Quarterly Progress Report April – June 2018

Development of a robust standardization, quality assurance, accreditation and metrology (SQAM) infrastructure in Malawi

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ACRONYMS

AWP	Annual Work Plan
BOBS	Botswana Bureau of Standards
COMESA	Common Market for Eastern and Southern Africa
CTA	Chief Technical Advisor
DTIS	Diagnostic Trade Integration Study
ERP	Enterprise Resource Planning
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDA	Food and Drug Administration
FSAT	Food Safety Assessment Tool
FSMS	Food Safety Management Systems
HQ	Headquarters
IAF	International Accreditation Forum
IE	International Expert
IEC	International Electrotechnical Commission
IFSTL	International Food Safety Training Laboratory
ILAC	International Laboratory Accreditation Cooperation
INNOQ	National Institute for Standards and Quality
IRCA	International Register of Certificated Auditors
ISO	International Organization for Standardization
MATCB	"Malawi: Market access and trade capacity building support for agro-
	industrial products"
MBS	Malawi Bureau of Standards
MDGs	Millennium Development Goals
MGDS	Malawi Growth and Development Strategy
MoITT	Ministry of Industry, Trade and Tourism
MSD	Metrology Services Department
NEP	National Enquiry Point
NMiSA	National Metrology Institute of South Africa
NML	National Metrology Laboratory
NASFAM	National Smallholder Farmers' Association of Malawi
Norad	Norwegian Agency for Development Cooperation
NQI	National Quality Infrastructure
NQP	National Quality Policy
NQS	National Quality Strategy
PM	Project Manager
PRP	Pre-Requisite Programmmes
QASD	Quality Assurance Services Department
SME	Small and Medium Enterprise
SADC	Southern African Development Community
SADCAS	Southern African Development Community Accreditation Service
SANAS	South African National Accreditation System
SPS	Sanitary and Phytosanitary
SQAM	Standardization, Quality Assurance, Accreditation and Metrology
TBT	Technical Barriers to Trade

ToRs	Terms of Reference
TSD	Testing Services Department
UK	United Kingdom
UNBS	Uganda National Bureau of Standards
UNDAF	United Nations Development Assistance Framework
UNECE	United Nations Economic Commission for Europe
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
USA	United States of America
USAID	United States Agency for International Development
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization
WTO	World Trade Organization

Executive Summary

The purpose of the "Development of a robust standardization, quality assurance, accreditation and metrology (SQAM) infrastructure" project is to contribute to a more adequate, effective and sustainable National Quality Infrastructure (NQI) in Malawi, in accordance with international and regional principles and practices (e.g. Common Market for Eastern and Southern Africa (COMESA), Southern African Development Community (SADC)), by supporting the enhancement of the performance of the Malawi Bureau of Standards (MBS). This will have direct implications in terms of benefits for Malawi enterprises through improved business services provided by the National Quality Infrastructure and indirectly, and in the long term, in terms of improved terms of trade and protection of consumer rights of Malawian citizens.

The project is being implemented in terms of a contribution agreement between the European Union (EU) and the United Nations Development Programme (UNDP). An inter-agency agreement (IAA) was subsequently concluded between the UNDP and the United Nations Industrial Development Organization (UNIDO) for UNIDO to provide specialized technical assistance to ensure the success of the overall project.

This progress report to the UNDP presents a summary of the work done by UNIDO during the second Quarter of 2018 (1 April to 30 June 2018) and it serves, therefore, to fulfill reporting requirements in the IAA. The reference for this report is the Annual Work Plan for 2018, which was discussed during the SQAM Project Annual Work Plan Retreat on 27 - 28 November 2017 in Zomba and approved during the SQAM Project Steering Committee Meeting on 30 November 2017 in Lilongwe, which was further revised on the 25 January 2018 in order to reflect the actual figures of the UNIDO and MBS budget.

The Contribution Agreement (Addendum No. 3) reflecting the cost project extension till end December 2018 between EU and UNDP was signed on the 8th June 2018 and a copy was sent to UNIDO. The project team followed up with UNDP to finalize the Amendment No. 3 of the Inter-Agency Agreement (IAA) between UNDP and UNIDO following the Contribution Agreement and after revising the funds to be transferred to UNIDO for the remaining implementation activities under UNIDO's responsibility. The Annual Workplan (January-May 2018) has been signed by UNIDO in early April and the signed scanned copy was shared with UNDP and MBS. The Workplan for May-December that was prepared as part of the extension proposal was approved by the 17th SQAM Steering Committee Meeting, 6 June 2018, Lilongwe.

The members of SC acknowledged the progress achieved by the project and asked the team to monitor closely the accreditation process. The members were appraised with the progress in the new MBS building with a new finalization date of end of October 2018. It was reported that the Minister of Industry, Trade and Tourism met the building contractor and urged for expediting activities to avoid further delays. Mr. Ouseph Padickakudi, new CTA was introduced to the stakeholders at the PM and SC meetings. The SQAM Steering Committee with profound thanks bid farewell to the outgoing CTA, Dr. Alaa Fahmy, for his dedicated service to the project.

The report shows the implementation progress throughout the quarter. As per inputs received by UNIDO's Financial Management of Technical Cooperation Unit, the financial implementation for this quarter is in the amount of USD 299,643.44 (see Annex 2: obligations and disbursements), bringing the total financial expenditure to USD 3,401,439.61.

In terms of disbursements only (refer to Annex 1), the quarter reports a total of USD 166,735.72, bringing the total financial disbursement to USD 2,726,489.98.

The main focus of implementation by UNIDO during this reporting period was: (i) the support to MBS in addressing SADCAS's initial accreditation assessment feedback and on the facilitation for the on-site assessment of mass and testing laboratories accreditation; (ii) the initiation of the procurement activities for the XRF and Oil Analyzer and the revision of the technical specifications of the Inductively Coupled Plasma Spectrometer (ICP) and launching its public international bidding; (iii) the technical assistance of the NE on quality and food safety management systems with remote support of the IEs; (iv) the support on the preparation of a proposal for project extension for a period of 7 months until 15 December 2018 that was approved by EU in June 2018; (v) support to promote SQAM project through the organization of industry awareness seminars and the initiation of discussion on the production of a joint UNDP/UNIDO/MBS SQAM project video.

While UNIDO interventions pertaining outputs 2, 4, 5 have been completed and output 1 is nearly completed, the current efforts are focusing on implementation of activities related to outputs 3, 6 and 8, towards reaching the accreditation targets of the project as well as the communication and visibility objectives of the SQAM project.

A. Situational Background/Context

There is a clear need for rapid and sustainable economic growth if Malawi is to achieve the Millennium Development Goals (MDGs) and the overall objective of poverty reduction on a meaningful scale. Trade, as recognized by the Malawi Growth and Development Strategy II (MGDS II), has the potential to be an engine for growth that can lift many Malawians out of poverty.

Malawi's standardization, quality assurance, accreditation and metrology infrastructure are currently inadequate to support the growth in exports envisaged by the MGDS II. The MBS is the National Enquiry Point (NEP) required by the World Trade Organization (WTO) under the Agreement on Technical Barriers to Trade (TBT). MBS sets national standards and monitors compliance of standards as well as conducts conformity tests on selected imports and exports. However, certificates from MBS are not recognized internationally and exporters incur high costs to obtain certification overseas. More generally, MBS has very limited infrastructure to meet demands for the provision of SQAM services within Malawi.

To address these issues, the SQAM project intends to achieve internationally recognized accreditation of the conformity assessment services of the MBS, contributing to an efficient and adequate National Quality Infrastructure in Malawi by 2016 (this was extended to 15 May 2018 and, subsequently, to 15 December 2018). This will have direct benefits for Malawian enterprises, and indirect long-term benefits for Malawian citizens in terms of improved protection of consumer rights.

As well as the MGDS II, the SQAM project also aligns with the United Nations Development Assistance Framework (UNDAF) 2012-2016 and subsequent development policy guidelines. The project will 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". More directly, the project

ties into UNDAF Output 1.2.2 that aims at improving Malawi's access to international and regional markets.

The Lead Implementing Partner for the project is the MBS. Financial and Management oversight is provided by the UNDP, whilst UNIDO provides specialist technical expertise.

The National Quality Policy (January 2014) paves the way for Malawi to gradually implement a modernized National Quality Infrastructure and is a statement by the Government of Malawi of its commitment towards this modernization process and lays a solid foundation that supports the project objective and outcomes. The National Quality Strategy was launched on 18 May 2016 to guide the implementation of the NQP. The launch of the NQS provides a demonstration of the Governments intentions to inculcate a quality culture and aims at improving the competitiveness of production value chains to expand the export performance of Malawian products worldwide. It is, however, noted that implementation of actions as outlined in the NQS remains very slow; failures to implement these actions will pose challenges to the achievements of the policy objectives.

