey</p>	<p>Annual Reports</p> <p>Steering Committee Minutes</p>
3. Assess the responsiveness of project management to significant changes in the environment in which the programme functioned (did these facilitate or impede project implementation)?	<p>Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice.</p> <p>Annual variation of the number of non-compliances of enforced national technical regulations. % of national technical regulations actually</p>	<p>Interviews</p> <p>Expert survey</p>	

	being enforced.		
4. Determine whether or not lessons learnt from other relevant programmes/projects were incorporated into the project?		Document review Interviews	Mid Term Evaluation
5. To what extent did the project prioritize gender equality in its implementation? To what extent are both women and men accessing the benefits/results of the project?	Gender disaggregated data of the SQAM trainings and the rate of female led SMEs involved in the SQAM project	Document review Interviews SMEs + Experts surveys	Project support Document
6. Assess effectiveness of monitoring and technical support of the programme as expected by the Government, UNDP, EU, and UNIDO.	MBS's reviewed and formalised organisational structure, service delivery, procedures, responsibilities, knowledge management and monitoring. Percentage of financial autonomy of MBS's budget from GoM and donors.	Document review	Annual Progress Reports + Annual Work plan Steering Committee minutes
7. What are the major achievements of the project vis-à-vis its outputs, performance indicators and targets? Did the project meet the success criteria as outlined in the project document?	Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice.	Document review Interviews SMEs + Experts surveys	Log Frame Annual Progress Reports
8. Whether there is evidence of UN's contribution (alone and with the financial support from the EU) to the outcome of The project? The effectiveness of the UNDP Country Office and its impact (positive and negative) on project delivery?		Document review	Project support document

<p>9. Given the capacity building objectives of the project, how effective were the project's capacity building interventions?</p>	<p>Trainers-cum-counsellors and auditors: Training in HACCP / ISO 22000 Food safety management systems</p> <p>Training in ISO 9001 Quality management systems.</p> <p>Training in "Initiating quality improvement in selected sectors</p> <p>Training in ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories.</p> <p>Number of trainees approved as trainers and auditors</p>	<p>Document review</p> <p>Interviews</p> <p>SMEs + Experts surveys</p>	<p>Project support document</p> <p>Log frames</p>
<p>10. The effectiveness of the project's collaboration with the public and private sector.</p>	<p>Number of private and public organisations, accredited or certified</p>	<p>Interviews</p> <p>Experts and SMEs surveys</p>	<p>Information collected by interviews and surveys</p>
<p>11.What are the major achievements of the project vis-à-vis its outcomes, performance indicators and targets?</p>	<p>Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice.</p> <p>Number of private and public</p>	<p>Document review</p> <p>Interviews</p> <p>SMEs + Experts surveys</p>	<p>Log Frame</p> <p>Annual Progress Reports</p>

