

# EXTERNAL EVALUATION - SHORT REPORT<sup>1</sup>

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Strengthening of Metrology for the improvement of the Competitiveness in the Egyptian Economy

Country | Region: Egypt/Middle East and North Africa (MENA)

Project number: PN: 2019.2001.6  
Project term: 05.2022-08.2025

Lead executing agency and Implementing Partner: Egyptian National Institute of Standards (NIS)

PTB | Section: Group Q.34, until 31.12.2024 Group 9.34  
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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**

<b>AB</b>	Advisory Board
<b>BMZ</b>	<i>Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung</i>
<b>CD</b>	Capacity Development
<b>CRMs</b>	Certified Reference Materials
<b>CW</b>	Capacity WORKS
<b>GIZ</b>	<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>
<b>NIS</b>	National Institute of Standards
<b>OECD/DAC</b>	Organisation for Economic Cooperation and Development/Development Assistance Committee
<b>PTB</b>	<i>Physikalisch-Technische Bundesanstalt</i>
<b>QI</b>	Quality Infrastructure
<b>SMEs</b>	Small and Medium Enterprises
<b>SMIC</b>	Strengthening of Metrology for the Improvement of Competitiveness

## 1. Executive summary of the project

The **objective of the evaluation** is to assess the performance of the project “Strengthening of Metrology for the Improvement of Competitiveness in the Egyptian Economy” (SMIC), covering its activities since its start in May 2022 until the end of phase, planned by the end of April 2025. In March 2025, after the implementation of the evaluation, the project was extended without additional costs for another four months, until the end of August 2025. The 1.000,000 EUR project is integrated in the German Development Cooperation (DC) programme “Private Sector Development” and financed by the Federal Ministry for Economic Cooperation and Development (*Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung*, (BMZ)).

The project’s **political and implementing partner** is the Egyptian National Institute of Standards (NIS). Its **target group** is the employees of the NIS. The indirectly involved actors are other Quality Infrastructure (QI) service providers (including the National Food Safety Authority (NFSA) and secondary testing and calibration laboratories, authorities and chambers, partly of Small and Medium Enterprises (SMEs), from the food processing sector). Consumers of processed food products are the **final beneficiaries**.

The Technical Cooperation (TC) module supports the development of new QI demand-based services at NIS and enables SMEs in the food processing sector, as well as testing and calibration laboratories, to better utilise them through its three outputs. **Output 1** aims to improve cooperation, exchange, and awareness-raising between the NIS and its customers from the food processing sector. **Outputs 2 and 3** focus on strengthening the technical expertise of NIS through the production of certified reference materials<sup>2</sup> (CRMs) and improving its competences as a service provider in carrying out comparative measurements for food analysis.

## 2. Evaluation of the project

The evaluation **aimed** at independently and systematically assessing the overall achievement of the project, contributing to transparency and accountability towards the BMZ, Egyptian partner organisations and the general public. Results of the evaluation contribute to learning on institutional and strategic levels, guiding actions in the follow-up phase.

The evaluator **utilised participatory research methodologies**, incorporating a desk review, observations, a seven-days data collection mission to Egypt, semi-structured (virtual) individual and group interviews and an assessment workshop with key partners and stakeholders. The evaluation and appraisal missions were conducted in January 2025, with **partially overlapping data collection phases**, to ensure maximisation of learning benefits and rationalisation of resources.

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?

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<sup>2</sup> A Certified Reference Material (CRM) is a reference material characterised by a metrologically valid procedure for one or more specified properties, accompanied by a reference material certificate that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability [ISO Guide 30:2015, 2.1.2].

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: Successful to a limited extent (3.1).

### Relevance

The project is **relevant and in line** with Egyptian and German priorities, international practices and the needs of beneficiaries and stakeholders. The project's **added value** gained more relevance during the implementation period, given the increasing requirements with which products have to comply to access European markets, high inflation rate and unavailability of foreign currency, affecting mainly SMEs operations. The project's **design** is plausible and coherent, but not realistically geared towards achieving the intervention's objectives nor indicators in the current phase. From a design perspective, the formulated theory of change is coherent and logical, and its three components are appropriate and well interlinked. However, the objectives and indicators of the project were **overambitious** for the planned timeframe, even with the extension in project's timeline. This is mainly due to an inadequate virtual appraisal mission and not due to poor design of the project. The project identified and monitored risks and unintended results continuously, responded positively to changes in the environment and adapted to needs to some extent.

Overall, the criterion received the **mark**: Successful to a limited extent (2.8).

### Coherence

The project was designed in a complementary manner with other German projects, but collaboration opportunities turned out to be less than initially foreseen, not just with other German projects but also with other existing donors. Potential synergies were mindfully explored but not leveraged. Internal cooperation with PTB Unit 3.2.1 accelerated implementation, as the expert could **bridge the technical language gap** between NIS' technical team and PTB's project management. Still, the exchange that took place with other *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) projects during this phase was assessed **as sufficient, due** to the fact that the project's focus and target group are different and unique than other GIZ projects. The project was steered, implemented and monitored in a participatory way. The real innovative aspect concerning external coherence is the participatory steering, implementation and monitoring nature of the project, not only with NIS but also with other important QI actors.

Overall, the criterion received the **mark**: Successful to a limited extent (3.0).

### Effectiveness

The project is not expected to achieve **its objectives nor indicators** by the end of the phase, even with extending its timeframe. The project successfully carried out some important Capacity Development (CD) activities in relation to improving NIS' core competencies but could have **benefited** from the use of additional technical experts with different specialty areas to complete the needed specified trainings, with respect to Outputs 2 and 3. The project will also **benefit** from further participation of private sector companies in the next phase. The networking component and purchase of equipment were perceived as **the most significant change**.