B. Assessment of Project Results During the Reporting Period

This progress report presents a summary of the work done by UNIDO during the second Quarter of 2018 (1 April to 30 June 2018) in accordance with the Annual Work Plan for 2018.

The main focus of implementation by UNIDO during this reporting period was as below.

- (i) The action plans for clearing the non-conformities (NCs) were submitted to SADCAS by both Testing and Metrology Departments of MBS on the third week April. CTA supported the organization of a workshop in Mulanje on the 10th and 11th of May 2018 with participation of Mike Peet to clear the NCs. Both Testing and Metrology Departments submitted the NCs' clearance documents to SADCAS during the first week of June 2018. Additional documents and supporting proofs on compliance (e.g. calibration certificates of environment measurement devices) were also submitted to SADCAS. The accreditation application for additional scopes in testing (Microbiology, covering E-coli, Total Plate count and Coliform) and extension of mass scope (mass pieces/weights with range: 1 mg to 500 mg, Class E2) were submitted to SADCAS during the last week of June 2018. SADCAS confirmed the acceptance of both applications for accreditation (ISO 17025:2015).
- (ii) With respect to the Quality Assurance Services Department (QASD) Management Systems Accreditation (ISO 17021: scope ISO 9001 - full assessment; ISO 22000 pre-assessment) and Product Certification Accreditation (ISO 17065: scope bottled water - pre-assessment), the documents were reviewed by SADCAS and reports sent to MBS on 21 May 2018. On-site pre-assessment was also carried out by SADCAS Lead Assessor Mr. Reuben Govender on 28 May 2018. In addition to the preassessment of the two scopes, namely ISO 17021 for ISO 22000 certification and ISO 17065 for product certification, the Lead Assessor discussed also the NCs and observations made in the document review report for the ISO 17021 for ISO 9001 certification. QASD team started working on the observations and prepared an action plan to redress all the NCs and that was shared with the Lead Assessor. Accordingly,

further on-site assessments are planned to take place by late September / early October 2018. The Lead Assessor also advised to go ahead with Stage 2 audit of ISO 9001 in order to be able to assess the full process, including accreditation certification decision. The ISO 9001 audits took place on 13 June 2018 in three companies and on 20 June 2018 in one company. All the four companies are recommended for ISO 9001 certification, provided the correction of NCs identified by the companies. Support to clear the NCs is in progress by the national quality management expert, Mr. Rex Nyahoda.

- (iii) The support to three ISO 22000 companies is also coordinated with Rex Nyahoda together with the plan for ISO 9001. As most of the pre-requisites programmes and the documentation system are being progressively finalized, the NE is currently supporting the companies in finalizing the HACCP plans as guided by the IE. MBS sent the companies the application for the certification services and the NE is guiding the companies to apply. As the NE has been qualified to provide internal audit training to ISO 9001 companies, and has delivered the trainings successfully, the same approach is being followed for ISO 22000.
- (iv) CTA attended the SQAM 2nd Industry Awareness Seminar on 23 May 2018 in Lilongwe. Attendance by the industry was weak, thus further efforts are needed to promote the SQAM services in the capital city. It has been discussed with the Director General and Deputy Director General of MBS to expedite the actions on recruiting a Public Relations and Marketing Director to work on the marketing strategy of MBS services. The 3rd and final SQAM Industry Awareness Seminar took place in Mzuzu on 12 June 2018, which was attended by more than 50 participants. Mzuzu Seminar was very productive and interactive in nature. While the Seminar was attended by both the Outgoing and Incoming CTAs, the incoming CTA stressed the importance of SQAM project for National Quality Infrastructure development and economic growth while MBS being a service provider to public and private sectors.
- (v) The procurement of the Oil Analyzer, XRF and ICP is in progress and the funds to be advanced by UNIDO finance upon the signature of the IEE agreement with UNDP. Public international bidding for ICP-MS was undertaken in June 2018. The development of the technical specifications of the Laboratory Information Management System LIMS is being finalized jointly by the CTA and DTS. Consideration is made for a modular and phased approach for the LIMS development taking into account of the resources required and efficiency of the system. The supplier of the UPLC has advised to install the UPLC system at current MBS premises and then moving it to the new building, though MBS preferred the installation of the equipment in the new building. This will help in maintaining the guarantee of the manufacturer. Thus, the supplier advised about the needed site preparations before commencing with the installation and MBS is working on it.
- (vi) The arrangements with the National Laboratory Association of South Africa (NLA) to train TSD technicians on the analysis of elements in water and food using AAS and ICP-MS were finalized. The training for 2 technicians took place in Pretoria from 18-22 June 2108. Though more practical training was in the training programme agenda, unfortunately focus was given for theoretical training. Trainees report on the ICP-MS training is available.
- (vii) Following the 38th Project Management Meeting on 5 June 2018, the SQAM 17th Steering Committee Meeting took place on 6th June 2018 in Lilongwe. The members acknowledged the progress achieved by the project and asked the team to monitor closely the accreditation process. The members were appraised with the progress in

the new MBS building with the contractual completion date of end-October 2018, which is very unlikely. The Minister of Industry, Trade and Tourism met the contractor and urged for expediting activities to avoid further delays. The Incoming CTA was introduced to the stakeholders at the meetings.

- (viii) The Contribution Agreement between EU and UNDP was signed on 8 June 2018 and a copy was sent to UNIDO. The project team followed up with UNDP to finalize the Inter-Agency Agreement (IAA) between UNDP and UNIDO following the Contribution Agreement and after revising the funds to be transferred to UNIDO to be used in Output 3 and Output 8 with focus on equipment, project management unit and remaining activities towards accreditation. The Annual Workplan (January-May 2018) has been signed by UNIDO in early April and the signed scanned copy was shared with UNDP and MBS. The hard copy has been handed to UNDP and MBS by the Incoming CTA on 5 June 2018. The Workplan for May-December that was prepared as part of the extension proposal has been slightly modified to account for a training on the new version of ISO 17025:2017 and for additional funds to the NE and it was circulated for final review before signing.
- (ix) Chief Technical Advisor, Mr. Ouseph Padickakudi took charge on 12 June 2018, replacing Mr. Alaa Fahmy, who introduced the CTA to the stakeholders such as EU, UNDP, MoITT and MBS and handed over the functions for continuity of the project.
- (x) Regular project management activities, including field support of the CTA and the support on the preparation of a proposal on project extension for a period of 7 months until 15 December 2018, which was approved by EU in June 2018, were conducted. It also includes the participation of the UNIDO CTA, Project Manager and Project Associate (via video-conference) to the 37 and 38 Project Management meetings on 17 April and 5 June 2018 respectively.

Some of the key achievements from UNIDO implementation actions during this quarter include:

<u>Output 1:</u> Strengthened capacity of the Malawi Bureau of Standards to deliver business services and achieve financial sustainability.

- Redesigned MBS website was promoted at the Second and Third Industry Awareness Seminars on SQAM, held in Lilongwe on 23 May 2018 and in Mzuzu on 12 June 2018 respectively.
- The arrangements with the National Laboratory Association of South Africa (NLA) to train TSD technicians on the analysis of elements in water and food using AAS and ICP-MS were finalized and the training took take place in Pretoria, 18 22 June 2018. Training report is available. Originally, this training activity has been planned to take place in collaboration with Food and Environmental Research Agency (FERA) in the United Kingdom, who quoted only for practical training using ICP-MS but could not meet with MBS training need.

<u>Output 3:</u> Structurally enhances the capacity of the Malawi Bureau of Standards for conformity assessment services.

• With respect to the Quality Assurance Services Department (QASD): ISO 17065 (scope bottled water) pre-assessment, the documents were reviewed by SADCAS, Botswana, and report sent to MBS, Blantyre on the 21st May 2018. A pre-assessment was also

carried out by SADCAS Lead Assessor Mr. Reuben Govender on 28th May 2018. SADCAS queried the necessity of accreditation for mandatory required certification of products (bottled water). The project team answered the query giving justification and examples of accredited mandatory product certification from Bangladesh and Bhutan. The QASD team started working on the observations and prepared an action plan to redress all the NCs and that was shared with the Lead Assessor. Accordingly, the on-site assessments are planned to take place by late September / early October 2018.