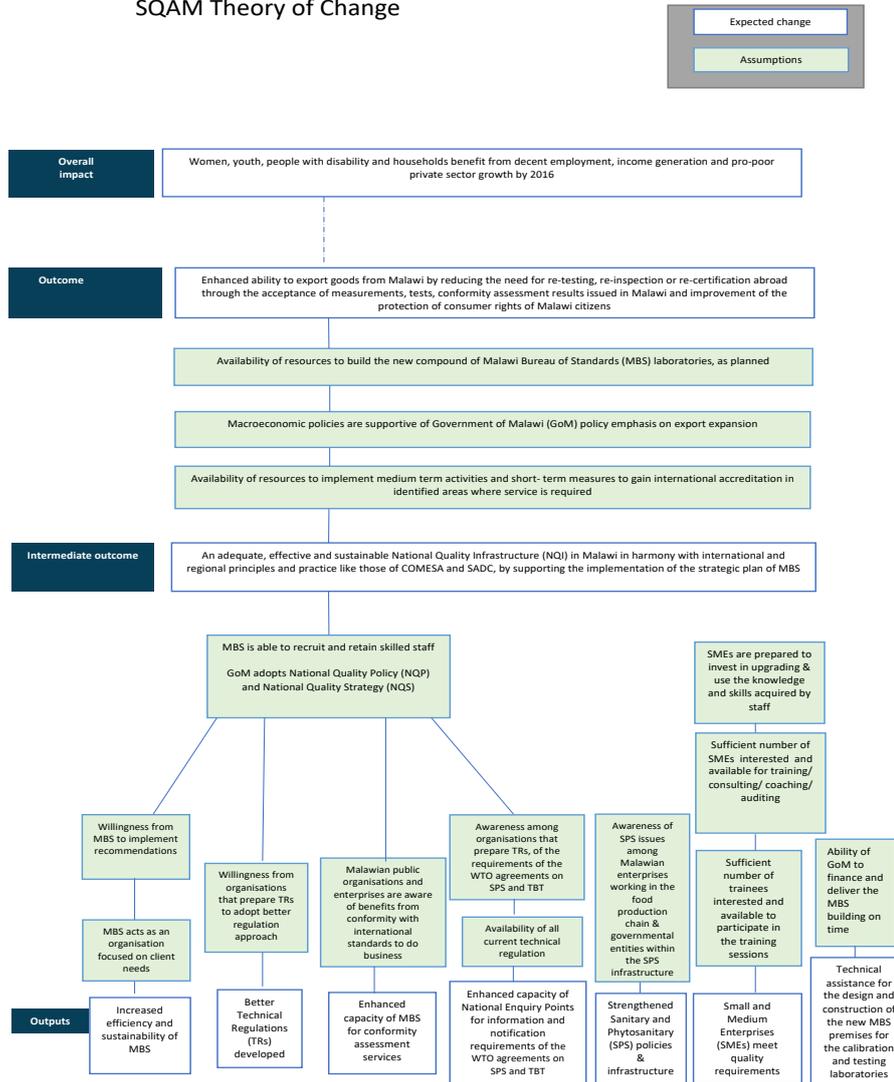
	organisations, accredited or certified		
12. Any underlying factors, beyond control, that influenced the outcome of the project?	Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice	Interviews Experts surveys	Information collected by interviews and survey
13. What real differences has the activity made to various beneficiaries? How many firms and organisations have been affected?	Number of private and public organisations, accredited or certified. Increase in volume and value of Malawian exports. Increased demand and offer of MBS business services: standards, training services, testing and calibration.	Interviews SMEs survey SMEs case studies	Final reports
14. Were the project activities effectively organised and delivered? Would it have been better if things had been done differently?	Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice	Interviews SMEs + UNIDO experts survey	Annual Work Plan Annual Progress Reports
Efficiency			
1. Whether the project resources (financial, physical and manpower) were adequate in terms of both quantity and quality?	Percentage of financial autonomy of MBS's budget from GoM and donors	Desk review Interviews	Annual Progress Reports + Annual

			Work Plan
2. Whether the project resources were used effectively to produce planned results (were the disbursements and project expenditures in line with expected budgetary plans)? Whether the project resources were used cost-effectively compared to similar intervention? Were the project activities delivered on schedule?	Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice.	Document review Interviews Expert Survey	Annual Progress Reports + Annual Work plan
3.The efficiency of delivery by Government counterparts in terms of inputs such as personnel, equipment, and in-kind contributions such as office space.	Efficiency of business services provided by MBS to Malawian organisations, public and private.	Interviews Experts Survey	Information collected by interviews and surveys
Impact			
1. What impacts have been achieved as a result of the project? What are positive and negative change that the project produced, directly or indirectly, intended or unintended.	Variation in % between the project inception and end of project in the following quantified profiles for NQI: Performance profile for the basic principles. Performance profile for the practice. Number of private and public organisations, accredited or certified	Desk review SMEs Survey SMEs case studies Interviews	Annual Progress Reports + Annual Work plan Final reports
Sustainability			
1.Assess whether or not the project’s achievements are sustainable.	MBS's reviewed and formalised organisational structure, service delivery, procedures, responsibilities, knowledge management and	Desk review Interviews Surveys	Annual Work plan Annual

