

EXTERNAL EVALUATION - SHORT REPORT

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Strengthening Quality Infrastructure in Sri Lanka II



Country/Region: Sri Lanka
Project number: 2018.2021.6
Project term: 01/2019 – 12/2023
Lead executing agency: Ministry of Trade, Commerce and Food Security
Executing agencies: Measurement Units, Standards and Services Department (MUSSD), Sri Lankan Standards Institution (SLSI), Industrial Technology Institute (ITI), and other QI institutions at national and regional level
PTB | Section: 9.32 Asia
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This evaluation is an independent assessment. Its contents reflect the evaluator's opinion which is not necessarily equivalent to PTB's view.

List of abbreviations

APMP	Asia-Pacific Metrology Program
ARW	Awareness Raising Workshop
ATL	Association of Testing Laboratories
CCiy	Chamber of Commerce and Industry of Yarlpnam
GQII	Global Quality Infrastructure Index
GMP	Good Manufacturing Practices
HACCP	Hazard Analysis and Critical Control Points
HCD	Human Capacity Development
ISO	International Organization for Standardization
ITI	Industrial Technology Institute
LEEDS	Lanka Enterprise and Entrepreneurs Development Services
MUSSD	Measurement Units, Standards, and Services Department
NIPHM	National Institute of Post-Harvest Management
NCPCCIA	Northcentral Province Chamber of Commerce, Industry and Agriculture
NMI	National Metrology Institute
NWSDB	National Water Supply and Drainage Board
PDHS	Provincial Director of Health Services
PRI	Palmyrah Research Institute (PRI)
QI	Quality infrastructure
SAARC	South Asian Association for Regional Cooperation
SDG	Sustainable Development Goal
SLAB	Sri Lanka Accreditation Board for Conformity Assessment
SLSI	Sri Lankan Standards Institution
WRB	Water Resources Board
UNIDO	United Nations Industrial Development Organization

1. Executive summary of the project

Subject of the evaluation was the project 'Strengthening quality infrastructure in Sri Lanka II'. The project built on a predecessor project that was active at national level and in the Northern Province of Sri Lanka with a focus on the food sector. The evaluated project maintained the sectoral focus and was extended to the North-Central province. Both provinces are former civil-war zones.

The project was scheduled to be implemented from 01/2019 to 12/2021 with a budget of 1 million EUR, financed by the BMZ. As the bilateral cooperation with Sri Lanka will end in 2024, it was extended until 12/2023 and the budget increased to 1,8 million EUR. Module objective was that 'Small and medium-sized enterprises from the project region make increased use of the offer of quality assurance services based on international good practices.' The project objective was to be achieved via four outputs: (1) strengthening the national quality infrastructure (QI) with a focus on calibration services for mass, volume and temperature and proficiency testing, (2) strengthening the capacities of seven testing laboratories in the provinces with a focus on water, arrack, ice cream, fruit juices, and (3) accompanying selected SMEs in an upgrading process towards obtaining relevant certifications including massive awareness raising campaigns. A fourth output was added in 2021 that aimed at strengthening the sustainability of achieved results, for instance by introducing short and certificate courses on food handling and a metrology academic course at Vavuniya University, and the development of a food handling handbook.

Lead executing agency was the Ministry of Trade, Commerce and Food Security. Main implementing partners at national level (output 1) were the Measurement Units, Standards and Services Department (MUSSD), the Sri Lanka Standards Institution (SLSI), the Industrial Technology Institute (ITI) and the Sri Lanka Accreditation Board for Conformity Assessment (SLAB). At regional level (output 2), the project supported seven labs: two laboratories of the National Water Supply and Drainage Board (NWSDB) and the Palmyrah Research Institute (PRI) in the Northern Province, and in the North Central Province the National Water Supply and Drainage Board (NWSDB) Anuradhapura, the Water Resources Board (WRB), the National Institute of Post-Harvest Management (NIPHM) and the Water Quality Laboratory of the Mahaweli Authority of Sri Lanka in Dambulla. Further partners at regional level were Provincial Departments of Health Services (PDHS), as well as several universities (Rajarata University, University College of Anuradhapura, the University College of Jaffna, the University of Jaffna and the University of Vavuniya). Final beneficiaries of the project are small and medium-sized enterprises (SMEs, output 3) in the food sector in the Northern and the North Central Province of Sri Lanka.