- With respect to the ISO 17021 (scope ISO 9001 full assessment; ISO 22000- preassessment), the documents for ISO 17021 were handed over to SADCAS Project Manager during the SADC SQAM meeting on the 3rd week of March 2018. SADCAS advised that they do not witness stage 1 audits as part of the pre-assessment for ISO 22000. They indicated July/August as tentative dates for the on-site and pre-assessment of the two scopes after the document review is conducted in April, and MBS is given time to effect corrective actions to the system documents till July 2018.
- The action plans for clearing the Aflatoxin NCs were submitted to SADCAS by Testing Department on the third week of April 2018. CTA supported the organization of a workshop in Mulanje on the 10th and 11th of May 2018 with participation of Mike Peet to clear the NCs. Testing Department submitted the NCs' clearance documents to SADCAS during the first week of June 2018. Additional documents and supporting proofs (e.g. calibration certificates of environment measurement devices) were also submitted. The application for the second accreditation scope in testing: Microbiology, covering E-coli, Total Plate count and Coliform was submitted to SADCAS during last week of June 2018 and it was accepted by SADCAS for ISO 17025:2015 accreditation review.
- SADCAS recommended MBS Aflatoxin Testing Laboratory in June 2018 for accreditation subject to clearance of NCs.
- All the procurement activities of the Oil Analyser and the XRF were finalized and the evaluation process was completed together with MBS. The next step will be issuing the purchase order to the suppliers, which are awaiting the transfer of funds to UNIDO after the signature of the amended IAA.
- Since the delivery of the UPLC to MBS in October 2017, the MBS management indicated that it would wait to install it in the new MBS building. Due to delays in the construction works and the need to issue the final payment to the supplier, a further communication was sent from UNIDO HQ to MBS on the 31st of January with that regard following two reminders sent to UNIDO by the supplier (Chemetrix) on 10 and 17 January. Consultations of MBS with the suppliers resulted in a decision to install it in the existing premises in order to maintain the manufacturer's warranty. The site preparation for the UPLC installation has commenced in June 2018.
- CTA revised with MBS the technical specifications of the Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) to initiate the procurement process, pending availability of funds for this activity. Public international bidding for ICP-MS was launched in June 2018.
- The UTM Accessories were installed by the engineers sent by the supplier, Enkay Enterprises, in December 2017. The engineers also provided technical support for the operation of the Universal Testing Machine and trained the MBS technicians. However, the CTA observed again leakage on UTM and initiated rectifying measures communication in June 2018 with Enkay Enterprises, though the equipment is out of guarantee period.

- MBS prepared the technical specifications for Laboratory Information Management System (LIMS) and it was updated with the help of CTA for possible procurement consideration, provided the resources are available.
- MBS submitted to SADCAS, during the last week of June 2018, the Mass laboratory scope extension of mass pieces/weights with range: 1 to 500 mg, Class E2. Original mass scope of application was for 1 to 200g mass balance. The application for scope extension was accepted by SADCAS in June 2018.
- The MBS Quality Assurance Department proposed a study tour to a certification body in the region. As the MBS is getting qualified as an accredited certification body for Quality Management System ISO 9001 and Food Safety Management System ISO 22000, the objectives of the visit will be: to learn about other experiences in building up a certification system, the business model, key success factors, challenges faced and success stories, to visit a couple of clients of the certification body to appreciate the systems in place at SMEs level, to witness one or two audits conducted by the certification body (as a practical experience to MBS auditors) and to exchange on recent developments and accreditation at MBS in the area of Quality Assurance Services. The training was planned for 3 certification officers for a duration of 5 days. The Standards Association of Zimbabwe (SAZ), Harare, was chosen for training and mutual cooperation under an MOU with MBS. MBS completed the steps in June to implement this training activity with SAZ in July 2018 under national implementation.

<u>Output 6:</u> Capacity of Small and Medium Sized Enterprises (SME), and particularly women and youth led enterprises, strengthened to comply with quality requirements.

- The NE Rex Nyahoda is providing technical support to cohort companies on ISO 22000 based on the to-do-list agreed upon with the IE Anya Knoetze. The NE has supported the companies on finalizing most of the pre-requisites programmes, documentation system and the work is in progress. The HACCP plans will follow during April-August. The NE has been qualified to provide internal audit training to ISO 9001 companies and has delivered the trainings during March 2018. Based on this experience and under the guidance of IE, the NE is expected to perform internal audit training for ISO 22000 companies. For closer monitoring, in addition to the to-do-list that is being updated on a bi-weekly basis, a visit report template has been provided to the NE to report on the activities and progress of each visit was co-signed by the company representative to ensure commitment of the companies to the agreed actions. The NE is sharing his visit reports on a regular basis with the project team and the IE.
- The NE Rex Nyahoda is providing technical support to cohort companies on ISO 9001 based on the to-do-list agreed upon with the IE Seth Shashank. The ISO 9001 audits took place on 13 June 2018 in three companies and on 20 June 2018 in one company. All the four companies are recommended for ISO 9001 certification, provided the correction of NCs identified by SADCAS. Support to clear the NCs is in progress by the national quality management expert Rex Nyahoda.

Output 8: Programme Management Unit.

• The Contribution Agreement between EU and UNDP was signed on the 8th June 2018 and a copy was sent to UNIDO. The project team is following up with UNDP to finalize the Inter-Agency Agreement (IAA) between UNDP and UNIDO following the Contribution Agreement and after revising the funds to be transferred to UNIDO to be used in Output 3 and Output 8 with focus on equipment, project management unit and remaining activities towards accreditation. The Annual Workplan (January-May 2018) has been signed by UNIDO in early April and the signed scanned copy was shared with UNDP and MBS. The hard copy has been handed to UNDP and MBS by the CTA on the 5th of June 2018. The Workplan for May-December that was prepared as part of the extension proposal has been slightly modified to account for a training on the new version of ISO 17025:2017 and for additional funds to the NE and it was circulated for final review before signing.

- The SQAM 17th Steering Committee Meeting took place on the 6th June 2018 in Lilongwe. The members acknowledged the progress achieved by the project and asked the team to monitor closely the accreditation process. The members were appraised with the progress in the new MBS building with a new finalization date of end of October 2018. The Minister of Industry, Trade and Tourism met the contractor and urged to expediting activities to avoid further delays. Mr. Ouseph Padickakudi, CTA was introduced to the stakeholders at the PM and SC meetings. Mr. Alaa Fahmy discharged his duties as CTA on 12 June 2018 and Mr. Padickakudi, CTA, took charge as of 12 June 2018.
- Joint SQAM/MATCB projects' video production concept initiated among UNDP/UNIDO/MBS/NASFAM.
- Case studies from the ISO 9001 and ISO 22000 supported enterprises, focusing on the benefits accrued through the project have been planned.

Action matrix:

The tables on the pages to follow present a summary of the status of progress of the activities for each output where UNIDO is listed as the party responsible for implementation.

Output 1: Strengthened capacity of the Malawi Bureau of Standards to deliver		
business services and achieve financial sustainability		
ACTIVITY	STATUS	
1.0 National Quality Policy [MoITT (MBS/UNDP/UNIDO)] - Dissemination of the NQP	• This activity was completed.	
- Development of a National Quality Strategy (NQS)	 This activity is a national implementation activity under MBS and MoITT. 	
	• UNIDO learnt that the MoITT appointed the high-level committee in support of the implementation of the NQS and ultimately the NQP.	
	• The National stakeholders chose to proceed without involvement of UNIDO and of the CTA, and as result no more contribution is required. It is now the responsibility of National stakeholders to ensure the objectives under this Output is achieved.	
1.1 Project Visibility event	• This activity is a national implementation activity under the MBS as provided for under activity 8.2.	
1.2 Review and set-up of organizational structures, service delivery procedures and knowledge management within MBS [MBS (MoITT/UNDP)]	 This activity is a national implementation activity under MBS. UNIDO took note of the need of MBS to recruit a marketing manager. 	