	<p>monitoring.</p> <p>Efficiency of business services provided by MBS to Malawian organisations, public and private.</p> <p>Percentage of financial autonomy of MBS's budget from GoM and donors.</p>		<p>progress Reports</p>
<p>2.Assess the robustness of the exit strategy for all elements of the project?</p>		<p>Document Review</p> <p>Interviews</p>	<p>MBS exit strategy</p>
<p>3.What should be done to strengthen sustainability of programme outcomes by MBS and other stakeholders?</p>	<p>MBS's reviewed and formalised organisational structure, service delivery, procedures, responsibilities, knowledge management and monitoring.</p> <p>Efficiency of business services provided by MBS to Malawian organisations, public and private.</p> <p>Percentage of financial autonomy of MBS's budget from GoM and donors.</p>	<p>Interviews</p> <p>SMEs and Experts surveys</p>	
<p>4.Provide specific recommendations for future potential interventions beyond the current project with regard to impact and sustainability of recent support</p>		<p>See question 3</p>	

Annex 2: Theory of Change

SQAM Theory of Change



Annex 3a: Programme for Field Mission 1

Sunday, 2 June	
Tom Pengelly Time – 12:20	Transfer from Lilongwe Kamuzu International Airport to Sunbird Capital Hotel Lilongwe Flight: South African Airways - SAA 170 From Johannesburg with arrival at 12h20 Driver: Ken Anka Hotel details: Sunbird Capital Hotel Lilongwe
Paul Kalenga Time – 15:35	Transfer from Lilongwe Kamuzu International Airport to Sunbird Capital Hotel Lilongwe Flight: Ethiopian Airlines – ET21 From Johannesburg with arrival at 15h35 Driver: Ken Hotel details: Sunbird Capital Hotel Lilongwe
Monday, June 3	
7:50 – 8:15 AM	Travel from Hotel to UNDP Malawi Offices
8:30 – 9:00 AM	Meeting with UNDP PSD Team, Cinzia Tecce, PSD Specialist; Chio Chionetsero PSD Programme Analyst; Titus Kavalo, PSD Programme Analyst
9:00 – 11:30 AM	Kick-off meeting with SQAM stakeholders (Ministry of Finance, European Union Delegation, Malawi Confederation of Chambers of Commerce and Industry, Ministry of Industry Trade and Tourism, Malawi Bureau of Standards, United Nations Industrial Development Organization) Venue: UNDP Malawi, Conference room A
12:00 – 1:30 PM	Lunch
1:30 – 2:30 PM	Meeting with UNDP Malawi Claire Medina, Resident Representative a.i. Andrew Spewzoka, Portfolio Manager PSD Team, Cinzia Tecce, PSD Specialist; Chio Chionetsero PSD Programme Analyst; Titus Kavalo, PSD Programme Analyst
3:00 – 4:15 PM	Meeting with Mr. Phangaphanga (former Deputy Director of Industry in MoITT) Venue to be determined
4:30 – 5:00 PM	Debrief with PSD Team
5:10 PM	Transfer back to hotel
Tuesday, 4 June	
7:00 AM	Leave hotel for Lilongwe Kamuzu International Airport

Tom Pengelly/Paul Kalenga/Cinzia Tecce	Flight to Blantyre Time: 8:40 - 9:20 Flight: Ethiopian Airlines ET40 Flight time: 8:40 – 9:20 Driver: Ronex Mbale Hotel details: Sunbird Mount Soche Hotel Blantyre
10:30AM	Check-in Sunbird Mount Soche Hotel
1:00 – 4:00 PM	Roundtable Meeting with Malawi Bureau of Standards SQAM Project Management Team
4:00 – 5:00 PM	Meeting with Willy Muyila, SQAM National Project Coordinator
Wednesday, 5 June	
Tom Pengelly Time – 6:00AM	Transfer from the Hotel to airport: 6AM Flight to OR Tambo Flight Departure Time: 7:20AM Flight: Ethiopian Airlines ET22
9:00-11:00	Meeting with Rex Nyahoda, SQAM local consultant for ISO 9000 and ISO 2001 Certification
11:30-1:30 PM	Lunch meeting with Mr. Davlin Chokazinga, former DG MBS
2:00 PM-5:00 PM	Meeting with SMEs (Saana Consulting to confirm)
Thursday, 6 June	
Paul Kalenga Time – 6:00AM	Transfer from the Hotel to airport: 6AM Flight to OR Tambo Flight Departure Time: 7:20AM Flight: Ethiopian Airlines ET22
8:00 – 10:00 AM	Flight to Lilongwe for Cinzia to be confirmed