Some **internal factors**, mainly in relation to project planning and steering, affected implementation quality negatively, contributing to delays. It is worth highlighting that all Capacity WORKS (CW) success factors were assessed relatively positively by PTB, stakeholders and NIS team, with discrepancies in answers between both cooperation partners. Finally, the project has leveraged the potentials **of unintended positive results**. No unintended negative results occurred or are foreseen as a consequence of the intervention.

Overall, the criterion received the **mark**: Successful to a limited extent (3.3).

## Efficiency

The project's use of resources is deemed partially reasonable regarding its outputs and outcomes achieved. Due to the late start of project activities, delay in signing the implementation agreement, conducting a second appraisal mission phase and delays with custom clearance processes, less activities could be carried out than originally planned. Neither could the achieved outputs be delivered using fewer financial resources, nor would a different use of financial resources increase project results.

Overall, the criterion received the **mark**: Successful to a limited extent (2.5).

## Impact (higher-level development results)

Higher-level development changes are not expected to take place by the end of the phase. Project activities plausibly contributed to some intended higher-level changes only. They did not, however, contribute to any unintended negative or positive results at the level of beneficiaries or stakeholders.

Overall, the criterion received the **mark**: Rather unsuccessful (3.5).

## Sustainability

The project planted the seeds required to achieve its objective in the next phase, by establishing and supporting the right structures. There was a general agreement that NIS has good facilities, and sufficient manpower, mandate and willingness to learn and sustain the positive results of the project over time. Financial resources might represent a challenge. More efforts have to be exerted in the following phase to achieve and sustain positive results, increase the technical expertise and resilience of NIS and stakeholders, and expand the inclusion of private sector in the dialogue.

Overall, the criterion received the **mark**: Successful to a limited extent (3.3).

## 3. Learning processes and experiences

Introduction of the **participatory project CW management tools** added positively to project learning and steering in particular, especially as most NIS staff have more technical than project management and development cooperation backgrounds. Although the use of key project management tools, such as the results model, process landscape and Operational Plan (OP), is a standard and "normal practice" in any development project, it was distinctly appreciated in this particular project due to its **technical focus and background of NIS employees and AB stakeholders**.

## 4. Recommendations

### Recommendations to the partners:

#### *Sustainability*

- NIS mainly relies on existing informal contacts to sell its services. It should continuously **update** its service catalogue, and **proactively market** and **raise awareness** on it through official channels.
- NIS should invest resources, not just in its **business plan** to market its services, but also in a **feasibility assessment** on **maintaining the project's output** (e.g. CRM production), to ensure sustainability.
- NIS should **update its training programme** and integrate newly developed curricula based on the needs of food testing labs, to continuously use it for trainings offered for the network of QI members in the future. Trainings topics can include method selection, development and analysis of mycotoxins, and sample preparation.

### Recommendations to the project team:

#### *Strategy*

- The project should continue to support NIS to **produce CRMs in mycotoxins** until recognition. This can be achieved by supporting the ISO 17034 standard requirements implementation and adaptation of management system including ISO 33405:2024 (ISO 33400 series), and through on-the-job-training. A **stepwise approach** should be followed in producing CRMs for a realistic outcome.
- The project will benefit from a detailed **training plan focusing on the needs of NIS, governmental and private QI actors** involved in the project at the beginning of the next phase, with clear specification of target groups and learning objectives of each CD measure.

#### *Learning, Innovation/Steering*

- Project did not achieve its objectives but **planted the required seeds** for NIS during 2022-2024 to achieve the project's goals in next phase (preparatory/orientation phase), especially as it is considered the first bilateral German project. Project should **continue using CW tools for learning and innovation in steering** the projects as they added value to NIS managerial and steering capacities, expanding their understanding of development cooperation.
- Project should include a **technical expert with knowledge about QI processes** in the **design phase and steering and strategy discussions** (e.g. some topics of AB meetings) to accelerate the implementation process, particularly in other similar projects with such technical focus.

#### *External Coherence/ Steering*

- Bringing all relevant people together at an early stage, sensitising them to each other's work and involving them in joint coordination processes has proven to be a successful approach and can contribute to ownership. Project should rely on the **same participatory steering structure** in the next phase but should explore whether **the structure, ToR and content need expansion or improvements** to maximise benefits for all QI stakeholders and revenue from offered services.
- Project should create **benefits/opportunities** for network stakeholders and users of CRMs on food safety to keep them engaged. This can be achieved either by providing them with trainings (related to test methods and validation, ISO 17025 and ISO 17043 topics, etc.) or by benefiting them from the existing training programmes.

#### *Internal Coherence*

- Project should follow up on **identified cooperation opportunities** (e.g. awareness raising, food quality) during appraisal mission for the next phase, to improve internal coherence

### Recommendations to the International Cooperation Department (Q.3):

#### *Relevance*

- Projects focusing on metrology mainly will benefit from having a **broader focus**, embedding in project concept activities focusing on networking, awareness raising and exchange of experience with potential gains and joint activities. QI and the food sector have many important actors that can act as potential future customers.

#### *Steering, Strategy*

- Projects with similar technical focus should be advised to **start with the procurement processes of required equipment/goods** in the **first year** of project implementation.

- Projects with similar complex technical designs covering food safety analysis, CRM production and traceability, and Proficiency Testing (PT) provision should include **technical experts, either based on short term contracts or through agreement with PTB labs**, in the implementation phase as early as possible.

Recommendations to the evaluation unit of Working Group Q.01:

- The evaluation unit should **include project coordinators from other regions** —as much as resources allow— in all evaluations to foster learning between projects, as they bring beneficial PTB experience to implementation.