1.3 Market survey on the demand for	 It remains essential for the achievement of project indicators and objectives for MBS to incorporate findings and recommendations arising from final reports by various UNIDO International Experts into MBS Strategy and Business Plan and implement these in order to ultimately achieve the anticipated reforms. This activity is a national implementation activity under
testing and calibration in Malawi [MBS (UNDP)]	 MBS. UNIDO noted that the status of the Laboratory Mapping report was still in a preliminary phase: the overall analysis of the laboratories, common challenges and possibilities for networking among laboratories, the checklists or questionnaires used, the list of acronyms and a summary of the labs are still missing. It was reported to UNIDO and to the other SC Members during the 16th SQAM SC Meeting that since there were no further inputs from stakeholders, the report for the mapping of laboratory landscape was cleared. The profile for the laboratories would be printed and shared with the stakeholders in due course. The printed version of the report was released in June 2018.
1.4 Preparation of a business plan and monitoring system for MBS [MBS (UNIDO]	 This activity is under national implementation by MBS. UNIDO trusts that the national consultants and MBS Management will commit to ensure the findings and recommendations arising from project reports find its way into the MBS Strategic Plan 2017-2022, and ultimately contribute to the anticipated reforms and project outputs.
1.5 Development of a "marketing unit" within MBS [MBS (UNIDO]	 This activity is under national implementation by MBS. The report by IE (Visser) made clear recommendations on the marketing strategy and require of MBS to formulate also a marketing policy but UNIDO understands that no actions have been taken by MBS to advance in this matter. It was noted that the functional review made positive recommendations about the MBS marketing unit and UNIDO therefore hopes the action will form part of the MBS Strategic Plan 2017-2022 to ensure the objective is achieved.
1.6 Enhancement and updating of the MBS website [MBS (UNDP)] During	 This activity is a national implementation activity. UNIDO encourages MBS to ensure regular updating thereof, including of implementation activities under this project and to maintain hyperlinks to all project partners. UNIDO has taken note of the issue of intermittent functioning of the MBS website and e-mail system. UNIDO was informed that the MBS engaged a contractor (Quedesign) in September 2017 to redesign and revamp the MBS website. The website was redesigned and became operational again by end of October 2017. UNIDO CTA's proposal for three (3) Industrial Awareness Seminars was approved by the DG of MBS. The first seminar took place in Blantyre on 20 September 2018 and the second and third ones took place in Lilongwe on 23

	May 2018 and in Mzuzu on 12 June 2018 respectively. The website was also promoted during the seminars. More than 50 industrialists attended the Mzuzu seminar.
1.7 Preparation and implementation of a "training plan" for MBS [MBS (UNIDO)]	 Out-of-country training in food safety testing: The arrangements with the National Laboratory Association of South Africa (NLA) to train TSD technicians on the analysis of elements in water and food using AAS and ICP-MS were finalized and the training took take place in Pretoria, 18 – 22 June 2018. This activity has been originally planned to take place in collaboration with Food and Environmental Research Agency (FERA) in the United Kingdom, who quoted only for practical training using ICP-MS but could not meet with MBS training need. Targeted training on new equipment is being delivered by the suppliers as this is part of the technical specifications. These training need to be agreed upon with MBS once the equipment is delivered (last training was given in December 2017 to the MBS technicians on the Universal Testing Machine from the engineers of Enkay Enterprises). It is mandatory that the suppliers of equipment provide the MBS staff with training certificates.

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

ACTIVITY	STATUS
2.1 Documentary and field survey of the Malawian situation with regards to technical regulations and enforcement. [MBS (UNDP/UNIDO)]	• UNIDO notes that the process of meetings of the TBT Committee under the MoITT are provided for and that MBS and MoITT requires no more support from UNIDO in this regard. It is now the responsibility of National stakeholders to ensure the objectives under this Output are achieved.
2.2 Awareness campaigns and training on "Better regulation". [MBS (UNDP/UNIDO)]	• It was reported by the MBS that the field survey of Malawi Technical Regulations, Standards and Conformity Assessment procedures has been completed and the analytical report was prepared in June 2018 and that will be presented at the validation workshop scheduled by end August 2018
 2.3 Data gathering on TR, analysis and consolidation. Preparation of a strategy and a plan for the institutionalization of "Better Regulation" in Malawi. [MBS (UNDP/UNIDO)] 2.4 Preparation of a strategy and a plan for the institutionalization of 	 August 2018. The Study Tour to the Uganda National Bureau of Standards (UNBS), which took place during 25-29. September 2017, supported by UNIDO is one of the highlights on the January issue of the Malawi Quality Time Digest Newsletter supported by the MATCB Project. The study tour enhanced the participants' knowledge and skills in WTO/TBT NEP operations and the capacity of the MBS as a National Enquiry Point for Malawi. A significant sector of the Material Sector Secto
"Better Regulation" in Malawi [MBS (UNDP/UNIDO)].	milestone, which was achieved thanks to this study tour and its report, was the drafting and submission of 15 TBT notifications of draft Malawi standards to the WTO, which were approved and circulated to the Member States for comments. TBT Enquiry Point activity is a continuous notification process.

Output 3: Structurally enhances capacity of the Malawi Bureau of Standards for		
conformity assessment services		
ACTIVITY 3.1a Construction of the Metrology building. [MBS (GoM)].	 STATUS This activity is under national implementation by MBS and the Government of Malawi. UNIDO notes the good progress on the construction of the building, which was reported as 68% at the 38th SQAM Project Management Meeting, 5 June 2018 and 17th Steering Committee Meeting, Lilongwe, 6 June 2018. The official completion date was 1st July 2018 but on the ground the contractor was behind by 9 weeks. The delay in construction works was mainly due to labour turnover and scarcity of skilled labour. It was reported that the completion date of the building is October 2018, but it is very unlikely. It was agreed that a meeting should be arranged between the UNDP Resident Representative and the Contractor through the MBS Director General to discuss on how best the lost time could be recovered. However, since the Minister of Industry met the main contractor to resolve the issue, meeting between the UNDP 	
3.1b Develop within MBS an accredited product certification body [MBS (UNIDO/UNDP)]	RR and the contractor did not take place.	
3.2 Develop within MBS a management systems certification body for ISO 9001 and ISO 22000 / HACCP [MBS (UNIDO/UNDP)]	 Current implementation is in terms of the Pilot Phase for MBS to be accredited to ISO/IEC 17021 for ISO 9001 management system certification. With respect to the ISO 17021 (scope ISO 9001 - full assessment; ISO 22000- pre-assessment), the documents for ISO 17021 were handed over to SADCAS Project Manager during the SADC SQAM meeting on the 3rd week of March. SADCAS advised that they do not witness stage 1 audits as part of the pre-assessment for ISO 22000. They indicated July/August as tentative dates for the on-site and pre-assessment of the two scopes after the document review is conducted in April and MBS is 	

	given time to effect corrective actions to the system
	documents till July 2018.
3.3 Upgraded and accredited testing laboratories in MBS [MBS (UNIDO)]	 Accreditation: The action plans for clearing the Aflatoxin NCs were submitted to SADCAS by Testing Department on the third week of April 2018. CTA supported the organization of a workshop in Mulanje on the 10th and 11th of May 2018 with participation of Mike Peet to clear the NCs. Testing Department submitted the NCs' clearance documents to SADCAS by the first week of June 2018. Additional documents and supporting proofs (e.g. calibration certificates of environment measurement devices) were also submitted. The application of the second scope for testing: Microbiology, covering E-coli, Total Plate count and Coliform was submitted to SADCAS during last week of June 2018 and it was accepted by SADCAS for ISO 17025:2015 accreditation review. SADCAS recommended MBS Aflatoxin Testing Laboratory in June 2018 for accreditation subject to
	clearance of NCs.
	Procurement of equipment:
	• All the procurement activities of the oil analyser and the XRM were finalized and the evaluation process was completed with MBS. The next step will be issuing the purchase order for the suppliers, which are awaiting the transfer of funds to UNIDO after the signature of the amended IAA.
	 Since the delivery of the UPLC to MBS in October 2017, the MBS management indicated that it would wait to install it in the new MBS building. Due to delays in the construction works and the need to issue the final payment to the supplier, a further communication was sent from UNIDO HQ to MBS on the 31st of January with that regard following two reminders sent to UNIDO by the supplier (Chemetrix) on 10 and 17 January. Consultations of MBS with the suppliers resulted in a decision to install it in the existing premises in order to maintain the manufacturer's warranty. The site preparation for the UPLC installation has commenced in June 2018.
	• CTA revised with MBS the technical specifications of the Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) to initiate the procurement process, pending availability of funds for this activity. Public international bidding for ICP-MS was launched in June 2018.
	• The UTM Accessories were installed by the engineers sent by the supplier, Enkay Enterprises, in December 2017. The engineers provided technical support also to the Universal Testing Machine and trained the MBS technicians. However, the CTA observed again leakage on UTM and initiated rectifying measures communication in June 2018 with Enkay Enterprises, though the equipment is out of guarantee period.
	• MBS prepared the technical specifications for Laboratory Information Management System (LIMS) and it was updated with the help of CTA for possible procurement