Annex 3b: Programme for Field Mission 2

Sunday, 23 June	
Tom Pengelly Time – 12:20	Transfer from Lilongwe Kamuzu International Airport to Sunbird Capital Hotel Lilongwe Flight: South African Airways - SAA 170 From Johannesburg with arrival at 12h20 Driver: Ken Anka Hotel details: Sunbird Capital Hotel Lilongwe
Paul Kalenga Time – 15:35	Transfer from Lilongwe Kamuzu International Airport to Sunbird Capital Hotel Lilongwe Flight: Ethiopian Airlines – ET21 From Johannesburg with arrival at 15h35 Driver: Ken Hotel details: Sunbird Capital Hotel Lilongwe
Monday, June 24	
8:30 – 9:00 AM	TBC
12:00 – 1:30 PM	Lunch
4:30 – 5:00 PM	TBC
Tuesday, 25 June	
8:00 AM	Leave hotel for UNDP office
9:00 – 10:00	Meeting with Cinzia Tecce at UNDP office
9:00 – 10:00	Meeting with Matilda Palamuleni at the EU Delegation
10:00	Meeting with Mr. Phangaphanga in the lobby at Sunbird Capital Hotel
14:00	Transfer from hotel to the Airport
Tom Pengelly/Paul Kalenga/Claudia Scuriatti	Flight to Blantyre Time: 16:30 - 5:10 Flight: Ethiopian Airlines ET40 Driver: Ronex Mbale Hotel details: Sunbird Mount Soche Hotel Blantyre
17:30PM	Check-in Sunbird Mount Soche Hotel
18:00PM	Meeting with Mr. Davlin Chokazinga former MBS DG at Sunbird Mount Soche Hotel
Wednesday, 26 June	
8:00am	Meeting with Mr. Willy Muyila, Deputy Director General (DDG) at MBS
9:00am	Meeting with Mr. Stephen Kuyeli, Director of Testing Services (DTS) at MBS
11:00	Meeting with Mrs. Elizabeth Kunje, Deputy Director of Standards Development-Food & Agriculture (DDSD-FA), at MBS
Lunch	

15:00	Meeting with Mr. Crighton Marrongwe, Deputy Director of Metrology Services (DMS)at MBS
Thursday, 27 June	
9:00 – 10:00	Mr. Rex Moyo, Director of Finance and Administration (DFA)at MBS
10:00 – 11:00	Mr. Emmanuel Jere, Project Assistant SQAM project at MBS
Lunch	
14:00 – 15:00	Mr Luckson Zidana, MBS Auditor
5:00-6:00 PM	Meeting with Rex Nyahoha, SQAM local consultant for ISO 9000 and ISO 2001 Certification at Sunbird Mount Soche Hotel
Friday,28 June	
14:00 – 16:00	Validation Workshop at Sunbird Mount Soche Hotel
Saturday 29 June	
Tom Pengelly	Transfer from hotel to Airport Flight departure Time 9:50 – 10:30 am Flight: Ethiopian Airlines 41
Monday1 July	
10:00	Mr Gift, Deputy Director of Quality Assurance Services (DQAS) MBS in Blantyre
11:30	Ms Gertrude, Deputy Director of Quality Assurance Services (DQAS) MBS in Blantyre
Lunch	
14:00	Mr. Milap Pujara, Production Manager of Capital Oil Refining Industries (CORI), CORI premises in Blantyre
Tuesday 2 July	
10:00	Mrs. Jane Phambala, Quality Manager of Project Peanut Butter, Project Peanut Butter premises in Blantyre
Paul	Flight back to Lilongwe
Wednesday 3 July	
10:00	Mr. Elijah Kumwenda, CEO of Promat, Promat premises in Lilongwe
14:00	Mrs. Margret Ngwira, Managing Partner of Linga Wine, Linga Wine premises in Lilongwe
Thursday, 4 July	
9:00	Meeting with Cinzia Tecce at UNDP office
13:30	Flight departure Lilongwe to Johannesburg, SA 171