2. Evaluation of the project

This final evaluation serves accountability and learning; it was selected based on a random sample. The main methods of data collection were document analysis, interviews and observation. The documents provided by the project, which were of very good quality, were analyzed and findings were allocated to the respective evaluation criteria. Interviews took place in August 2023 and were conducted based on a specific interview guideline for every interview partner. Most interviews in Sri Lanka were conducted by the technical evaluator who met with project partners on-site. The lead evaluator, based in Germany, conducted all interviews with German staff and consultants. Interviews were documented in English, using a pre-developed template. Visual observation was used by the technical evaluator during his visits of the partner laboratories based on the following criteria: Housekeeping (cleanliness /orderly nature), controlled environmental conditions (defined, monitored), equipment (accuracy, calibration status, measurement traceability, maintenance). Triangulation was done by using different sources (e.g., project documents, interview transcriptions). The evaluators also compared their findings to come to a joint assessment of the evaluation criteria.

The six OECD/DAC criteria were used as an evaluation basis for this evaluation:

- Relevance: Is the project doing the right things?
- Coherence: How well does the project fit?
- Effectiveness: Is the project achieving its objectives?
- Impact (higher-level development results): What difference does the project make?
- Efficiency: How well are resources being used?
- Sustainability: Will the results last?

The following marking scale was used for the evaluation:

1	2	3	4	5	6
very successful	successful	successful to a limited extent	rather unsuccessful	mainly unsuccessful	entirely unsuccessful

Overall, the project received the mark: very successful (1,4)

Relevance

The project was in line with the strategic orientations both of Sri Lanka and the donor (dimension 1). It was strongly oriented at the needs and capacities of project partners and small and medium-sized enterprises (SMEs) in the food sector. For the latter, a mixture of push factors (Good Manufacturing Practices certification had become mandatory) and pull factors (the wish to extend the business, export opportunities) were at work to make the project highly relevant. The project also considered, by the choice of project regions, the needs and capacities of both Tamil and Sinhala ethnicities (dimension 3). The project's 'bottom up' approach was well suited to create demand for QI services and to render QI services more customer-oriented. The sustainability component was a valuable addition to the original approach. Activities were adequate and the results hypotheses were plausible. In terms of organisational and financial aspects however, this design also stretched the available resources. The project has very well adapted to changes in the environment, for instance by adding a fourth output to support sustainability and changing the mode of delivery e.g. during the Covid pandemic (dimension 4).

Overall, the criterion received the mark: very successful (1,3)

Coherence

Synergies were realized with two regional PTB projects where project partners were trained on complementary topics. Potential synergies with two GIZ projects on SME promotion and vocational education - as for instance joint development of business services or the promotion of value chains - were never realised (dimension 1). Coordination and division of labour with the UNIDO project on 'mainstreaming standards-based best practices for agri-food sector development' was outstanding. PTB and UNIDO worked with the same partner institutions (MUSSD, ITI and SLSI) and in doing so, closely cooperated throughout the years and divided the tasks (dimension 2).

Overall, the criterion received the mark: 1,5

Effectiveness

Regarding achievement of the project objective (dimension 1), the project has fully achieved three out of four indicators and the fourth was estimated to be achieved by 90% at the end of the project. The indicators related to the provision of QI services assessed the capacities of regional laboratories by using calibration services for mass, volume, and temperature and by taking part in proficiency tests (indicator 1) and the provision of demand-oriented testing services for three additional foodstuffs by food testing laboratories in the project regions (indicator 2). Regarding the demand for QI services, indicator 3 assessed the introduction of quality management systems by SMEs from the food sector and the re-certification of previously certified SMEs (indicator 4). Project contribution to the achieved results could be confirmed and external influence be ruled out (dimension 2). The quality of implementation was assessed very positively. The project has made exemplary good use of project management tools such as a well-functioning steering structure and an exemplary well-developed results monitoring. The cooperation with and among project partners was managed very well, too. All interview partners highly praised the engagement of consultants and the quality of their advice (dimension 3). The project monitored unintended effects. One unintended effect observed refers to the topic of waste management for laboratories (hazardous waste), which was initiated by the project and later had to be abandoned for budgetary reasons. What would have been an unintended negative result (creating expectations that were not met) led to development of such a system by the National Water Supply and Drainage Board NWSDB in Jaffna, inspired by the project (dimension 4).