	action, provided the resources are available.
3.4 Upgraded and accredited calibration laboratories in MBS	• Current implementation is in terms of the Pilot Phase for MBS to be accredited to ISO/IEC 17025 with scope limited to light mass (1-200 g) being implemented in close collaboration with the MATCB project.
	 The IE Mike Peet provided support to the MSD in preparation for the on-site assessment by SADCAS as part of the accreditation of the light mass scope. The IE provided inputs to specific MSD enquiries, mainly pertaining to the SADCAS feedback on the documentation system. The on-site assessment took place on 26-27 March, identified 15 Nonconformities (NCs) and recommended the accreditation of the scope after the NCs are cleared through an on-site assessment. An action plan for clearing the NCs was sent by MSD and the NCs were cleared in May 2018. It is expected that the accreditation be granted to MBS mass laboratory. However, the final accreditation decision on the mass scope is awaited. The PMU completed the coordination of the participation
	of MSD technicians in a Proficiency Testing (PT) scheme by end of April. The participation in the PT scheme and in the related Inter-Laboratory Comparison (ILC) forums is an important element to support accreditation of further calibration scopes for MSD based on the requirements of ISO/IEC17025. The PT scheme is being coordinated in cooperation with the National Laboratory Association (NLA) with participation of two MSD technicians at the scheme and conference held from 30 April to 3 May 2018.
	• MBS submitted to SADCAS, during the last week of June 2018, the Mass laboratory scope extension of mass pieces/weights with range: 1 mg to 500 mg, Class E2. The application was accepted in view of the potential to receive accreditation for 1 to 200g mass balances scope.
	• The MBS finalized the improvement of the road infrastructure at MSD which was implemented through MBS's own resources and demonstrates the continued willingness by MBS management to sustain improvements required at MSD beyond the scope of the project. The result produced from this activity was a commitment by the MBS of financial support from own resources to support further infrastructure upgrading at MSD.
	• UNIDO finalized the steps needed for the procurement of the hybrid electrical installation system for the MSD to ensure that there is consistent and quality electricity supply to the laboratories. The purchase order was issued under the MATCB complimentary project during April 2018 and the construction work for generator set housing initiated in June 2018.
	• Substantial good house keeping practices was implemented in the heavy mass laboratory of MBS in June 2018.
	• The design for the face lift of the reception area of the mass laboratory has been initiated in June 2018.

3.5 Develop a training business unit. [MBS (UNIDO)]

3.6 Establish a pool of Malawian auditors [MBS (UNIDO)]

- The functional review of the MBS recommended the establishment of a training unit. UNIDO recalls that, during the mid-year review in June 2016, MBS informed that a training officer was being recruited and that the new unit will be established by end of 2016; however, UNIDO notes with regret that the unit is not yet established. CTA urged the MBS management to fast track this activity.
- Implementation by UNIDO to support this activity can only proceed once the unit is established.
 - This activity provides for technical assistance to MBS in the development of processes and system to support the management of a pool of auditors where such auditors are integral to conformity assessment services earmarked for accreditation. MBS is being trained through accompanying visits to companies being supported for future certification (see activity 6.5, partially 6.3); in fulfillment of international requirements related to transparency and impartiality, those trainees shall not participate in audits to those companies. In addition, companies currently certified by other certification bodies are being approached in a way that they grant permission to conduct mock audits in their premises to further train auditors. This activity was supported by the international experts recruited under output 6 to support SMEs on quality and food safety management system.
- The MBS Quality Assurance Department has considered a study tour to a certification body in the region. As the MBS is getting qualified as an accredited certification body for Quality Management System ISO 9001 and Food Safety Management System ISO 22000, the objectives of the visit will be: to learn about other experiences in building up a certification system, the business model, key success factors, challenges faced and success stories, to visit a couple of clients of the certification body to appreciate the systems in place at SMEs level, to witness one or two audits conducted by the certification body (as a practical experience to MBS auditors) and to exchange on recent developments and accreditation at MBS in the area of Quality Assurance Services. The mission was planned for 3 participants for a duration of 5 days. South Africa Bureau of Standards (SABS) has been initially considered as a potential destination and communication has been facilitated by the CTA. SABS response was delayed due to internal matters and the Standards Association of Zimbabwe (SAZ), Harare, was considered as an alternative. Communication has been facilitated by the CTA and SAZ accepted cooperation, prepared and shared a MOU with MBS. MBS implemented this training activity successfully with SAZ under national implementation.
- This activity is a national implementation activity under MBS as was concluded during 2014.

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 [MBS (UNDP)] **Output 4:** Strengthened, proactive and responsive National Enquiry Points (NEP) to the information and notification requirements of WTO/TBT/SPS agreements

ACTIVITY	STATUS
4.1 Identify, store, update, create and use the information on foreign TR, standards and conformity assessment dispositions of countries that import from Malawi [MBS (UNIDO)]	 UNIDO component was concluded early in 2015 as per previous reports. Implementation towards the compliance by Malawi with the WTO transparency provisions of the three National Enquiry Points for SPS and the National Notification Authority as per the findings and recommendations from the work concluded by UNIDO in 2015 is required under national implementation responsibility. These specific responsibilities go beyond only the MBS: Food Safety [Malawi Bureau of Standards, Blantyre] Animal Health [Ministry of Agriculture, Dept. Animal Health and Livestock, Lilongwe] Plant Protection [Ministry of Agriculture, Dept. Agric. Research Services, Lilongwe] The National Notification Authority [Ministry of Industry and Trade, Lilongwe] UNIDO encourages MBS to ensure regular updating thereof, including of national implementation activities under this project and to maintain hyperlinks to all project partners.

Output 5: Sanitary and Pl	· · · · · ·
mainstreamed into National polic	ies
ACTIVITY	STATUS
 5.1 Review the national SPS infrastructure [MBS (UNIDO)] 5.2 Develop a road map to improve the Malawian SPS infrastructure. [MBS (UNIDO)] 5.3 Review and upgrade the legislation for the SPS infrastructure [MBS (UNIDO)] 	 The work under this Output concluded in 2016 Q3 and was approved during the 13th Steering Committee meeting held on 10th November 2016. The work on development of the Food Safety Legislation was expected to continue outside the SQAM Project. FAO indicated that it had funds for continuation of the work but there has been no progress. The MBS was tasked to follow up on the matter with FAO.

Output 6: Capacity of Small and Medium Sized Enterprises (SME), and particularly women and youth led enterprises, strengthened to comply with quality requirements		
ACTIVITY	STATUS	
6.1 Preparation of an overall training and technical assistance programme for SMEs, in particular female and youth headed SMEs. [MBS (UNDP/MoIT)]	• Programme implementation related to the 7 Cohort I companies to benefit from technical assistance through international experts for ISO 9001 and ISO 22000 quality management systems commenced in accordance with the AWP2017 and as reported under act. 6.2 and 6.3.	
6.2 Technical assistance to 15 SMEs,	• The NE Rex Nyahoda is providing technical support to	

in particular female and youth headed SMEs, to comply with HACCP / ISO 22000 Food safety management systems [MBS (UNIDO)]	 cohort companies on ISO22000 based on the to-do-list agreed upon with the IE Anya Knoetze. The NE has supported the companies on finalizing most of the prerequisites programmes, documentation system and the work is in progress. The HACCP plans will follow during April-August. The NE has been qualified to provide internal audit training to ISO 9001 companies and has delivered the trainings during March 2018. Based on this experience and under the guidance of IE, the NE is expected to perform internal audit training for ISO 22000 companies. For closer monitoring, in addition to the to-do-list that is being updated on a biweekly basis, a visit report template has been provided to the NE to report on the activities and progress of each visit co-signed by the company representative to ensure commitment of the companies to the agreed actions. The NE is sharing his visit reports on a regular basis with the project team and the IE. The IE on ISO 22000 Anya Knoetze conducted a mission from 21 January to 10 February 2018. The mission included the support to the 3 cohort companies (Valid Nutrition in Lilongwe, and Dairy Board in Blantyre). The feedback to MBS auditors was given during and after the audit days and a feedback session to all auditors will was conducted on Friday 9 February.
6.3 Technical assistance to 10 SMEs, in particular female and youth headed SMEs, to comply with ISO 9001 Quality management systems. [MBS (UNIDO)]	• The NE Rex Nyahoda is providing technical support to cohort companies on ISO 9001 based on the to-do-list agreed upon with the IE Seth Shashank. The ISO 9001 audits took place on 13 June 2018 in three companies and on 20 June 2018 in one company. All the four companies are recommended for ISO 9001 certification, provided the correction of NCs identified by SADCAS. Support to clear the NCs is in progress by the national quality management expert, Mr. Rex Nyahoda.
6.4 Other type of quality requirements in export markets. Technical assistance to 10 SMEs. [MBS (UNIDO)]	 This activity is under National implementation. This activity is dropped as per the agreement of the Steering Committee meeting held in November 2016. UNIDO is therefore excluded from the achievement of indicators foreseen from implementation of this activity as outlined in the project logical framework.
 6.5 Trainers-cum-counsellors and auditors: Training in HACCP / ISO 22000 Food safety management systems. [MBS (UNIDO)] 	 MBS staff has been given exposure to ISO 22000 through company visits. This activity was concluded in 2016 Q3.
6.6 Training in ISO 9001 Quality management systems for trainers- cum-counsellors and auditors. [MBS (UNIDO)]	• This activity was concluded in 2016 Q3.
6.7 Trainers-cum-counsellors: Training in "Initiating quality improvement in selected sectors" [MBS (UNIDO)]	 This activity is dropped as per the agreement of the Steering Committee meeting held in November 2016. There is no longer a requirement for any UNIDO implementation under this activity.