Annex 4: Stakeholder Mapping

Name	Organisation	Notes	Contact
Donors			
Andrew C. Spezowka	United Nations Development Programme (UNDP) Portfolio Manager – Resilience and Sustainable Growth		Andrew.spezowka@undp.org
Emmanuel Jere	SQAM Project Coordinator		Emmanuel.jere@undp.org
Francois Denner	Chief Technical Advisor (CTA)	Phone Interview	francois@enceladus.africa
Matilda Palamuleni	European Delegation in Malawi – Programme Manager		Matilda.palamuleni@eeas.eurpa.eu
DIAZ-CASTILLO, Juan Pablo	UNIDO		j.diaz-castillo@unido.org
Dominka DOR	UNIDO	Phone Interview	d.dor@unido.org
Karin Monaco	UNIDO	Phone interview	k.monaco@unido.org
Ouseph PADICKAKUDI	UNIDO - Chef Technical Advisor		o.padickakudi@unido.org
Jackson Hau	National Norad project co-ordinator		
Milika Kalyati / Andreas von Brühl-Pohl	European Delegation in Malawi		Milika.kalyati@eeas.europa.eu/ lot10@pohl-consulting.org
Cinzia Tecce	PSD Specialist - United Nations Development Programme (UNDP)		
Jean Kamanzi	Food and Agriculture Organization (FAO) Food Safety expert in region		jean.kamanzi@fao.org
Titus Kavalo	Program Analyst – Economic Competitiveness and Private Sector Development (UNDP)		Titus.Kavalo@UNDP.org
Allah Fami	Chef Technical Advisor		
Region			
TBC	Common Market for Eastern and Southern Africa (COMESA)		
Dr Geoff Visser	SQAM Consultant, Southern African Development Community (SADC)	Contracted to SADC to support the SQAM programme	geoff.visser@serengeti.co.za

Government			
Yollum Gundaphiri	Ministry of Finance		yollumgunda@gmail.com
Edward Jusking	Ministry of Finance		
Rex Moyo	MBS		rmoyo@mbsmw.org
Stephen Kuyeli	MBS		stephenkuyeli@mbsmw.org
Masautso Ngamwane	MBS		masangamwane@mbsmw.org
D. Mwalwayo	MBS		danielmwalwayo@mbsmw.org
Davlin Chokazinga	Former DG Malawi Bureau of Standards (MBS)		
Elizabeth Kunje	MBS		elizabethkunje@mbsmw.org
Damiano Kumwenda	MBS		damianokumwenda@mbsmw.org
Mr Clement Phangaphanga	Former Deputy Director of Industry in the Ministries of Industry, Trade and Tourism (MoITT)		Clement.Phangaphanga@yahoo
S. K. Chisale	MITT		chisalesk@gmail.com
Fred Sikwese	Director of Standards Development (MBS)		Fsikwese@mbsmw.org Tel : (+265) 1870 488
Willy H Muyila	Deputy Director General – (MBS)		Willymuyila@mbsmw.org Tel: +265 1 870
SMEs/Others			
Bernard Thole	Polytechnic University of Malawi		bthole@poly.ac.mw
Chancellor L. Kaferapanjira	Chief Executive – Malawi Confederation of Chambers of Commerce and Industry		ckaferapanjira@mccci.org Tel: (+265) 01871988/813
Mr. Siraj Karim	Managing Director - Capital Oil Refining Industries (CORI)	Blantyre	skarim@corilimited.com
Rex Nyahoda	National Consultant on Result 6		+265 999 95 00 17
Mr. Milap Pujara	Capital Oil Refining Industries (CORI)	Blantyre	mpujara@corilimited.com Phone: 0999 23 11 25
Mr. Premkumar Sethumadhavan	CEO (Responsible for ISO 9001 activities) - Polyplast Limited (Now Flowtech Ltd)	Blantyre	premkumar.s@flowtechmw.com Phone: 0997 21 46 76

