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Independent terminal evaluation
Global Quality and Standards Programme (GQSP)

Office of Evaluation and Internal Oversight

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Independent Evaluation of GLOBAL QUALITY AND STANDARDS PROGRAMME (GQSP)

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Abstract

This report provides an overview of the evaluation of the first phase of the Global Quality and Standards Programme (GQSP) from December 2017 to November 2023. The evaluation covers seven countries, including Colombia, Peru, Indonesia, Vietnam, Kyrgyzstan, South Africa, and Georgia.

The findings indicate that the GQSP has achieved good results in strengthening quality infrastructures and enhancing awareness for quality. However, the program's effectiveness varies between quality infrastructure institutions and small and medium-sized enterprises (SMEs), with limited reach to SMEs and mixed results in terms of enhanced export competitiveness. Financial sustainability is also highlighted as crucial for long-term impact.

The evaluation concludes that the overall intervention logic of the GQSP works partially and suggests revising the theory of change to better reflect the program's scope and factors influencing export competitiveness. Furthermore, the evaluation recommends continued financial support for the development and maintenance of global knowledge tools created under the GQSP.

Recommendations for the second phase of the GQSP include strategies to enhance SME outreach, better definition of target beneficiaries, innovative approaches for capacity building, investment in empirical evidence collection, revision of the theory of change, consideration of a parallel trade promotion program, and strengthening long-term sustainability.

Overall, the evaluation highlights the achievements and areas for improvement of the GQSP and provides valuable recommendations for the second phase to enhance its effectiveness and impact on quality infrastructure and SMEs.

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Abbreviations and Acronyms

Abbreviation	Meaning
BIPM	International Bureau of Weights and Measures
BOA	Bureau of Accreditation of Vietnam
Buscalab	Colombian laboratory search engine
CAB	Conformity Assessment Body
C4Q	Culture for Quality
CHF	Swiss Franc
COSMOS	Natural and Organic Certification for Cosmetics
CTA	Chief Technical Advisor
EC	European Commission
EGM	Expert Group Meeting
EIO	Office of Evaluation and Internal Oversight (UNIDO)
ENPARD	European Neighbourhood Programme for Agriculture and Rural Development
EUR	Euro
F&V	Fruit and Vegetable
GAP	Good Agriculture Practices
GeLab	Georgian Laboratory Association
GMP	Good Manufacturing Practice
GQSP	Global Quality and Standards Programme
HACCP	Hazard Analysis and Critical Control Points
HQ	Headquarters
IAF	International Accreditation Forum
ILAC	International Laboratory Accreditation Cooperation
INACAL	The National Institute of Quality of Peru
INetQI	International Network on Quality Infrastructure
IRPF	Integrated Results Performance Framework
ISID	Inclusive and Sustainable Industrial Development
ISO	International Organization for Standardization
KPI	Key Performance Indicator
LabNet	Laboratory Network
LIMS	Laboratory Information Management System
MRA	Multilateral Recognition Agreement/Arrangement
MTE	Mid-Term Evaluation
MSQF	Multi-Stakeholder Quality Forum
M&E	Monitoring and Evaluation
NAB	National Accreditation Body
NAFIQPM	National Agro-Forestry-Fisheries Quality Assurance, Processing and Market Development
NGO	Non-Governmental Organization
NMI	National Metrology Institute
NPC	National Project Coordinator

NQI	National Quality Infrastructure
NSB	National Standards Body
OECD	Organisation for Economic Co-operation and Development
OIML	International Organization of Legal Metrology
PA	Programme Assistant
PC	Programme Coordinator
PM	Programme Manager
PMU	Project Management Unit
PPD	Plant Protection Department
PSC	Project Steering Committee
PTP	Proficiency testing provider
QI	Quality Infrastructure
QIS	Quality Infrastructure System
QI4VC	Quality Along the Value Chain
QS	Quality and Standards
RMP	Reference Material Producer
SAEOPA	Southern African Essential Oil Producers' Association
SC	Steering Committee
SCA	Standards Compliance Analytics
SDG	Sustainable Development Goal
SDO	Standards Development Organization
SECO	State Secretariat for Economic Affairs, Switzerland
SIAEP	Sub-Institute of Agricultural Engineering and Post-Harvest Technology
SICAL	Colombian National Quality Subsystem
SIPPO	Swiss Import Promotion Programme
SME	Small and Medium-Sized Enterprise
SOP	Standard Operating Procedure
STAMEQ	The Directorate for Standards, Metrology and Quality of Viet Nam
TBT	Agreement on Technical Barriers to Trade (WTO)
TCB	Trade Capacity Building
ToR	Terms of Reference
USD	United States Dollar
VC	Value Chain
VIAEP	Vietnam Institute of Agricultural Engineering and Post-Harvest Technology
WTO	World Trade Organization

Glossary of Evaluation Related Terms

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the objectives of a development intervention were or are expected to be achieved.
Impact	Positive and negative, primary and secondary, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor. Means by which a change will be measured.
Intervention	An external action to assist a national effort to achieve specific development goals.
Lessons learned	Generalizations based on evaluation experiences that abstract from specific to broader circumstances.
Logframe (logical framework approach)	Management tool used to guide the planning, implementation and evaluation of an intervention. System based on MBO (management by objectives) also called RBM (results-based management) principles.
Outcome	The achieved or likely short-term and medium-term effects of an intervention's outputs.
Outputs	The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Recommendations	Proposals aimed at enhancing the effectiveness, quality, or objectives; and/or at the reallocation of resources.

Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies. Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.
Results-Based Management (RBM)	A management strategy focusing on performance and achievement of outputs, outcomes and impacts.
Review	An assessment of the performance of an intervention, periodically or on an ad hoc basis. Note: Frequently "evaluation" is used for a more comprehensive and/or more in-depth assessment than "review". Reviews tend to emphasize operational aspects. Sometimes the terms "review" and "evaluation" are used as synonyms.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.
Target group	The specific individuals or organizations for whose benefit an intervention is undertaken.
Theory of change	Theory of change or programme theory is similar to a logic model, but includes key assumptions behind the causal relationships and sometimes the major factors (internal and external to the intervention) likely to influence the outcomes.

Executive Summary

Introduction	
Purpose	• To learn from the first phase of the GQSP (December 2017 - November 2023); • To make recommendations for the implementation of the second phase of the GQSP which will end in November 2027; • To make recommendations for the design of several country project documents for the second phase.
Objective and focus	• To assess the performance of the first phase of the Global Quality and Standards Programme (GQSP); • To focus on the country interventions.
Overarching evaluation questions	• What are the results at the country level? • Does the overall intervention logic of the GQSP work? • How useful are the global knowledge tools at the country level?
Evaluation approach	• Mixed-methods approach for both for data collection and data analysis; • Primary data collection from stakeholders and beneficiaries; • Data collection at the country level was main primary data collection effort.
Country selection	• Latin America: Colombia and Peru • Asia: Indonesia and Vietnam • Central Asia: Kyrgyzstan • Africa: South Africa • Europe: Georgia (special measures) • With the seven country visits the evaluation covers 60% of the countries and 70% of the budget of country interventions.
Data collection methods	• Semi-structured interviews and focus group discussions; • The evaluation team interacted with a total of 260 stakeholders/beneficiaries; • Observations and photos during visits to 42 sites, i.e. QI institutions and SMEs.
Data analysis and triangulation methods	• "Country analysis template" for each GQSP country visited; • Comparative analysis of the seven "country analysis templates"; • Portfolio analysis of results reported at the GQSP global level; • Qualitative assessment of global knowledge tools; • Theory of change analysis.
Findings	
Global programme and country projects	While this is a programme evaluation, one of the key findings of this evaluation is that the realities of the various GQSP country projects are very different. Consequently, this evaluation is both a programme evaluation and an evaluation of seven GQSP country projects which is reflected in the findings and "suggested areas of action" for each GQSP country project. *(chapter 4.1)*
Relevance	The GQSP is a relevant programme. The vast majority of stakeholders interviewed expressed appreciation for the GQSP, both at the level of the Quality Infrastructure (QI) institutions and the level of the SMEs, although the demand for QI services from SMEs in the selected value chains is in several countries still limited. Most value chains selected are well justified. A few can be questioned. *(chapter 4.3)*