Overall, the criterion received the mark: very successful (1,3)

Efficiency

Production efficiency (input-output, dimension 1) was assessed as good to very good for all outputs, as most output indicators were fully achieved or even overachieved. This was particularly the case in output 2 (testing laboratories) and output 4 (sustainability component). Output 3 (upgrading of SMEs) has used significantly more budget than previously planned but did on the other hand not achieve all its indicators, due to delays in project implementation. These were caused by the pandemic but also by one important partner in providing business services, the Chamber of Commerce and Industry of Yarlpanam, not being available any more. However, production efficiency is overall still assessed as successful. Allocation efficiency (dimension 2) was assessed as very good, due to the good division of labour with UNIDO and the convincing project concept. There are no alternative approaches that could have brought similar results.

Overall, the criterion received the mark: between very successful and successful (1,5)

Impact (higher-level development results)

The rather negative economic performance of Sri Lanka in recent years and the still shaky path to recovery limit the potential for significant impact notably for SDG8 (dimension 1). However, project partners and SMEs have shown surprising resilience in view of the crisis: Project data showed that the certification of SMEs had a significant positive impact on employment. All interviewed companies had an optimistic outlook and were planning to expand their business. There is anecdotal evidence that the Northern and North-Central provinces have in recent years developed positively with regard to infrastructure and income from tourism. No trade-offs between social, economic and environmental changes could be observed. The project has contributed to strengthening the QI institutional system, there was a large outreach to SMEs and good up-scaling approaches (dimension 2). Several positive unintended effects were discovered that show how partners upscale the project results (dimension 3). The NWSDB has started to extend accreditation of their regional laboratories based on the good experience with the project. It was also confirmed by the Health Authorities that the awareness raising in water treatment will be upscaled. Finally, a positive employment effect was created when students of food technology at the University of Jaffna and the University College of Jaffna who were trained as counsellors were employed by the SMEs they were consulting.

Overall, the criterion received the mark: very successful (1,3)

Sustainability

All partners and SMEs interviewed emphasized that they have the capacities to maintain the achieved results (dimension 1). It was also confirmed that the project has contributed to strengthening the partner capacities mainly at individual and organizational level (dimension 2). The sustainability component (output 4) and another sustainability concept in output 3 show that the project has actively developed and implemented an exit strategy. Durability is assessed as successful (dimension 3), as most results are structurally anchored. The durability of the SME upgrading process is seen as the most critical element, due to the lack of partner capacities to continue and the not yet convincing business model of the current solution. In spite of this, there are pull and push factors at work that favour sustainability over time and may override risks such as a prolonged economic crisis and the lack of government attention to quality infrastructure. The willingness of customers to pay for QI services is another good precondition for sustainability.

Overall, the criterion received the mark: between very successful and successful (1,7)

3. Learning processes and experiences

The project had applied a very good monitoring system and paid particular attention to documenting learning processes (what worked well, what did not work well, for which reasons) and resulting lessons learned. This was documented for each output and subsequently integrated in project implementation. In most instances the lessons learned could be

successfully integrated in the implementation, in others less. For instance, the lesson learned to have a closer cooperation with the ministry could not be successfully implemented due to the frequent changes at ministry level.

Experiences were also documented in the monitoring tool (unintended results). They were documented for each year, and in the case of positive effects it was assessed whether an upscaling would be possible.