Mr. Bilal Mahomed	Managing Director - Polyplast Limited (Now Flowtech	Blantyre	bmahomed@robraymw.com Phone: 0888 84 31 98
Dessa Shuckerow (based in USA)	Quality Director - Project Peanut Butter	Located in Lunzu, Blantyre along the BT-Zalewa Road	dessa@projectpeanutbutter.org
Theresa Ngoma Jane Milanzie	Food Safety Manager - Project Peanut Butter	Located in Lunzu, Blantyre along the BT-Zalewa Road	theresa@projectpeanutbutter.org Phone:0999 413 806 jane@projectpeanutbutter.org
Mr. Elijah Kumwenda	Managing Director - Promat Limited	Located Kanengo (Lilongwe) off Salima Road.	ejkumwenda@promatpipes.com Phone: 0882 09 18 52
Mr. Cuthbert Kampeni	QA Manager (Responsible for ISO 9001 activities) - Promat Limited	<u>Located Kanengo (Lilongwe) off Salima Road.</u>	Cark1962@gmail.com Phone: 0999 11 85 91
Mr. Harrison Kalua	CEO - Mzuzu Coffee Planters Cooperative Union Limited	Located in Luwinga Mzuzu	hbkalua@gmail.com
Mr. Christopher Gondwe	Processing and Trading Manager (Responsible for ISO 9001 activities) - Mzuzu Coffee Planters Cooperative Union Limited	Located in Luwinga Mzuzu	christophergondwe@gmail.com Phone: 0882 72 51 69
Mrs. Lusubilo Chakaniza	CEO - Ethanol Company	Located in Dwangwa, in Nkhotakota, close to Illovo Sugar Company	lchakaniza@ethanolmw.com
Mr. Derek Zamaere	Operations Manager - Ethanol Company	Located in Dwangwa, in Nkhotakota, close to Illovo Sugar Company	dzamaere@ethanolmw.com
Mr. Dickson Chakale	Risk Coordinator - Ethanol Company	Located in Dwangwa, in Nkhotakota, close to Illovo Sugar Company	dchakale@ethanolmw.com
Mr. Robin Nansambo	Ethanol Company	Located in Dwangwa, in Nkhotakota, close to Illovo Sugar Company	rnansambo@ethanolmw.com Phone: 0881 129 944
Dr. Timothy Ngwira	LINGA WINERY	Located in Area 3 Lilongwe, close to Bishop	lingawine@gmail.com
Leman Jussa	Director of Business Information – Small and Medium Enterprises Development Institutions (SMEDI)		jussaleman@gmail.com

Annex 5: Interviews Undertaken

Name	Date
Mr. Denner, Francois	May 22, 2019
Ms. Dor, Dominika	June 7, 2019
Ms. Monaco, Karin	June 7, 2019
Mr. Padickakudi, Ouseph	June 18, 2019
Mr. Fahmy, Alaa A. A.	June 19, 2019
Ms. Cinzia Tecce	June 25, 2019
Ms. Matilda Palamuleni	June 25, 2019
Mr. Phangaphanga	June 25, 2019
Mr. Davlin Chokazinga	June 25, 2019
Mr. Willy Muyila,	June 26, 2019
Mrs. Elizabeth Kunje,	June 26, 2019
Mr. Crighton Marrongwe,	June 26, 2019
Mr. Rex Moyo,	June 27, 2019
Mr. Emmanuel Jere,	June 27, 2019
Mr. Luckson Zidana,	June 27, 2019
Mr. Rex Nyahoha,	June 27, 2019
Mr Gift	June 1, 2019
Ms. Gertrude	July 1, 2019
Mr. Milap Pujara,	July 1, 2019
Mrs. Jane Phambala	July 2, 2019
Mrs. Margret Ngwira	July 3, 2019
Mr. Elijah Kumwenda,	July 3, 2019
Ms. Cinzia Tecce	July 4, 2019