Effectiveness	Overall, the GQSP is effective. The GQSP is however more effective at the level of the QI than at the level of the SMEs. While the SMEs participating in the GQSP benefit, the number of SMEs reached by the GQSP is overall rather limited. Still, the GQSP made a significant contribution to enhancing the awareness for quality across all types of beneficiaries.
Impact	Until now, the competitiveness and export of the participating SMEs has not increased significantly, although it varies between the different GQSP countries. Export depends on many factors, of which meeting international quality standards is only one dimension. The GQSP has positive effects beyond the selected value chains. *(chapter 4.3)*
Coherence	Overall, coherence is a strength of the GQSP reflected in many different ways. The GQSP is clearly not operating in an isolated manner.
Sustainability	While the sustainability of the results achieved of the GQSP is enhanced by several factors such as quality awareness and capacity building, sustainability is challenged by several factors most importantly by factors of financial nature. *(chapter 4.3)*
Global knowledge tools	Overall, the review of the global knowledge tools reflects notable progress and achievements in the finalization, implementation, and promotion of these tools under the GQSP. Several advocacy documents have been issued, and efforts have been directed towards awareness and enhancing the tools' impact. Some of the tools may benefit from refinements to ensure greater relevance and usability among stakeholders. *(chapter 4.2)*
Conclusions *(chapter 5)*	
What are the results at the country level?	• The GQSP has achieved many results. • The main results of the GQSP at the country level are strengthened quality infrastructures (outcome 1). The strengthening of quality infrastructures is clearly a comparative advantage of the GQSP and of UNIDO. • The GQSP has made a considerable contribution to enhancing the awareness for quality at various levels (outcome 3). • The results at the level of SMEs are mixed (outcome 2). • The GQSP contributed to enhancing the benefitting SMEs' compliance with international standards and technical regulations. • The demand from SMEs for QI services is – for various reasons - not robust yet. • Awareness for *voluntary compliance* with norms and standards needs further strengthening. • The absolute number of SMEs reached is overall rather limited. • With the exception of the GQSP Indonesia and Colombia, this evaluation did not find evidence that the SME competitiveness in terms of enhanced export has increased significantly until now.
Does the overall intervention logic of the GQSP work?	• The generic theory of change of the GQSP works only partially. • The causality between GQSP interventions and the ultimate objective (impact) of greater international competitiveness and increased exports for SMEs in the beneficiary countries is weak. • The generic GQSP ToC is too simplistic; unlike for instance the ToC developed for the GQSP Kyrgyzstan which reflects (a) the many conditions that need to be in place in order to enhance export and (b) the limited scope of the GQSP.

	• The ToC is based on some fundamental assumptions which are not addressed in the overall theory of change of the GQSP. • Having an enhanced national quality infrastructure does not necessary lead to SMEs making use of the quality services. • The ToC of the GQSP is not supported with empirical evidence that higher quality leads to more export.
How useful are the global knowledge tools at the country level?	• The global knowledge tools are of very limited use at the level of the GQSP country projects. • The global knowledge products are global public goods which are relevant for the broader quality community. • The global knowledge tools represent a ground-breaking innovation in the quality infrastructure field, recognized worldwide for their potential as global reference and benchmarking instruments. • As global public goods, they hold significance for the broader quality community. • To maximize their impact and preserve the gain realised so far, continued financial support for development and maintenance is essential.
Recommendations *(chapter 6)*	
SME outreach and target SMEs	• The GQSP must develop strategies to reach out to many more SMEs in order to enhance the effectiveness and impact of the programme. • The GQSP must better define the main target beneficiaries. The category "SMEs" is too broad and includes well established (and well financed) as well as very small and new companies (with weak finances). • The GQSP in "special measure" countries should either be discontinued or elevated to "regular" GQSP country projects including outcome 2.
Capacity building of Quality Infrastruc-ture (QI)	• Complement existing methodologies, such as theoretical training and in-house support, with innovative approaches like attachment training, reverse attachment and experience exchange with more advanced QI institutions of other countries. • While theoretical training lays the foundation, hands-on experiences and collaborative learning opportunities can significantly enhance the practical skills and knowledge of QI practitioners.
Empirical evidence	• The GQSP should invest more in collecting data on effectiveness and impact at the level of SMEs. • For that, the GQSP should conduct impact assessments as it was done by the GQSPs Indonesia. • The GQSP should commission a research study which shows the causality between quality and sales.
Theory of change	• The theory of change needs to be revised, in particular at the impact level. • The ToC needs to better reflect the limited scope of the GQSP and the many other factors that need to be in place to enhance competitiveness and export. • The ToC must better elaborate the many assumptions underlying the ToC. • The ToC also needs to be more stringent, clearly describing the means-ends relationships (causality).

Trade promotion	• If export should remain the primary objective of the GQSP, UNIDO and SECO should consider developing a parallel trade promotion programme which can address other challenges faced by SMEs (other than quality), such as finding new clients or building new supply channels. • Such a parallel trade promotion programme should take place in the same countries and same sectors as the GQSP.
Sustainability	• The GQSP must strengthen the long-term sustainability of the approach, in particular the financial sustainability of the institutions involved. • This should be done at the level of all three outcomes (QI, SMEs, awareness). • A particular focus must be on supporting institutions in developing self-financing schemes.
Global knowledge hub	• Position the global knowledge products as global public goods beneficial to a large audience beyond the GQSP countries. • De-emphasis the direct relevance of the global knowledge projects for the implementation of the GQSP country projects. • Continued financial support for development and maintenance is essential.

1. Evaluation purpose, objectives, subject, scope and focus

1.1 Purpose

The main purpose of this terminal evaluation is to learn from the first phase of the GQSP (December 2017 - November 2023). The evaluation makes recommendations for the design and the implementation of the second phase of the GQSP which started in December 2022, and which will end in November 2027. While the global programme document has been designed and approved, several country project documents for the second phase have yet to be designed for which the recommendations of the terminal evaluation will be timely. The evaluation also draws lessons learned and identifies good practices from the first phase of the implementation of the GQSP for enhancing the design of future similar UNIDO programmes. The evaluation is intended to be used by the GQSP management team at the country and headquarters level, by the donor of the GQSP (SECO) and UNIDO.

1.2 Objective

The objective of the terminal evaluation is to assess the performance of the first phase of the Global Quality and Standards Programme (GQSP).

1.3 Subject, scope and focus

The subject of this evaluation is the first phase of the GQSP which started in December 2017 – and ends in November 2023. The GQSP has three components:

- Component 1: Global Knowledge Management (C1)
- Component 2: Country Projects (C2)
- Component 3: Programme Coordination, Monitoring and Evaluation (C3)

In view of limited time and resources available, the terminal evaluation does not examine the full spectrum of programme activities. All three components have already been evaluated during the mid-term evaluation (April 2021) and the recommendations of the mid-term evaluation haven been considered for the design of the second phase of the GQSP (2022-2027). During the mid-term evaluation, particular attention was given to component 1 – the Global Knowledge Management and included a quality assessment of the global knowledge products. Additionally, the evaluation assessed specifically the programme approach and the synergies between global and country levels. While the mid-term evaluation also assessed the country projects (component 2), due to COVID-19 related travel restrictions, no country visits were possible. This is why the terminal evaluation puts a particular emphasis on assessing the country interventions (project and special measures). Stakeholders are of the view that assessing the country interventions enables the evaluation to add most value to the GQSP.

The focus on component 2 does not preclude the assessment of the two other components of the GQSP, i.e., the global knowledge management (Component 1) and the programme management, monitoring (component 3). Stakeholders agreed that components 1 and 3 are assessed from a country level perspective. For instance, the relevance of the global knowledge tools is assessed from the beneficiaries' point of view at the country level.

Focussing on the country level interventions, the evaluation places emphasis on assessing progress towards achieving outcomes. The emphasis on outcomes is because the first phase of the GQSP has ended and because reporting on activities and outputs is largely covered by the programme monitoring, i.e., the annual and mid-year reports.

The evaluation assesses all three outcomes. The expected outcomes are:

- Outcome 1: Technical competence and sustainability of the National Quality Infrastructure System enhanced.
- Outcome 2: SME compliance with international standards and technical regulations enhanced.
- Outcome 3: Awareness for quality is enhanced.

Outcome 2 is central as the SMEs are the key element in the theory of change. The expected overall outcome of the GQSP is:

- Compliance capacity of the country with regard to quality and standards is strengthened, thus facilitating market access for SMEs and ultimately increasing exports.

The expected impact is also centred around the SMEs:

- Improved framework conditions for SMEs and greater international competitiveness of the country.

Both, the overall outcome and the expected impact stress the central position of the SMEs in the GQSP theory of change.

In short, the terminal evaluation focuses on the interventions at country level (component 2), emphasising the outcome-level, thereby giving particular attention to the outcome 2 related to the SMEs. Components 1 and 3 were be assessed through a country level-perspective.