	• UNIDO is therefore excluded from the achievement of indicators foreseen from implementation of this activity as outlined in the project logical framework.
6.8 Awareness seminars: ISO 14000 Environment management systems; GLOBALG.A.P. (Good Agricultural Practice) [MBS (UNIDO)]	• This activity was concluded in 2016 Q4.
6.9 Trainers-cum-counsellors and auditors: Training in ISO/IEC 17025 [MBS (UNIDO)]	• This activity was concluded in 2016 Q3. The international expert (Steve Sidney) conducted the ISO/IEC 17025 training course for 45 participants during the week of 15-19 August 2017. The results of the course were reported to UNIDO.
	• MBS Testing and Calibration labs have been recommended, pending clearance of NCs, for ISO 17025: 2005 accreditation by SADACS. The new version of the ISO 17025:2017 is effective from 1 July 2018, thus transition from ISO 17025:2005 to 2017 needs to be implemented by MBS. To facilitate this service, a training course on ISO:17025:2017 version is planned for 27 participants and scheduled from 6-10 August 2018 in Blantyre, as per the AWP of 2018.

Output 7: MBS Compliant with International Regulations established		
ACTIVITY	STATUS	
7.1 TA for the preparation of the organizational ad operational bylaws and business plan for the Malawian accreditation body. [MBS (UNIDO)]	• This activity was concluded in 2015.	

Output 8: Programme Managem	ent
ACTIVITY	STATUS
8.1 Operational Management Team	 The Cooperation Agreement between EU and UNDP was signed on the 8th June 2018 and a copy was sent to UNIDO. The project team is following up with UNDP to finalize the Interagency Agreement (IAA) with UNIDO following the Cooperation Agreement and after revising the funds to be transferred to UNIDO to be used in Output 3 with focus on equipment. Upon the signature of the IAA, funds can be advanced from UNIDO finance. The Annual Workplan (January-May 2018) has been signed by UNIDO in early April and the signed scanned copy was shared with UNDP and MBS. The hard copy has been handed to UNDP and MBS by the CTA on the 5th of June 2018. The Workplan for May-December that was prepared as part of the extension proposal has been slightly modified to account for a training on the new version of ISO 17025:2017 and for additional funds to the NE and it was circulated for final review before signing. The SQAM 17th Steering Committee Meeting took place on the 6th June 2018 in Lilongwe. The members

8.2 Communications and Visibility [MBS]	 acknowledged the progress achieved by the project and asked the team to monitor closely the accreditation process. The members were appraised with the progress in the new MBS building with a new finalization date of end of October 2018. The Minister of Industry, Trade and Tourism met the contractor and urged for expediting activities to avoid further delays. Mr. Ouseph Padickakudi, CTA was introduced to the stakeholders at the PM and SC meetings. Participation of UNIDO CTA and Project Associate (via teleconference) to the 37th Project Management meeting on 27 April and 38th PM meeting on 5 June 2018. Actions proposed at the PM and SC meetings were monitored and implemented. The UNIDO CTA alerted MBS on the importance to strengthen MBS visibility and improve its image within the industry. As such three (3) Industrial Awareness Seminars, took place: Blantyre, 20 September 2017; Lilongwe, 23 May 2017; and Mzuzu, 12 June 2018. MBS website was redesigned and became operational again by end of October 2017. Joint SQAM/MATCB projects' video production concept initiated among UNDP/UNIDO/MBS/NASFAM. Case studies from the ISO 9001 and ISO 22000 supported enterprises, focusing on the benefits accrued through the project have been planned. CTA advised MBS management for a pro-industry MBS services and adherence to that approach was visible in all the three presentations of MBS at the Industry Awareness Seminar, Mzuzu, 5 June 2018. CTA flagged importance of industry-MBS partnership for NQI development at the Mzuzu Industry Awareness Seminar.
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C. Financial Status and Utilization

Summary of financial payments to date include receipt of first instalment of EUR 550,000 (equivalent to USD 717,079.53, incl. support costs) received from the UNDP on 28 October 2013 in accordance with the schedule of payment of the inter-agency agreement. At the end of March 2014 financial implementation by UNIDO was reported as 83% allowing for request for the second disbursement of funds. This instalment was received on 10 October 2014 totaling EUR 1,009,728, equivalent to USD 1,283,009.68 (USD 1,199,074.47 excluding support costs).

The third instalment of EUR 781,784 (originally requested by UNIDO on 8 December, 2015) was received in June 2015 in the amount of USD 500,000 and in June 2016 in the amount of USD 500,000. This brought the amount of total funds received (instalment 1 + instalment 2 + instalment 3) to USD 3,000,089.21 (including support costs).

The fourth instalment for the amount of EUR 208,682 (equivalent to USD 250,819.71) was received at UNIDO on 17 November 2017. This brought the amount of total funds received (instalment 1 + instalment 2 + instalment 3 + instalment 4) to USD 3,250,908.92.

The threshold for claiming the fifth instalment for the amount of EUR 208,681 was reached and claimed by UNIDO with the submission of the Q4 2018 Progress Report on 26 January 2018. UNDP confirmed to UNIDO receipt of instalment from the EU on 28 March 2018. The disbursement to UNIDO of the fifth instalment was received by UNIDO on 29 June 2018 in the amount of USD 256,050.31. This brought the amount of total funds received to USD 3,506,959.23.

The disbursement of the remaining instalments to UNIDO is dependent on the finalization and signing of the amended Annual Work Plan and on the finalization of the amendment to the Inter Agency Agreement between UNIDO and UNDP to reflect the 7 months extension, the new budgetary allocations on Annex III and new instalments schedule based on the amended EU-UNDP Contribution Agreement, which is yet to be urgently finalized.

The total financial implementation by the end of the second quarter of 2018 was equal to 99% of total instalments received.

D. Lessons Learned

- As the project approaches the final stage of the implementation cycle, it is crucial to maintain all stakeholders and development partners informed in current and future project activities as well as challenges encountered. This includes the lengthy administrative procedures of the accreditation body that ensures impartiality and avoidance of conflict of interest but on the other hand limits expediting the accreditation activities. The progress in MBS laboratories accreditation process facilitated the application for additional scope accreditation in microbiology and the extension of mass scope as recommended by SADCAS.
- It is worth also to note that the lead times in the procurement of additional equipment takes not less than 6 months as the equipment to be purchased are made to order. UNIDO already kick started the procurement actions including the revision and advertising of the TORs and the evaluation of the bids received. The issuance of the purchase order for XRF is achieved, while awaiting the finalization of the Interagency Agreement with UNDP that will follow the amendment of the Implementation Agreement between UNDP and EU following the approval of the project extension.
- It is important that MBS adheres to the lead times given by the accreditation body, i.e. submission of the Action Plan for addressing the nonconformities (NCs) within a month time of the on-site assessment and clearing the NCs within the given 3 months period starting form the date of the on-line assessment. The project management unit is to follow up on these deadlines and possibly also to even expedite the actions in order to meet the project targets during the extension phase given the tight timelines observed on the basis of the administrative procedures of the accreditation body. The International Expert on Conformity Assessment and Accreditation systems is providing remote assistance on the same.
- The full assessment of the first two scopes (testing and metrology) was an invaluable learning process for MBS and the captured NCs should be seen as an excellent opportunity for improving the internal systems at MBS. These NCs and how they are being addressed by MBS shall be well communicated internally to relevant staff within the concerned departments and within MBS at large to maximize the benefit and to ensure

spill over improvements to other departments. The pre-assessments of ISO 17021 for food safety management system and ISO 17065 for product certification should be also considered as a high-level technical assistance and a learning opportunity for system improvements in preparation for full assessment that will be supported later by the project during the extension phase.