Annex 6: Main Documents Reviewed

Documents
Signed Contribution Agreement between EU–UNDP, 2012
SQAM Project Logical Framework
Inter-Agency Agreement UNDP – UNIDO 2013
Project Support Document signed 2012
Annual and Interim Progress Report (2012,2013,2014,2015,2017)
SQAM Project Annual Workplan (2013,2014,2015,2016,2017,2018)
Minutes Steering Committee Meetings
Mid-Term Evaluation of the EU-GoM Capacity Building programme towards Trade and PSD
Technical Report on <i>Strengthened capacity of the Malawi Bureau of Standards to deliver business services and to achieve financial sustainability.</i>
SQAM Sustainability Plan for MBS
UNIDO–SQAM Project Final Report

Annex 7: Evaluation Questionnaire Pro-Formas

General Stakeholder Questions

1. Could you please tell us what was your involvement before/during the SQAM project? Which components/activities did you participate in and what was your role?
2. In your view, was the SQAM project component/activities you were involved in relevant and appropriate for the current needs? Did the project do the right things in your view? Were you involved or consulted in the design of these activities/components?
3. Were the project activities you were involved in effectively organised and delivered? Would it have been better if things had been done differently? Did the project pay sufficient attention to the gender dimension?
4. From your point of view, was the project efficiently managed by UNDP, UNIDO and MBS? Were the procurements, training and experts provided by the project of good quality and good value for money? Did the project management partners adapt the project when necessary?
5. Do you think the project engaged well with stakeholders from the private sector and across government? Was their good co-ordination with other development partners working in the SQAM sector?
6. What do you see as the main achievements and accomplishments of the project? Do you think the project met its targets? What type of impacts have you seen from the project or do you expect in the future?
7. Do you think the results supported by the project that you were involved in will be sustainable? If not, why not? Are follow-on investments needed?
8. What lessons can be learnt from the SQAM project for similar future projects in Malawi and other developing countries?

UNIDO Experts' Survey Questions

1. Was your UNIDO Expert contract efficiently processed, with smooth mission logistics and payments made on time?
2. Were your mission visits well-prepared and timely, with counterparts engaged and available? Did you observe follow-up from your previous missions?
3. Did you judge that your activities were effective in contributing to the relevant project outputs, and do you think these are sustainable?
4. Were there any ways in which your inputs could have been more efficiently managed and more effective? What could be improved in this regard for future UNIDO projects? What lessons can be learnt?

5. To what extent did the project prioritize gender equality in its implementation?

SME Survey Questions/Case Studies

1. What is the nature of your business? How many people do you employ? What is the age and gender profile of your employees?
2. Do you currently export goods outside Malawi or plan to in the future?
3. How was your company seeking to benefit from the SQAM project? Do you feel that your expectations have been satisfied?
4. What type of activities did you participate in from the SQAM project and over which period? Did you find these activities to be relevant to your business and effectively organized/delivered? What could have been done differently?
5. What have been the main achievements and results from the SQAM project for your company? Have you been able to achieve certification in any fields? What has been the impact on your business? Have you been able to access new markets or attract new customers?
6. Do you think these results and impacts can be sustained in your company now that the SQAM project has finished? If not, why not?
7. Are there any lessons from the SQAM project's work with SMEs that you want to highlight for future projects like this in Malawi or other countries?

Annex 8: Survey Responses

UNIDO Technical Experts Survey

Name	Response status
Otto Loesener	
Michael Peet	Received
Geoff Visser	Received
Sohrab	Received
Valentin Nikonov	
Enrique Sierra	
Shaukat Malik Hussain	Received
Shashank Sheth	Received
Anya Knoetze	Received
Rex Nyahoda	
Steve B. Sidney	
Reimond Willemse	Received
Nigel Croft	Received
Phil Heath	
Howie Ng	
Laura Pedraza	Received
Angelica Caponera	
Ryan Cutting	

Total responses: 9 from 18.