2. Programme description

The overall objective of the GQSP is to strengthen the quality and standards compliance capacity to facilitate market access for SMEs. The Programme pursues three outcomes, thus responding to the main compliance challenges identified for developing countries:

- ***Outcome 1:*** *Technical competence and sustainability of the National Quality Infrastructure System enhanced.* Institutional strengthening of key institutions and relevant public-private support institutions through capacity building, use of best practices, skills development, and implementation of management systems to ensure quality and international recognition of their services.
- ***Outcome 2:*** *SME compliance with international standards and technical regulations enhanced.* Improving of compliance capacity through specialized training, capacity building and preparation for certification, strengthening of cluster networks and quality consortia as well as relevant support institutions.
- ***Outcome 3:*** *Awareness for quality is enhanced.* Advocacy, up-scaling of knowledge dissemination, and advice for informed policy decisions on standards compliance and support for policy development.

Key programme facts are summaries in Table 1.

Table 1: Programme factsheet (overall)

Project title	Global Quality and Standards Programme, GQSP
UNIDO ID	170032
Region	Global
Country(ies)	Albania, Colombia, Costa Rica, Georgia, Ghana, Indonesia, Kyrgyzstan, Peru, Philippines, South Africa, Ukraine, and Vietnam
Project donor(s)	Switzerland, through the State Secretariat of Economic Affairs (SECO)
Planned implementation start date	01.11.2017
Planned implementation end date	31.10.2022
Actual implementation start date	01.12.2017
Actual implementation end date	30.11.2023
Implementing agency(ies)	UNIDO
Total project allotment	EUR 16,336,035 equal to CHF 18,149,455 (incl. 13% Programme Support Costs)

Table: data from GQSP.

Table 2 below provides a summary of countries, starting dates, project budgets and value chains selected for support.

Table 2: GQSP data by country

Country	Start	End date	SECO contribution (EUR)*	Value Chain(s)
Albania	May 2022	Nov 2023 (module 1)	1,840,000	▪ Medicinal & aromatic plants ▪ Fruits & vegetables
Colombia	Apr 2019	Nov 2023	2,700,500	▪ Chemicals
Costa Rica	Feb 2021	Oct 2023	380,000	▪ Beef
Georgia	July 2020	Nov 2022	350,000	▪ Fruits & vegetables
Ghana	Aug 2019	Aug 2023	1,304,000	▪ Cocoa ▪ Cashew ▪ Oil palm
Indonesia	July 2019	Jun 2023	2,929,000	▪ Fish ▪ Shrimp ▪ Seaweed
Kyrgyzstan	Oct 2019	Nov 2022	864,500	▪ Fruits
Peru	Jan 2019	Nov 2023	2,325,000	▪ Cocoa ▪ Coffee
Philippines	Jul 2021	Nov 2023	359,500	▪ PPE
South Africa	Sept 2018	May 2023	1,378,000	▪ Essential & vegetable oils
Ukraine	Sept 2019	Nov 2023	1,060,000	▪ Wood
Vietnam	Mar 2020	Jun 2023	1,040,000	▪ Mango

**numbers rounded to the nearest hundred*

Table: data from GQSP.

3. Evaluation methodology and limitations

3.1 Evaluation criteria and evaluation questions

Based on the TOR for the terminal evaluation and the exchange with the main stakeholders of the evaluation and the UNIDO evaluation manager, the evaluation team has refined the evaluation questions. Adhering to the request to specify a limited number of key evaluation questions, the evaluation team has defined the following overarching evaluation questions:

1. What are the results at the country level? This question relates to the evaluation criteria effectiveness, impact and sustainability. It includes both components 1 and 2 as well as all three outcomes.
2. Does the overall intervention logic of the GQSP work? This is about the validity of the GQSP theory of change at the country level. It includes both components 1 and 2 as well as the three outcomes. The evaluation question relates to the valuation criteria relevance, effectiveness and impact.
3. How useful are the global knowledge tools at the country level? This question relates to evaluation criteria relevance, coherence and effectiveness. It includes both components 1 and 2 as well as all three outcomes.

The three overarching evaluation questions constitute the main focus of the evaluation. In order to answer the three overarching evaluation questions, several more specific evaluation questions are required (Table 3). These evaluation questions are the primary evaluation questions during data collection. The primary evaluation questions and criteria received most attention.

Table 3: Primary evaluation questions

Primary evaluation criteria	Primary evaluation questions
1. Relevance (of component 1 and 2)	a) To what extent is the GQSP responding to the needs of the QI institutions? (National Quality Infrastructure (i.e., NSB, NMI, NAB) and conformity assessment bodies (i.e., testing and calibration laboratories, certification bodies, inspection bodies) *[EQ 1.a]* b) To what extent is the GQSP responding to the needs of the targeted SMEs and value chains? *[EQ 1.b]* c) Have the right value chains been selected? *[EQ 1.c]*
2. Effectiveness (of component 1 and 2)	a) To what extent is the technical competence and sustainability of the National Quality Infrastructure System enhanced in the GQSP countries? (outcome 1) *[EQ 2.a]* b) To what extent is the SME compliance with international standards and technical regulations in GQSP countries enhanced? (outcome 2) *[EQ 2.b]* c) To what extent is the policy environment and awareness for quality enhanced in the GQSP countries? (outcome 3) *[EQ 2.c]*
3. Impact (of component 1 and 2)	a) To what extent has the international (and domestic) competitiveness of SMEs been enhanced? (selected value chains in GQSP countries) *[EQ 3.a]* b) Has the GQSP an impact beyond the pilots? (upscaling, replication in other value chains) *[EQ 3.b]*

4. Coherence (DAC criteria)	a) To what extent is the GQSP coordinating or partnering with other actors at the country level thereby avoiding duplication or collusion? *[EQ 4.a]*
5. Sustainability (DAC criteria)	a) What are the key factors for the benefits of the GQSP to last? *[EQ 5.a]*

Source: Evaluation Team.

In addition to the primary evaluation questions and criteria, this evaluation has several secondary evaluation questions and criteria in order to respond to specific interests or to comply with the UNIDO mandatory evaluation criteria and the DAC evaluation criteria[1] (Table 4). While the secondary evaluation criteria and questions are assessed, they received less attention compared to the primary evaluation question and criteria.

Table 4:Secondary evaluation questions

Secondary evaluation criteria	Secondary evaluation questions
6. Efficiency (DAC criteria)	a) Has the GQSP delivered results in an economic and timely manner? *[EQ 6.a]*
7. RBM, monitoring, evaluation and reporting (UNIDO criteria)	a) To what extent are RBM, monitoring, evaluation and reporting at country level linked with the global level? *[EQ 7.a]*
8. Digital transformation (specific interest)	a) To what extent has the GQSP contributed to the digital transformation at the level of the QI institutions and SMEs? *[EQ 8.a]*
9. Gender mainstreaming (UNIDO criteria)	a) How is the GQSP addressing gender mainstreaming and in particular women empowerment? *[EQ 9.a]*
10. Environment (UNIDO criteria)	a) How is the GQSP addressing environmental and climate related challenges? *[EQ 10.a]*
11. Social considerations (UNIDO criteria)	a) How is the GQSP addressing social challenges? *[EQ 11.a]*
12. Performance of partners (UNIDO criteria) *[EQ 12]*	a) To what extent does UNIDO fulfil its role in the programme? b) To what extent do national counterparts fulfil their role in the programme? c) To what extent do implementing partners fulfil their role in the programme? (if applicable) d) To what extent does SECO fulfil its role in the programme?

Source: Evaluation Team.

Evaluation approach

The evaluation follows a mixed-methods approach for both for data collection and data analysis. The evaluation collected primary data from stakeholders and beneficiaries and also used secondary data (e.g., GQSP documents). Based on the focus of this evaluation

[1] As per new DAC evaluation criteria: https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm

on the country interventions (component 2), data collection at the country level was the main primary data collection effort.

Country selection

Based on the available resources the evaluation could conduct seven country missions of which six (out of nine) are country projects and one (out of three) is a country with special measures. With the seven country visits the evaluation covers 60% of the countries and 70% of the budget of country interventions.[2] From a methodological point of view, this is significant as the seven country visits are not just a sample but cover a significant share of the total of country activities. There is a high plausibility that the data collected in the seven countries reflect the overall reality of the GQSP in all 12 countries.
The evaluation visited the following countries:
Latin America: Colombia and Peru
Asia: Indonesia and Vietnam
Central Asia: Kyrgyzstan
Africa: South Africa
Europe: Georgia (special measures)
The GQSP Ghana was not included, as there will be no additional phase in Ghana. The GQSP Ukraine was not included, as a country visit would be difficult given the ongoing conflict. The GQSP Albania was not included as the activities only started in 2022. Georgia was selected to cover one country with "special measures" and also to include one European country.