- It has been noted that a significant part of the NCs captured by the accreditation body are related to management practices and procedures which is a call for MBS to look into the way its business processes, especially decision-making processes, client relationship management, procurement and human resources management. Many of these issues can be improved through the implementation of the recently developed and approved Strategic Plan that is calling for service and business orientation.
- Most challenges faced during preparations for accreditation origin from the lack of the business approach and client orientation in providing the services. Enhancement of system documents, processes, competencies of personnel and activities shall originate from the business needs and through continuous improvements in response to interactions with clients from the industry and following an overall management and quality policy within MBS. The planned accreditation of scopes is to be seen as a pilot activity and learning experience towards improving confidence in MBS services and not as an ultimate goal. Acceptance and reputation of the MBS and its services within the industrial community is equally if not more important than the accreditation.
- The International Expert on Conformity Assessment and Accreditation Systems, Mike Peet, who conducted his mission during 16-26 October 2017 stressed on the fact that the current accreditation exercise should be seen as a pilot activity that provides a valuable opportunity to learn and gain more experience and confidence in the delivery of internationally benchmarked conformity assessment services. It is critical, however, that future expansions of the scope of accreditation focus on supporting the strategic imperatives of the Malawian Government, industry and commerce. The future extension of scopes should therefore be based on a well-considered strategy that ensures that the Conformity Assessment services provided meet the needs and demands of public and private sector clients. If this is successfully achieved, it will go a long way to ensuring that these Conformity Assessment services can be provided sustainability and will also enhance the reputation of MBS as a valued and insightful Conformity Assessment service provider.
- As witnessed by the International Expert on QMS to ISO 9001 during the Stage 1 Audit at participating SMEs, the MBS auditors and Lead Auditor on ISO 9001 (DQAS) have demonstrated technical capabilities and practiced excellent auditing methodology. MBS can further leverage these opportunities by starting to pro-actively promoting its quality management system certification services and preparing a pipeline of client companies to keep the momentum of learning by practice and to expose their technical personnel (auditors, inspectors etc.) to additional sub-sectors and businesses.
- The engagement of the National Expert (NE) in support to the SMEs on quality and food safety management systems ISO 9001 and ISO 22000 proved to be a good practice. Continuous hand holding and on-the-ground follow up remotely supported by the International Experts is showing substantial advancements in the readiness of the SMEs for system certification. The NE together with the trained calibers at the SMEs care considered as future technical resource in support to the national Quality Infrastructure in

the area of quality and food safety systems. The Malawian Government and MBS shall utilize these resources in supporting the quality culture at the private sector.

- Good Laboratory Practices and Good Housekeeping Practices have been gradually implemented in the Heavy Mass Testing Laboratory. CTA continuously reminds the management and laboratory staff for cleanliness in laboratory operation and safeguarding the security and safety of the personnel. MBS needs to put in place functional management system to achieve the maintenance of the laboratories and its premises.
- Maintenance of all equipment procured by the project is the responsibility of MBS and long-term service contracts with the suppliers are recommended using MBS resources for sustainable laboratory operation.
- Contractor and the Client of the MBS building complex indicate the completion date of the building construction as end October 2018 (official completion date was 31 July 2018), taking into account of the reality on ground and the technical, financial and operational delays and challenges. In case the task of building complex completion cannot be met on time, an exit strategy and plan need to be discussed by all stakeholders.

E. Conclusion

As SADCAS finalized the initial assessment of the first two scopes in testing and metrology, namely aflatoxin (testing) and light mass 1-200g (metrology), the work and continuous commitment towards the project objectives remain now in the hands of the MBS to address the Nonconformities captured by SADCAS and to adhere to the provided timelines. UNIDO amended the subcontract with SADCAS to include full assessment of ISO 17021 for Quality Management System ISO 9001 and pre-assessment ISO 17021 for Food Safety Management System ISO 22000 as advised by the International Expert of Conformity Assessment and Accreditation. To reflect the cost associated with the submission of additional application for accreditation of microbiology scope and extension of mass scope to 500g from 200g, SADCAS contract was further amended in June 2018. MBS submitted the necessary applications and shared with SADCAS the systems documentation of these scopes. The following steps are to address the feedback of SADCAS on the documentation and the NCs pertaining to the on-site assessments. The project team with remote support of International Experts and UNIDO HQ will be providing technical assistance in addressing awaited comments and feedback of SADCAS. The bulk of the work, though, will remain on MBS side to improve the relevant systems and to close identified gaps. Failure to address and implement them timely poses a serious risk to the success of the accreditation process during the lifecycle of the project.

The Annual Work Plan for 2018 was discussed and amended during the extraordinary SQAM Project Management Meeting on the 25th of January in Lilongwe. The EU approved an extension phase of the project for 7 months with a new end date of the 15th December 2018 to accommodate the accreditation timelines set by the accreditation body and for the remainder of the project activities to be completed. As the project approaches the final stage of the implementation cycle, and with the approved project extension it is critical for UNIDO to receive in a timely manner from UNDP the amended Inter-Agency Agreement to ensure timely completion of ongoing activities, under outputs 3, 6 and 8 by December 2018. The amended IAA between UNDP and UNIDO to reflect the above is in its final stage of signatures.

With regard to the procurement of equipment at this stage of the project there is a need to consider that procurement processes, which includes transportation/delivery/customs, installation and training, are often lengthy (approximately six months) and challenging as this has been proven through past occasions. UNIDO took pro-active measures by timely launching additional procurement bids in anticipation of the release of respective funds. UNIDO also took other measures with its financial department to advance remaining funds once the Interagency Agreement with UNDP has been finalized and signed. This step needs to be accelerated to allow for initiating the purchase orders of the equipment, namely Oil Analyzer and ICP-MS. Specifications for the Laboratory Information Management System was pending and the steps initiated to develop user specifications, taking into account of the necessity of a digital laboratory operation for long-term sustainability and image of MBS. Due to financial constraints, the LIMS can only be conceptualized at this stage and phased LIMS developmental approach with financial backing need to be initiated by MBS, with the combination of internal and external funding.

UNIDO finalized the training plan by making the necessary actions to facilitate the communication with National Laboratory Association of South Africa to coordinate the Training of TSD technicians on LC-MS/MS for the identification of Chemical Contaminants in Food and on Methods of Determination for Mycotoxins. The training was conducted at NLA, Pretoria, June 2018. Further trainings will be conducted by the suppliers of the remainder of the laboratory equipment (XRF, Oil Analyser, LC-MS/MS and ICP) as the training provision has been included as an integral part of the TORs.

In addition, based on the visual occupancy plan prepared during Q4 of 2017 by CTA in cooperation with the Directors of Testing and Metrology Services (DTS and DMS) that is showing 70% occupancy, MBS is to prepare a relocation plan of the equipment in cooperation with the suppliers. It is worth to reiterate this occupancy level is more than acceptable at this stage of building a new infrastructure that can accommodate the future growth of MBS according to its Strategic Plan. Occupancy could be further improved if MBS will opt to procure more equipment before the opening, but it is not advisable to do this in a rush. It is also worth to note that the few items pending from SQAM procurement plan will not make the big change. It is also to note that the additional equipment from the Procurement Plan from February 2017 signed by the MBS is not reflecting in the Canossa table from the original project document. It is again emphasized the importance of proper maintenance, preventive and corrective, of equipment by MBS for sustainable laboratory operation and customer satisfaction, thus improved visibility of the Organization.

F. Future Work Plan

Work plan until project closure (December 2018):

The Annual Work Plan for 2018 (until May 2018) was discussed during the SQAM Project Annual Work Plan Retreat on 27 - 28 November 2017 in Zomba and approved during the SQAM Project Steering Committee Meeting on 30 November 2017 in Lilongwe. The plan has been further revised during the extraordinary Project Management Meeting on the 25^{th} of January in Lilongwe. As the project duration has been extended to December 2018 by the EU, further revision is made and agreed up on by the 17^{th} SQAM Project Steering Committee Meeting of 6 June 2018.

The key activities from the Annual Work Plan 2018 (AWP2018) for implementation by UNIDO for the last two quarters of 2018 until original project completion in December 2018 include:

Output 1:

- Targeted training on new equipment (UPLC, X-Ray Spectrometer and Oil Analysis System) will be delivered by the suppliers as this is part of the technical specifications. These trainings need to be agreed upon with MBS once the equipment is delivered and installed. It is mandatory that the suppliers to provide the MBS staff with training certificates.

Output 2:

- UNIDO last activities were concluded in this quarter in terms of this Output.