SMEs Survey

Name	Response status
Christopher Gondwe – Mzuzu Coffe	Received
Dickson Chakale - ETHANOL COMPANY LIMITED	Received
Milap Pujara - CAPITAL OIL REFINING INDUSTRIES LIMITED (CORI)	Received
M E Ngwira - Linga Wine	Received
Jane Milanzie – Project Peanut Butter	Received
Promat Limited	Received
Polyplast Limited (now Flowtech Ltd)	Received

Total responses: 7 from 7

Annex 9: New Equipment Procured Under SQAM Project at MBS



2, 500L Proving Tank



Mass Comparator



High Performance Liquid Chromatograph

Annex 10: SQAM Result Areas and Indicators

Result Areas	Indicators
<p>R1: Increased efficiency and sustainability of the Malawi Bureau of Standards.</p>	<p>Availability of National Quality Policy (NQP), consensual amongst its stakeholders and approved by the Minister of Industry and Trade.</p> <p>MBS's reviewed and formalised organisational structure, service delivery, procedures, responsibilities, knowledge management and monitoring.</p> <p>Efficiency of business services provided by MBS to Malawian organisations, public and private.</p> <p>Percentage of financial autonomy of MBS's budget from GoM and donors.</p>
<p>R2: Better technical regulations - Support to the review and development of technical regulations</p>	<p>Organisations that prepare technical regulations (TR) adopt a methodology for clear, feasible, cost effective and harmonized technical regulations put forward by the project team after being previously discussed with stakeholders.</p>
<p>R3: Enhancement of the Malawi Bureau of Standards capacity</p>	<p>Increased demand and offer of MBS business services: standards, training services, testing and calibration.</p> <p>MBS's Product certification body accredited by an accreditation body full member of IAF.</p> <p>MBS's management systems certification body accredited by an accreditation body full member of IAF for the international standards; ISO 9001 ISO 22000 and HACCP.</p> <p>MBS's testing laboratories accredited by an accreditation body full member of ILAC for the international standards.</p> <p>MBS's calibration laboratories accredited by an accreditation body full member of ILAC for the international standards.</p> <p>MBS's training unit operational.</p>
<p>R4: Enhanced capacity of National Enquiry Points (NEP). Proactive and responsive NEP to the information and notification requirements of WTO/ TBT/ SPS/ agreements.</p>	<p>Availability through MBS of a public service that provides a comprehensive and updated data base with the Malawi technical regulations (TR), draft and approved national standards.</p> <p>Number of TR that were incorrectly not notified during its draft stage.</p> <p>Availability through MBS of a public service that provides a business information service particularly for exporting companies on foreign TR, standards</p>

Result Areas	Indicators
	and conformity assessment dispositions of countries that imports from Malawi.
R5: Strengthened Sanitary and Phytosanitary (SPS) infrastructure.	<p>Report reviewing the SPS infrastructure in Malawi and corresponding "Road map for improvement" discussed and approved by stakeholders.</p> <p>Report on the review and upgrade of SPS legislation in Malawi discussed and approved by stakeholders.</p>
R6: Small and medium enterprises (SME) meet quality requirements	<p>SME: HACCP / ISO 22000 Food safety management systems. Number of SME with a management system conforming to HACCP / ISO 22000 requirements through project assistance.</p> <p>SME: ISO 9001 Quality management systems. Number of SME with a management system conform to ISO 9001 requirements through project assistance.</p> <p>SME : Other type of quality requirements in export markets. Number of SME able to comply with specific quality requirements in export markets.</p> <p>Trainers-cum-counsellors and auditors training in HACCP / ISO 22000 Food safety management systems. Number of trainees approved as trainers and auditors.</p> <p>Trainers-cum-counsellors and auditors: Training in ISO 9001 Quality management systems. Number of trainees approved as trainers and auditors.</p> <p>Trainers-cum-counsellors: Training in "Initiating quality improvement in selected sectors (i.e. wood, horticulture, agro-processed foods)". Number of trainees approved as trainers.</p> <p>Seminars: Number of participants; % of affiliation with public or private sectors; evaluation by participants.</p> <p>Trainers-cum-counsellors and auditors: Training in ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories. Number of trainees approved as trainers and auditors.</p>
R7: Preparation of the organisational and operational internal bylaws and business plan for a national Malawian accreditation body.	Availability of the organisational and operational internal bylaws and business plan for the national Malawian accreditation body, consensualized amongst its stakeholders and approved by the Minister of Industry and Trade.