Stakeholders and beneficiaries

The direct beneficiaries and stakeholders and of the GQSP at the country level are:
Direct beneficiaries:

- QI institutions, i.e.,
    - national standardisation bodies,
    - national metrology institutions,
    - national accreditation bodies, and
    - conformity assessment bodies
- SMEs, including SME support institutions like business associations or cooperatives; the ultimate beneficiaries are the SMEs according to the GQSP theory of change

Stakeholders:

- Main counterpart of the GQSP at the government level (can also be beneficiaries)

SECO at the country level and regional level
UNIDO at the country level

Data collection methods

The focus during the primary data collection at the country level was on qualitative data. The data collection method used were semi-structured interviews and focus group discussions with beneficiaries and stakeholders as well as observations during visits to QI institutions and SMEs. The evaluation team prepared guiding questions for interviews and focus group discussions.

The focus of the data collection was on the beneficiaries, i.e., QI institutions and SMEs. During the evaluation mission to the seven countries, the evaluation team interacted with a total of 260 stakeholders and beneficiaries (Annex 4). The team visited 42 sites

[2] Euro 11.6 m of Euro 16.5.

(e.g., QI institutions, SMEs, cooperatives, Annex 5) and took numerous photos documenting enhanced testing capabilities, laboratory staff using new equipment, new farming practices, improved production processes, products, etc. A selection of the photos is included in chapter 4.1.

Data analysis and triangulation methods

The overarching evaluation questions, the primary and secondary evaluation criteria and questions as outlined above provided the analytical framework of this evaluation.

For each GQSP country visited, the responsible evaluation team member prepared a "country analysis template" which captured for each evaluation criteria and question country specific findings, key evidence (including some photos) and a short analysis. The templates also include country specific "suggested areas of action" and good practices. The "country analysis templates" are the basis for the chapter 4.1 "Findings by GQSP country projects". The "country analysis templates" are based on qualitative content analysis of notes from interviews and focus group discussions and observations during site visits (Annex 5) as well as qualitative and quantitative analysis of GQSP documents (Annex 6).

In order to prepare the evaluation report, the following data analysis methods were used:

- Comparative analysis of the seven "country analysis templates"
- Portfolio analysis of results reported at the GQSP global level
- Qualitative assessment of global knowledge tools by the QI expert in the evaluation team
- Theory of change analysis

In order to ensure validity and reliability, the findings that emerge were triangulated. Triangulation involved the confirmation of findings using multiple sources of data and methods of data collection.

The data collection and analysis process is summarized in Chart 1. A systematic account of data collection and analysis methods for each evaluation criteria is provided in the evaluation matrix (Annex 7).

Chart 1: Data collection and analysis process

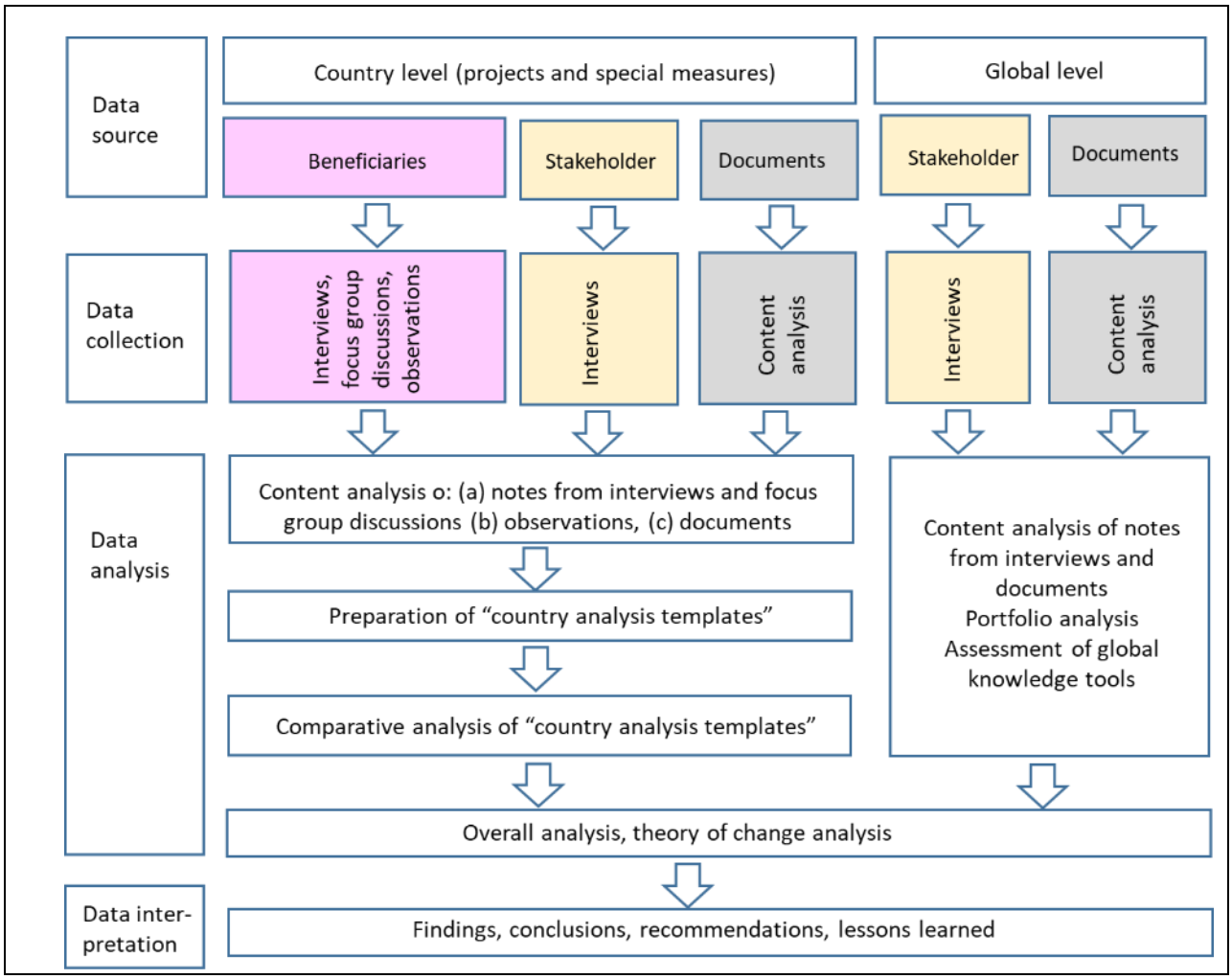


Figure: Evaluation Team.

Work plan and mission plan, responsibilities of evaluation team

Mr Urs Zollinger, International Principal Evaluator, team leader

Under the supervision of the UNIDO evaluation manager, UNIDO Independent Evaluation Unit (IEU), the International Principal Evaluator led the evaluation team. The team leader had the overall responsibility to deliver the evaluation report and all aspects related to it. The team leader also wrote the inception report. In addition, he planned and conducted three country missions, i.e., to South Africa, Kyrgyzstan and Georgia. Based on the country mission and the related documents, he prepare "country analysis templates" for the three countries and prepared the summaries for the main evaluation report. In addition, he conducted interviews with selected stakeholders at the global level (virtual) and conduct the portfolio analysis, the theory of change analysis and the overall data analysis in order to draft the evaluation report.

Ms Paulina Laverde, Evaluation Specialist, team member

Under the leadership of the team leader, the evaluation specialist contributed to all aspects of the evaluation, including the inception report and the evaluation report. As such, she advised the team leader as evaluation specialist on all aspects of the evaluation. Her main responsibility was to plan and conduct two country missions, i.e.,

to Colombia and Peru. Based on the country missions and the related documents, she prepared "country analysis templates" for each country and prepared the summaries for the main evaluation report. In addition, she conducted a few interviews with selected stakeholders at the global level (virtual) and conducted some additional document analysis. She supported the team leader in the drafting of the final evaluation report.