Output 3:

- Finalization of the procurement of equipment before project closure (December 2018): UPLC, CRMs and Peripherals, X-Ray Spectrometer, Oil Analysis System in accordance with the budget allocations reflecting on the Procurement Plan and Annual Work Plan for 2018.
- Independent assessment of MBS testing and calibration laboratories based on ISO 17025 requirements as part of the requirements of ISO 17065 for product certification (bottled water).
- SADCAS assessment Develop within MBS a management systems certification body for ISO 9001 (quality management systems).
- Pre-assessment for Management System Certification against ISO 17021 for FSMS (Food Safety Management System) to ISO 22000.
- Upgraded and accredited testing laboratories in MBS with initial scope limited to aflatoxin. Implemented i.t.o. MBS approved roadmap for pilot phase. To possibly expand scope in the future to microbiology, pesticides, food chemistry/elements and fortification.
- Upgraded and accredited calibration laboratories in MBS with initial scope limited to light mass (0 200g).
- Pre-assessment for Product Certification to ISO/IEC 17065 for bottled drinking water.
- Establish a pool of Malawian Auditors to ensure that MBS has experienced auditors (MBS budget). This requires a certain level of audit experience. Auditor mentoring by IRCA registered auditor is needed. A study tour at SABS for the MBS Quality Assurance Department is being considered. DQAS informed that there is no need for International Experts, local solutions can be found to address gaps and for competence building of the auditors.
- Finalization of equipment purchase as per agreed Procurement Plan, subject to receipt of funds from UNDP as per disbursement plan on the IAA (amendment n. 2) and budget allocated in the AWP for 2018. No additional equipment will be purchased during the extension. The extension will only allow the finalization of the logistics, delivery, and installation of the equipment and release of final payment to the suppliers. Pursue the viability to finalize the technical specifications of the Laboratory Information Management System (LIMS).

- Based on the results of the pre-assessment and corrective actions from the MBS on addressing non-conformities in a timely manner, develop within MBS a Management System Certification against ISO 17021 for FSMS (Food Safety Management System) to ISO 22000.
- Based on the clearance of Nonconformities of the two assessed scopes in testing and metrology, support the additional accreditation application for the microbiology in testing department and the extension of mass scope in metrology department.
- Based on the results of the pre-assessment and corrective actions from the MBS on addressing non-conformities in a timely manner, develop within the MBS a Product Certification body for the application of the ISO/IEC 17065 for bottled drinking water.

Output 4:

- UNIDO activities are concluded in terms of this Output.
- It is now essential that the National Implementation activities are continued in order to ensure the desired results under this output are achieved and that technical assistance to SMEs, in particular female and youth headed SMEs, complies with HACCP / ISO 22000 Food safety management systems.

Output 5:

- UNIDO activities are concluded in terms of this Output.
- It is now essential that the National Implementation activities are continued in order to ensure the desired results under this output are achieved and that technical assistance from FAO is requested to make progress in the Food Safety legislation.

Output 6:

- Technical Assistance to companies through IE in support of implementation of ISO 22000 systems on Cohort 1 SMEs and to the MBS will continue during the first quarter of 2018. The next missions of the IE Anya Knoetze has been planned during 21 January and 10 February 2018 to provide technical assistance to the participating Cohort I companies in the implementation of Food Safety Management System (FSMS) according to ISO 2200, to provide coaching to the NE on basic training on the HACCP methodologies and other relevant topics and to witness mock audits for the MBS auditors at the companies and provide related feedback to the assisted companies and to MBS auditors.
- Technical Assistance to companies through the NE in support of implementation of Quality management systems to ISO 9001 and 22000 on Cohort 1 SMEs and to the MBS for successful implementation and certification of Quality management system as per ISO 9001 towards full accreditation and for pre-assessment of ISO 22000.

Output 8:

Activity 8.1 Operational Management Team: UNIDO will continue to provide international technical assistance through the oversight of the work of the UNIDO project personnel (CTA and Project Associate at HQ) as provided under UNIDO responsibility until the end of the project in December 2018.

Annexes:

- 1. <u>Annex 1:</u> Financial figures as reported and accepted by UNDP HQ (UNEX) comprising Disbursements to date (2nd quarter 2018: April June 2018).
- 2. <u>Annex 2:</u> Financial reporting comprising Obligations + Disbursements to date (2nd quarter 2018: April June 2018).

OUTPUT	USD (\$)	USD (\$)	USD (\$)
	Apr - Jun 2018 QUARTERLY EXPENDITURE	TOTAL EXPENDITURE AS AT PREVIOUS QUARTER	TOTAL EXPENDITURE
Output 1: Increased efficiency and sustainability of the			
Malawi Bureau of Standards	-	209,694.17	209,694.17
Output 2: Better technical regulations - Support to the			
reviews and development of technical regulations	-	52,768.50	52,768.50
Output 3: Enhancement of the Malawi Bureau of Standards			
capacity	42,685.19	1,076,681.01	1,119,366.20
Output 4: Enhanced Capacity of National Enquiry Points			
(NEP). Proactive and responsive NEP to info and			
notification requirements of WTO/TBT/SPS agreements	-	14,074.71	14,074.71
Output 5: Strengthened Sanitary and Phytosanitary			
infrastructure	-	40,291.00	40,291.00
Output 6: Small and Medium Enterprise (SME) meet quality			
requirements	37,257.46	206,977.98	244,235.44
Output 7: Preparation of the organisational and operational			
internal by-laws and business plan for a national Malawian			
Accreditation body		-	-
Output 8: Operational Management Team (operation costs			
and visibility)	78,455.21	764,213.00	842,668.21
SUB-Total Project Direct Eligible Costs (EXCLUDING CONT)	158,397.86	2,364,700.37	2,523,098.23
CONT (2.75%) - has to be ≤ 5%		-	-
SUB-total Project Direct Eligible Costs (INCLUDING			
contingency)		-	-
Output 1 Support Costs	412.03	14,789.91	15,201.94
Output 2 Support Costs	-	4,032.97	4,032.97
Output 3 Support Costs	(591.93)	111,280.35	110,688.42
Output 4 Support Costs	-	2,311.46	2,311.46
Output 5 Support Costs	-	70.28	70.28
Output 6 Support Costs	2,044.74	13,314.34	15,359.08
Output 8 Support Costs	6,473.02	49,254.58	55,727.60
Indirect Costs (GMS 7%): Administrative Costs has to be ≤			
7% of Direct Eligible Costs	8,337.86	195,053.89	203,391.75
GRAND TOTAL (Including contingency)	166,735.72	2,559,754.26	2,726,489.98

ANNEX 1

OUTPUT	USD (\$)	USD (\$)	USD (\$)
	Apr - Jun 2018	TOTAL EXPENDITURE AS AT PREVIOUS	TOTAL EXPENDITURE
	QUARTERLY EXPENDITURE	QUARTER	TOTAL EXPENDITORE
Output 1: Increased efficiency and sustainability of the			
Malawi Bureau of Standards	8,183.30	211,285.44	219,468.74
Output 2: Better technical regulations - Support to the			
reviews and development of technical regulations	-	57,613.46	57,613.46
Output 3: Enhancement of the Malawi Bureau of Standards			
capacity	153,988.95	1,565,166.49	1,719,155.44
Output 4: Enhanced Capacity of National Enquiry Points			
(NEP). Proactive and responsive NEP to info and			
notification requirements of WTO/TBT/SPS agreements	-	14,074.71	14,074.71
Output 5: Strengthened Sanitary and Phytosanitary			
infrastructure	-	40,291.00	40,291.00
Output 6: Small and Medium Enterprise (SME) meet quality			
requirements	32,663.63	219,241.04	251,904.67
Output 7: Preparation of the organisational and operational			
internal by-laws and business plan for a national Malawian			
Accreditation body		-	-
Output 8: Operational Management Team (operation costs			
and visibility)	96,469.70	791,502.39	887,972.09
SUB-Total Project Direct Eligible Costs (EXCLUDING CONT)	291,305.58	2,899,174.53	3,190,480.11
CONT (2.75%) - has to be ≤ 5%		-	-
SUB-total Project Direct Eligible Costs (INCLUDING			
contingency)		-	-
Output 1 Support Costs	412.03	14,789.91	15,201.94
Output 2 Support Costs	-	4,032.97	4,032.97
Output 3 Support Costs	(591.93)	118,848.10	118,256.17
Output 4 Support Costs	-	985.23	985.23
Output 5 Support Costs	-	70.28	70.28
Output 6 Support Costs	2,044.74	13,314.34	15,359.08
Output 8 Support Costs	6,473.02	50,580.81	57,053.83
Indirect Costs (GMS 7%): Administrative Costs has to be ≤			
7% of Direct Eligible Costs	8,337.86	202,621.64	210,959.50
GRAND TOTAL (Including contingency)	299,643.44	3,101,796.17	3,401,439.61