4. Recommendations

Recommendations to the project partners:

- MUSSD, SLSI & SLAB should be under the same Ministry, as this would reduce friction and enable a smooth implementation of the QI strategy.
- It is important for MUSSD, SLSI and ITI to cooperate with each other to strengthen the QI in Sri Lanka.
- Secretaries in this Ministry should understand the importance of the work of the QI institutions for the economic development of the country. For this it is important that the 'QI community' and notably institutions such as MUSSD, SLSI and ITI lobby for their cause and sensitize ministry staff about the significance of QI for the competitiveness and economic development of the country.
- In this context, it is recommended that MUSSD uses the training offer of the regional PTB project "MEDEA" that offers training also on lobbying and policy dialogue.
- Both SLSI & ITI send their reference standards out of the country for calibration at present as only the Pressure and Volume labs at MUSSD are accredited. A policy decision should be taken at the relevant authority level to establish a green channel with the Sri Lanka Customs for this purpose until MUSSD labs comply with SLAB requirements to provide traceability to SLSI & ITI.
- MUSSD is functioning as a department which restricts implementation of some of its QI responsibilities. It is recommended to relook at the MUSSD responsibility and authority defined for a) Scientific Metrology b) Industrial Calibrations and c) Legal Metrology. This should be done considering technical requirements as well as the concerns of the present staff if it is to be a success.
- The University of Vavuniya has established a metrology programme with a very positive contribution from MUSSD. The training division of MUSSD should look at the possibility of collaborating with other universities which offer Engineering or Physics Degrees for establishing similar programmes.
- As an outcome of the PTB project, SLSI and ITI now have the capacity to provide PT services to calibration laboratories for certain parameters. MUSSD should investigate the possibility (there seemed to be an interest of doing so) of providing PT services to SLSI & ITI with the long-term goal of being accredited for ISO17043 standard.
- MUSSD could consider to designate other organizations with strong measurement capacities as responsible for certain national measurement standards (e.g. in chemistry).
- SLAB has developed extensive Assessor Training Programmes for different accreditation schemes. However, the method of providing feedback (both positive & negative) to assessors after regular monitoring of their performance could be further improved. We recommend the establishment of a training division at SLAB with the responsibility for training, monitoring and evaluation of assessor performance. It is also recommended not to enlarge the SLAB services into many new areas as it is already difficult to serve existing topics (such as ISO 17025) due to a lack of (well trained) assessors. New topics could (at least temporarily) be covered by partner accreditation bodies, e.g. from India.
- Creating awareness and conducting regular stakeholder meetings could make more companies use QI services. All QI institutions should get involved in this exercise.

Recommendations to the project team:

- Develop an approach to finance the upgrading process, either by finding alternative sources (e.g., government schemes for SMEs, other donors) or developing a payment scheme for companies; otherwise, the upgrading process will not be sustainable.
- Assist the University in Vavuniya and MUSSD to find a financial arrangement for paying the MUSSD experts (or at least, initiate the process).
- In the remaining project time, a process should be developed jointly with the partners to ensure sustainability of the Chemical Task force, respectively of all networks that were created with the support of the project. Particularly – but not only- in the case of cross-organizational networks it seems important that one responsible body and person assumes responsibility for managing the network (sustaining communication, organizing events, etc.).
- A Similar approach should be developed with and for the cooperation among MUSSD, SLSI and ITI. This would contribute very positively to strengthening the QI in Sri Lanka (e.g., Quality Council). It might be worth discussing this with UNIDO.

Recommendations to the International Cooperation Department (9.3):

- The monitoring approach of the project, notably also of lessons learned and the monitoring of unintended effects is recommendable and should be shared as best practice.
- The specific project concept should be shared and discussed within PTB, to see which elements could be easily replicated and which preconditions need to be in place to do so.
- The Capacity WORKS (CW) self-assessments indicate that some success factors, tools and their application are not yet well understood (for instance that the monitoring and operational plans are tools of CW). Ideally, some elements should be developed or implemented jointly with the partners (steering committee, monitoring). However, even without partner implication (as a team exercise), some instruments can be useful such as a results model, a Capacity Development strategy or monitoring. It is recommended to point this out in relevant training which should also be offered to consultants.

Recommendations to the evaluation unit of Working Group 9.01:

- The Capacity WORKS questionnaire could be simplified and improved.