Mr Brahim Houla, Quality Infrastructure (QI) Specialist with evaluation experience, team member

Under the leadership of the team leader, the quality infrastructure specialist contributed to all aspects of the evaluation, including the inception report and the evaluation report. As such, he advised the team leader as QI expert. His main responsibility was plan and conduct two country missions, i.e., to Indonesia and Vietnam. Based on the country mission and the related documents, he prepared "country analysis templates" for each country and prepared the summaries for the main evaluation report. In addition, he assessed the global knowledge tools. He provided technical opinions on both the global and country levels to the evaluation team members, offered insights on the relevance and effectiveness of the technical added value of the programme's interventions, conducted a few interviews with selected stakeholders at the global level (virtual) and conducted some additional document analysis. He supported the team leader in the drafting of the final evaluation report.

The details regarding the division of labour and the allocation of work days as well as some key milestones can be found in the evaluation work plan (Table 5).

Table 5: Work plan and mission plan

Tasks		**Schedule (2023)**	**Evaluation Team Responsibilities and work days**				
			Urs Zollinger	Paulina Laverde	Brahim Houla	Total days %	
Inception Phase							
Initial desk review of programme related documents and websites		July-August	3	1.5	1.5	6	20.5 20%
Interaction with evaluation office, GQSP team, donor and evaluation team			2	2	2	6	
Drafting inception report			4	0.5	0.5	5	
Planning of country missions			1.5	1	1	3.5	
Implementation Phase (data collection and data processing)							
Document analysis, financial data analysis, portfolio analysis		Aug.-Nov.	5	1	1	7	63.5 62%
<u>Country missions</u>: interviews, focus group discussions, observations; debriefing to stake-holders at country level	South Africa (confirmed)	18-22 Sept.	18	-	-	42	
	Georgia (confirmed)	2-6 Oct.					
	Kyrgyzstan (confirmed)	23-27 Oct.					
	Indonesia (confirmed)	18-22 Sept.	-	-	12		

	Vietnam	2-6 Oct.					
	Peru (confirmed)	16-20 Oct.	-	12	-		
	Colombia (confirmed)	23-27 Oct.					
Additional interviews with GQSP team, UNIDO, SECO at global level (virtual)		Sept.-Oct.	2	1	1	4	
Preparation of "country analysis templates" Submission of "country analysis templates" to team leader		Sept.-Oct. by 31 Oct.	4.5	3	3	10.5	
Reporting Phase							
Comparative analysis of "country analysis templates", overall analysis of data collected, theory of change analysis and report drafting (first draft report)		Nov.-Dec.	9	2	2	13	19 18%
Briefing of stakeholders of findings, including preparation			2	0.5	0.5	3	
Revise and finalize evaluation report, based on feedback received; prepare summary			2	0.5	0.5	3	
Total number of work days			**53**	**25**	**25**	**103**	100%

Table: Evaluation Team.

Support and logistics

The evaluation team was supported by the UNIDO Independent Evaluation Unit (IEU) and the GQSP team both at headquarters and at the country level. The support included in particular:

- the planning of the country missions,
- the reaching out to selected beneficiaries and stakeholders informing them about the evaluation and inviting them to participate in in the evaluation,
- the organisation of meetings,
- the engagement of interpreters,
- the provision of documents,
- the reviewing and commenting of the draft inception report as well as drafts of the evaluation report.

Limitations

The seven country missions conducted during this programme evaluation can't fully compensate for in-depth GQSP country project evaluations as the team could only dedicate about 7-8 days to each GQSP country project, including preparation of visits, visits, data analysis and preparation of "country analysis templates". This is also why this evaluation only includes "suggested areas of action" for each GQSP country project. Firm "recommendations" are only made at the global level.

The extensive and time-consuming data collection in seven countries limited additional primary data collection beyond the seven countries.

The duration of each country mission was limited to 5 working days. This puts a limit to the number of beneficiaries and stakeholders which can be met during the country missions.

The availability and willingness of the SMEs to participate in interviews and focus group discussions varied from one country to another.

Due to the scattered locations of SMEs in the essential and vegetable oil sector across South Africa, onsite visits were not feasible. SME representatives were interviewed online while the evaluator was in Pretoria. Similarly, the same situation was faced in Indonesia where fish farms are scattered on different islands and difficult-to-access locations. The discussion with associations and cooperatives was conducted through online focus group discussions.

As product harvesting is seasonal, the observation of farming practices, processing, and production was not readily available during the country visit for some value chains (e.g., end of the season for mango and pomelo in Vietnam or coffee and cocoa in Peru).

Due to personnel rotation, certain interviews had to be conducted with individuals who only recently participated in the programme.

4. Findings

4.1 Findings by GQSP country projects

Finding: While this is a programme evaluation, one of the key findings of this evaluation is that the realities of the various GQSP country projects are very different.

Each GQSP country project has a unique story to tell and the findings in each country can only partly be aggregated to a global picture. In order not to lose the richness of the different GQSP country projects, the evaluation team together with EIO decided to provide short assessment of each of the seven GQSP country projects along the evaluation criteria. By identified for each country specific "suggested areas of action", we hope to provide a useful input to the GQSP at the country level.

Below findings by GQSP country projects are based on "country analysis templates" prepared by the evaluators for each of the seven GQSP country projects visited. The country analysis templates are structured along the evaluation criteria and questions (table 3 and 4) and include the evidence supporting the findings. The "country analysis templates" are based on qualitative content analysis of notes from interviews, focus group discussions and observations as well as qualitative and quantitative analysis of documents. In order to make this a concise evaluation report, the evidence supporting the findings are not listed in detail. The seven templates including detailed evidence are, however, on record with the UNIDO Office of Evaluation and Internal Oversight (EIO).

GQSP Indonesia
Relevance

QI - GQSP Indonesia has effectively responded to the needs of Quality Infrastructure (QI) institutions, resulting in tangible benefits. It provided tailored capacity-building activities and guidance, benefiting various institutions, including the standardization body, accreditation body, laboratories, NMI, PTPs, RMPs, inspection departments, and certification bodies. The programme facilitated the establishment of a new reference material producer and proficiency testing programmes while supporting their international accreditation. The targeted and professionally designed activities fulfilled the target KPIs, enhancing the capacity of QI institutions and conformity assessment bodies in value chains. Nevertheless, some institutions highlighted areas of expertise not covered by the programme. *[EQ 1.a]*

SMEs - The GQSP Indonesia has demonstrated a strong response to the needs of SMEs and value chains. Its tailored capacity-building activities, consultancy, and guidance have empowered QI institutions and their personnel, along with contracted experts and auditors. The programme facilitated the introduction of new services within selected value chains, including standards development, certification initiatives, product certification schemes, and accreditation services. Feedback from QI institutions affirmed the programme's indispensable role in addressing their specific needs to ensure Indonesian products conform to international standards. However, some institutions emphasized the omission of certain areas of expertise, such as support for calibration departments and third-party auditor qualification, which could have enhanced the programme's impact further by enhancing the availability of calibration and audit services needed by the SMEs for their production chains and for checking compliance with international requirements. *[EQ 1.b]*

Selection of sector - The choice of value chains aligns with the government priorities and the existing advanced state of Indonesia's national quality infrastructure, necessitating an extension of its services. The programme effectively extended the scope of QI institutions,

facilitating their service expansion into value chains. The standardization body created new working groups for value chain-specific standards, and the accreditation body introduced additional accreditation services tailored to Indogap certification and fishery biology calibration. A new biology calibration laboratory was established within the national metrology institute, catering to biology and halal reference requirements. Accredited product certification bodies introduced new services, covering Indogap and various value chain-related certifications, including HACCP and personnel certification. However, the absence of a QI4VC methodology application in Indonesia may have resulted in some QI institutions not participating in value chain selection and capacity-building activities, leading to unaddressed needs in specific areas. *[EQ 1.c]*

Photos: GQSP Indonesia

Seaweed Cooperative- SOP implementation - New cleaning techniques

Sea weed cooperative New Bio-Fertilizer

Polytek Karawang Cat Fish farms – New fish based snack products

Seaweed farm – demonstration of new SOPs implementation

Online discussion with Shrimp association chair

Effectiveness

QI - Indonesia's National Quality Infrastructure System has witnessed significant improvements, showcasing enhanced technical competencies, strengthened institutions, and promising results. Nevertheless, certain conformity assessment activities require more time, equipment, and support to reach their full potential and gain international recognition. Notably, the involved Quality Infrastructure (QI) institutions have made significant progress. The Indonesian National Standardization Agency (BSN) has benefited from local expertise, while the National Accreditation Body (KAN) achieved international recognition. The Ministry of Marine Affairs and Fisheries (MMAF) has enhanced its capabilities and started digitalizing its services. The National Metrology Institute (SNSU) has invested in biology equipment, although some delays were encountered. A new proficiency testing provider has efficiently entered the scene. Despite these achievements, delays in approving the National Quality Policy (NQP) and the need for further training and equipment in the biology area at the national metrology institute pose challenges. *[EQ 2.a]*

SMEs –The GQSP has made significant strides in enhancing SME compliance with international standards and technical regulations, particularly in the Indonesian fisheries sector. It has led to substantial improvements in farm management, seed selection, contamination prevention, labeling, and increased business linkages among SMEs. This progress is evidenced by the adoption of Aquaculture SOPs by fish and seaweed farmers, resulting in enhanced production quality, quantity, and revenue. Fifteen (15) SMEs have obtained GMP and HACCP certifications, 88 assisted SMEs received SKP/Good Manufacturing Practices certificates and 19 assisted traders have received Good Handling Certificates (GHP). Despite these achievements, some challenges remain due to local policy issues. These include a lack of information on market requirements, limited access to conformity assessment services, exclusive ministry control of HACCP certification, and protracted equipment procurement procedures. *[EQ 2.b]*

Awareness - The GQSP in Indonesia has made strides in enhancing the policy environment and fostering awareness of quality standards and practices. Through dedicated efforts in policy development, comprehensive training, and effective communication, the programme has created an environment conducive to a sustainable quality culture. Stakeholders, including farmers, cooperatives, and associations, display a keen understanding of market intricacies and have expressed a strong demand for clearer quality requirements, improved HACCP certification services, and better linkages with seed suppliers. The launch of the "Indonesian Shrimp Brand" through online focus group discussions has significantly raised consumer awareness of the quality and safety of Indonesian shrimp products. Policy recommendations have been well-received, with five being adopted by partners, despite challenges in approving the National Quality Policy. While obstacles exist, the programme has earned recognition and successfully laid the groundwork for ongoing progress in quality awareness and policy enhancement. *[EQ 2.c]*

Impact

SME competitiveness - Despite the challenges associated with penetrating new markets, the GQSP programme in Indonesia has significantly advanced the international competitiveness of SMEs within the fisheries sector [EQ 3.a]. Notably, discussions with stakeholders underscore their strong aspiration to expand into external markets, and the programme has yielded substantial positive outcomes, including heightened production volumes, enhanced product quality, improved economic returns for adopters, and the establishment of valuable market linkages. Analyzing the impact, the available data reveals a considerable increase in export volume. For instance, PT Sabindo Raya Gemilang and PT Jala Lautan Mulia, two milkfish exporters, expanded their exports to destinations like the Middle East, Malaysia, and South Korea. This upsurge in exports has translated into improved economic gains, as around 80% of adopters experienced heightened economic returns, encompassing amplified production, elevated selling prices, enhanced sales, and cost savings. Moreover, the programme's effective facilitation of new business linkages, resulting from the linkage of value chain actors, spanning hatchery farms, farmers, traders, and processors, and covering 48% of the target, underscores its comprehensive support. Additionally, 122 SMEs received vital assistance in securing certifications, including Good Manufacturing Practices (GMP), Hazard Analysis and Critical Control Points (HACCP) and GHP certificates, further solidifying their access to international markets [EQ 3.a]. Nonetheless, it's worth noting that the impact on value chains covered in the previous SMART-Fish 1 initiative appears more pronounced than in newer value chains, such as seaweed, where persistent challenges are partially attributable to the impact of climate change. *[EQ 3.a]*

Impact beyond the pilots – The influence of the GQSP programme transcends its initial pilot phase, resonating with new value chains and establishing itself as a reference model for other countries. The programme has demonstrated its adaptability and scalability. Discussions with the ministry substantiate the flexibility of the Standard Operating

Procedures (SOPs) to accommodate new value chains, allowing the development and implementation of Good Practices and SOPs in previously unexplored areas of the fishery industry. For instance, the ministry has already embarked on the development of GQSP-like initiatives for the lobster farming value chain. Quality institutions (QI), including the (BSN), (KAN), MMAF, and PTP/RMP, have expanded their capabilities to serve the broader fisheries industry. The success of the programme has generated interest from other countries, such as Cambodia, Timor Leste and Tanzania, aiming to replicate the Indonesian GQSP experience. However, the programme's scalability is contingent upon available resources, including human expertise and financial support. While the initiation of GQSP-like initiatives for the lobster farming value chain represents a positive step, further expansion requires continued commitment and investment. *[EQ 3.b]*

Coherence

The GQSP in Indonesia has fostered robust connections with key stakeholders in the country's quality infrastructure and related industries. Interviews, observations, and report reviews underscore its proactive collaboration with a wide array of partners, including government bodies, private sector associations, NGOs, and other programmes. These partnerships not only prevent duplication but also promote enduring collaborations essential for programme success. Industry associations, cooperatives, SMEs, and various QI institutions are part of this collaborative network. The GQSP team in Indonesia demonstrates unwavering dedication to coordination and collaboration with diverse stakeholders, cultivating synergies with 98 public and private partners, both domestic and international. Collaborations extend to government entities, including various MMAF directorates, and UN agencies on various initiatives. Trust-building, team dedication, and alignment with stakeholder interests have been instrumental in the programme's success, but resource constraints, team transitions, and improved coordination mechanisms are essential for continued success. The project's localization strategy, involving local institutions, experts, and agencies, has proven effective, especially during the challenges posed by the COVID-19 pandemic. Previous SMART-Fish 1 initiatives have further facilitated this strategy's implementation. *[EQ 4.a]*

Sustainability

The GQSP Indonesia exhibits strong potential for long-lasting impact and enhanced results in its upcoming phase. With notable improvements in Quality Infrastructure (QI) institutions, the establishment of new services, and the enhanced capabilities of SMEs, the tools developed by the project for reinforcing the selected value chains have become integral, innovative practices embraced by the fisheries industry. Despite recent setbacks and structural changes within the ministry, the programme's long-term sustainability remains a reasonable expectation. A foundation of continued collaboration with diverse partners, including government, associations, universities, NGOs, and private entities, underpins this sustainability. Customized strategies tailored to the unique needs of each value chain ensure lasting benefits. The training of trainers and engagement of local assistants and experts further reinforce the programme's lasting impact. Promotion of certifications for sustainable farming practices enhances product quality and marketability, motivating sustainable farming practices. Proactive adaptation to climate change and market dynamics may be needed to foster sector resilience. Financial stakeholder engagement, with partners investing USD 55,634 in upgrading projects, contributes to the programme's sustainability. However, the project must consider potential resource limitations that could impact effective activity execution, emphasizing the need for careful resource allocation and management. Upcoming team member changes, particularly the departure of some team members, should be managed with a smooth transition plan and effective onboarding of

new team members. Additionally, uncertainties in government policies and structural transformations within ministry departments may introduce challenges affecting the sustainability of some project benefits. *[EQ 5.a]*

Secondary evaluation criteria

Efficiency - The GQSP Indonesia has efficiently and economically delivered results, achieving its KPIs, leveraging investments for maximal benefits and attaining cost savings of around €301,909, while also effectively utilizing the Ministry extensions' resources. *[EQ 6.a]*

RBM, monitoring, evaluation and reporting - Monitoring and reporting are only partly linked to the global level. Although reporting on corporate indicators faces complexities, the programme shows KPIs achievement attaining an average of 84%. Indonesia's specific context involves monitoring a substantial number of indicators, leading to reporting harmonization challenges within the global programme. GQSP Indonesia has established a sophisticated Monitoring and Evaluation(M&E) system that links project/sector specific indicators to the Integrated Results and Performance Framework (IRPF). This system was identified as a good practice and was adopted at Global Level. *[EQ 7.a]*

Digital transformation - The GQSP project has positively influenced national-level digitalization projects, with a focus on digitalizing Ministry support mechanisms for farmers, although QI institutions' digitalization was not a central intervention axis, supported by stakeholder feedback requesting further digital initiatives and testimonies of the Ministry's digitalization benefiting data tracking and government support. *[EQ 8.a]*

Gender mainstreaming - Gender mainstreaming is evident within the GQSP Indonesia project, despite not being its primary focus, as demonstrated by the commitment to inclusivity in training programmes, the promotion of success stories highlighting women's empowerment, the engagement of women in value chains, and the project's leadership team. This aligns with broader UN projects and the national agenda to empower women in the fishery sector. *[EQ 9.a]*

Environment - The GQSP's integration into Indonesia's broader "blue agenda" highlights its significant recognition and contributions to environmental protection. This is evident through its involvement in the development of the eco-friendly Indogap certification scheme, the promotion of environmentally responsible feed and fertilizer alternatives, and the consideration of critical environmental factors in SOPs. The programme recognizes the profound effects of climate change on the fishery industry and actively seeks environmentally sustainable solutions, fostering innovation and improved disease control in fish farms. *[EQ 10.a]*

Social considerations -GQSP prioritizes social considerations, focusing on vital value chains that are not just economic drivers but essential to the well-being of wide Indonesian communities. Although initial financial gains may seem modest relative to the project budget, they are expected to grow over time, justifying the donor's investments. *[EQ 11.a]*

Performance of partners - The GQSP in Indonesia benefits from excellent communication and collaboration among its various partners, ensuring everyone plays their role effectively. Key evidence, including prompt contributions from all parties, strong trust in the programme's positive impact, and high participant numbers, reflects this collaborative success. The foundation of trust established during SmartFish One, along with the team's persistence and support from the cooperative donor SECO, all contribute to the programme's effectiveness. *[EQ 12.a]*

Suggested areas of action

1. The ministry has a dedicated inspection department that collects information on the rejections related to the GQSP selected VCs, such specific and up to date information may be very useful if shared with exporters and upscaled via the SCA global tool. A secure platform for the exchange of information between farmers, exporters and ministry can be useful.
2. Attachment trainings in more experienced institutions (in Indonesia or abroad) could be a low-cost effective tool to increase the capabilities of the new QI institutions like the metrology laboratory in the field of biology, the reference material producer and the PTP provider.
3. Cooperation with academic institutions can be extended to cover other aspects than the current SOPs related activities. E.g., trade and marketing related aspects that the fishery industry is lacking to achieve the objective of establishing export deals.
4. Establishing an additional layer of strategic planning alongside the selection of VCs could allow for a dual-focus strategy that targets specific export markets, tailoring interventions to their distinct requirements while maintaining a focus on value chains for enhanced adaptability and responsiveness in international trade.
5. Given the variability in the success of SMEs in implementing SOPs and the diverse locations of selected SMEs, a well-defined set of criteria for beneficiary SMEs' selection can be useful. This methodology could encompass considerations such as the number of SMEs to concentrate on, the anticipated outcomes for each SME, and the degree of engagement required from the SME to ensure optimal results. Such an approach would enhance the programme's effectiveness and align resources with areas where they can yield the most substantial impact.

Good practices

- Leveraging students to spearhead pilot implementation of Standard Operating Procedures (SOPs) in local farm in their communities
- Cooperation with university researchers to experiment on processes that could help finding solutions specific to the value chains and the country ecosystems
- Conducting impact analysis to follow the results of implementing the SOPs and draw lessons on when and how the SOPs can bring added value.
- Conducting cost efficiency analysis to identify, once conduced, if costs could have been used differently for specific activities and demonstrate the adherence to the budget limits and financial spending procedures.

GQSP Vietnam

Relevance

QI - the GQSP Vietnam project aligns effectively with national priorities by providing targeted capacity-building activities. Notably, it has enhanced the competence of government testing centres, and STAMEQ reported improved standards and metrology capabilities. Conversations with QI institutions confirm that the project's activities in the selected value chains have enabled the provision of essential services to SMEs, including the development of updated standards and certifications. With the exception of the accreditation body BoA, all QI institutions and conformity assessment bodies interviewed emphasized the project's indispensable support in validating Vietnamese product conformity with international requirements. The GQSP technical support activities demonstrate professionalism and alignment with international practices. Additionally, efforts to address pesticide levels, including proficiency testing, equipment calibration, and laboratory quality enhancement, signify the project's commitment to enhancing quality and safety. *[EQ 1.a]*

SMEs – The GQSP Vietnam project effectively addresses the needs of SMEs in the mango and pomelo value chains. Capacity-building activities, consultancy, IT platforms, and guidance have been designed in line with national priorities and SMEs' requirements. The project has enhanced mango and pomelo quality and production processes for farmers and pack houses. Collaborative efforts with other projects to design equipment further support the project's effectiveness. Interviews with various stakeholders, including farmers, exporters, fruit associations, cooperatives, and pack houses, affirm the project's value. The Ministry of Agriculture and Rural Development (including NAFIQPM, VIAEP, PPD) has closely monitored the project and confirmed its contribution to their strategic objectives. *[EQ 1.b]*

Selection of sector - The selection of value chains aligns with government priorities, reflecting the country's export trends and stakeholder expectations. The consensus among stakeholders emphasizes the well-thought-out selection, which aligns with national priorities and the identification of 14 priority crops. The strategic goal of diversifying markets, further supports the chosen value chains for export. Although the QI4VC methodology was not employed, stakeholders broadly support the selected value chains and advocate for their expansion to encompass other value chains within the same industry sector like Durian and Passion Fruit. The desire of SMEs and cooperatives to focus on specific mango varieties and explore processed fruit products for enhanced value and exports is evident. *[EQ 1.c]*

Effectiveness

QI - The QIS in Vietnam has witnessed an enhancement in technical competence. Capacity-building activities have yielded tangible benefits for various entities within the system, including the standardization body, selected laboratories, and certification bodies, along with their personnel. The project has brought about improvements through the development of new and revised standards, new certification activities, and the creation of new schemes. Conversations with laboratory management and personnel underscore the pivotal role project support played in improving testing capabilities and competence. These efforts have led to the reorganization of laboratories, minimizing the risk of cross-contamination and false positives while creating a safer working environment. Collaborations with industry and universities have supported pilot programmes and trials aimed at enhancing product shelf life and quality. Interviews with the Ministry's laboratories and other partners have confirmed the effective delivery of capacity-building activities. The adoption of new and revised standards, certification activities, and schemes indicates substantial technical competence improvements. Nevertheless, information is lacking concerning the enhancement of accreditation bodies' competence as Accreditation Bodies were not involved. The project has effectively capitalized on the technical progress of private sector laboratories to facilitate knowledge transfer to supported technical centres resulting in more sustainable outcomes. Engaging private laboratories, already valued by SMEs, can play a pivotal role in expanding the project's influence and fostering public-private collaboration. *[EQ 2.a]*

SMEs – The GQSP has significantly enhanced the capabilities of SMEs in Vietnam, enabling them to produce products in compliance with national requirements and appealing to certain importing markets. On-farm visits have revealed improved farming practices, and observations of packhouses have demonstrated more effective processes and better-packaged final products. Exporters and cooperatives report increased customer satisfaction and repeated orders. These positive outcomes are attributed to the project's pilot initiatives, supported by technical research centres, where trials have been conducted to identify the best practices for extending shelf life, enhancing quality, and improving the appearance of fruits. However, interviews with SMEs have indicated uncertainty regarding importing countries' requirements and reasons for rejections, emphasizing a need for

improved awareness and understanding. The SCA global tool is underutilized by SMEs. Sharing experiences with other exporting markets such as Pakistan, India, Australia, Israel, and China is seen as an unexplored path to finding solutions for value chain difficulties. While SMEs are not mandated to provide conformity certificates or test reports, they have proactively allocated a significant portion of their monthly budget to test the products they receive from farmers. The project's most visible contribution is evident in its pilot research initiatives, which have tailored solutions to specific fruit varieties, leading to extended shelf life, improved quality, and enhanced appearance. The project also played a significant role in enabling the local design and procurement of equipment, contributing to the acquisition of equipment by SMEs at minimal cost, although these unique designs remain unregistered. *[EQ 2.b]*

Awareness - The GQSP project has positively impacted the policy environment and quality awareness in Vietnam, yet challenges persist in understanding market requirements, quality benefits, and export deals. While improvements have been made through ministry tools, workshops, and GQSP activities, growers and businesses still need further awareness about quality. Packhouses and cooperatives show increased awareness and understanding of value chain policies, such as Global GAP certification, but exporters reported facing difficulties in accessing market information, also testing laboratories note that their customers often lack awareness of pesticide requirements for importing markets. The successful establishment of Vietnam Mango Association facilitated by the project have helped in the creation of an interface between the industry, Government and service providers. The project's information sessions and engagement with importing country experts offered opportunities for clearer information on policies and requirements, and the collaboration with the PPD replaced unworkable Vietgap requirements with two regulatory standards as differences may exist between export markets' published and negotiated requirements. Availability of information clearly affects SME engagement in quality, so it seems involving technical experts in awareness activities can allow for a deeper understanding of export requirements. *[EQ 2.c]*

Impact

SME competitiveness The GQSP programme in Vietnam, while not yielding immediate significant growth in exports[3], has accomplished notable improvements in the compliance of selected Pomelo and Mango varieties. This achievement has bolstered the potential of Vietnamese SMEs to explore new markets. Collaborations with technical Institutions in developing SOPs have proven to be effective in enhancing product conformity, as affirmed by SMEs, associations, and cooperatives. This has enabled SMEs to secure export deals, with shipments to new markets, although these are typically one-time exports with higher transportation costs, especially through air transportation. SMEs also benefit from traditional markets, especially during low seasons in nearby countries, where products with shorter shelf life and less stringent requirements are more accessible, and transportation costs are lower. Despite challenges posed by competition from nearby countries, extending shelf life, meeting specific market requirements, and the cost of transportation, there's a strong desire among stakeholders to expand exports. Support to laboratories, however, has had limited impact on exports. Public laboratories, supported by the programme, receive a limited number of test requests in selected value chains, primarily due to the absence of export requirements for test reports. The project's objective of increasing exports depends on various circumstances converging and is more likely to materialize in the long term

[3] Latest information provided by the GQSP Vietnam team *after* the data collection phase for this evaluation was completed may suggest an increase in export of mango and pomelo in 2023, including the companies which benefitted from the GQSP. However, the evaluation team could not verify the data at the late stage of the evaluation.

rather than within the project's relatively short duration. The success of exports of pomelo and Mango varieties is largely contingent on negotiations and agreements facilitated by the Ministry with importing countries. The project's support activities played a crucial role in this regard as The technical assistance of GQSP also supports the effort of the government to open the markets by negotiation and protocol agreements. While the project has made relevant testing and certification services available for fruit conformity, public laboratories face competition from private sector laboratories. Enhancing laboratory competencies may offer long-term benefits, supporting the national food safety programme, SMEs opting for voluntary testing, and potential future importing requirements. *[EQ 3.a]*

Impact beyond the pilots – The GQSP programme in Vietnam has showcased its impact beyond the pilot phase, extending to similar value chains. This upscaling has been achieved through the adoption of good farming and packing practices, the development of expertise in the fruit sector, and the utilization of established networks. Packhouses have harnessed the project's benefits to enhance practices in other value chains, including better-trained personnel, improved management systems, new packing and treatment practices, and upgraded equipment. These packhouses have already expanded their activities to include durian fruit, and fruit associations are creating sub-associations for durian. Pesticide monitoring procedures, the farm diary system, and the Multi-Crop IT Platform have contributed to this upscaling. Conformity assessment bodies, standardization bodies, and ministry departments have received support that can be easily upscaled to similar value chains and potentially beyond. Cooperatives have diversified their activities into value-added products such as juices, snacks, and food ingredients, reflecting the potential for broader impact. *[EQ 3.b]*

Coherence

The GQSP in Vietnam has fostered vital connections with key stakeholders in the Vietnamese quality infrastructure and relevant industrial sectors, including industry associations, cooperatives, SMEs, essential quality infrastructure institutions, government counterparts, and bilateral partners. The project has established robust relationships with government departments and quality infrastructure operators, relying on experts trusted by the value chains community. Despite its compact team, the project efficiently communicates with various partners. The project successfully facilitated a joint application (UNIDO-IFAD) for the MPTF's COVID-19 recovery call, expanding its scope to encompass additional areas, such as an extra pomelo value chain, digitalization, and value addition. Discussion with SECO Vietnam reveals the potential for future cooperation among SECO-supported projects, where tools like QI4SD prove relevant. While cooperation is a shared responsibility, it can be limited by differing project timelines and objectives. *[EQ 4.a]*

Photos: GQSP Vietnam

Successful varieties of Mango for export – SOP implementation

Dragon Fruit value chain (not covered by GQSP) benefiting from the implementation of the SOPs for Mango

New farming practices to protect the quality of Mango and reduce the use of pesticides

Enhanced pesticides testing capabilities in DOVETEC and SPCC

New equipment for fruit washing without damaging the fruit quality
Designed and produced by VIAEP

Sustainability

Sustaining the GQSP benefits in Vietnam depends on several key factors. The continuity of established networks, SME adaptability to market uncertainties, and addressing resource and policy updates are pivotal. SMEs commend the programme for enabling long-term contracts with farmers, ensuring stable fruit supply and demand, and fostering financial stability for enduring GQSP benefits. Strong collaboration with partners, especially SIAEP and VIAEP, underpins programme sustainability by maintaining momentum, supporting research, and pilot programmes. Training and assistance drive lasting changes in farmer and packhouse practices, with local trainers and experts for long-term value chain success. Challenges persist, including laboratory financial constraints and equipment maintenance issues, highlighting the need for resource allocation and Phase 2 support. External factors like climate change and market dynamics pose risks, necessitating stable trade routes and enduring export contracts for selected value chains. Cooperatives and associations progress in upgrading value chains, reflecting their commitment to sustaining project benefits. Ministry support for new practices and SOPs ensures their ongoing impact. Investments in equipment, value-added products, and successful trade agreements, such as the first pomelo shipment to the USA, signify positive future prospects. Consistently satisfactory laboratory proficiency results indicate ongoing competence enhancement, contributing to sustainable improvements. *[EQ 5.a]*

Secondary evaluation criteria

Efficiency - The GQSP in Vietnam has efficiently delivered results, despite some COVID-19-related delays, receiving strong support from beneficiaries and partners for its economic and timely execution, with particular praise for its close cooperation, accessibility, and effective follow-up on actions, although some concerns were raised about financial transfer delays and the balance between external and local expertise *[EQ 6.a]*

RBM, monitoring, evaluation and reporting - Monitoring and reporting are only partly linked to the global level. The reporting on corporate indicators is a challenge. There are attempts by GQSP HQ to better support the country teams on this. Still, not all data available at the country level are used for the aggregated reporting at the global level. For instance, the important quantitative results of the narrative survey among SMEs are not used at the global level. And the present final GQSP evaluation can't fully compensate for an in-depth evaluation of the GQSP Vietnam. Additionally, a dual reporting structure, involving project managers at the project level and UNIDO country representatives at the administrative level, may require extra time and coordination. *[EQ 7.a]*

Digital transformation - GQSP Vietnam enhanced digitalization in agriculture, introducing innovative tools like digital SOPs and traceability systems like Koltitrace. The farm diary system received praise for enhancing traceability and modernising work. The global Standards Compliance Analysis tool aimed to identify export rejection reasons, but awareness among stakeholders was limited despite several awareness activities. Testing laboratories struggled with paper-based systems, causing delays. The call for digitalization, particularly a Laboratory Information Management System (LIMS) in English, grew due to these challenges, crucial for efficient testing and quicker results in support of products exports and limiting delays. *[EQ 8.a]*

Gender mainstreaming - GQSP Vietnam, while not a gender-focused programme, demonstrated commitment to gender mainstreaming by collaborating with IFAD to support women and youth-led value chains. Observations of farms and SMEs revealed a significant presence of women and youth in leadership roles within these value chains. This collaboration also allowed for budget support and the creation of the "Building Forward Better" project, emphasizing resilience and digital enhancement, representing an effective approach for gender mainstreaming and serving as a model for other projects. *[EQ 9.a]*

Environment - The GQSP project in Vietnam contributed to environmental sustainability through the development of pesticide monitoring systems, promoting resource efficiency, and recognizing the environmental impact of value chains. The project emphasized climate change's threat to the fruit industry, promoting climate adaptation measures, resilient fruit varieties, and environmental solutions for processing waste, particularly in pomelo and durian production. Pesticides monitoring supported soil and water quality preservation. *[EQ 10.a]*

Social considerations - The GQSP, focusing on the Mekong River Delta, aligns with the government's social development priorities, with interviews highlighting its impact on agriculture and fishery, vulnerable to climate change. SMEs reported an improved economic status, longer contracts, and increased production quantities. *[EQ 11.a]*

Performance of partners - All project partners demonstrate excellent collaboration and engagement, reflecting a high level of trust and positive impact. SECO receives praise for its active involvement and flexibility. Technical partners, such as SIAEP and VIAEP, are recognized for innovative solutions and continued engagement. The government closely monitors the project, viewing it as a negotiation advantage for accessing new markets. *[EQ 12.a]*

Suggested areas of action

1. Attachment training programmes, where CABs personnel visit and receive training in the premises of a more advanced facilities, represent a cost-effective method for transferring knowledge and expertise.
2. The digitalization of the laboratories services via a LIMS system would help with the issues related to the delays in exports especially for products with short shelf life.
3. SCA can be complemented by a local platform for information exchange between exporters and the ministry department, focusing on the reasons for rejection in

specific value chains within export markets. LabNet can be supported with a link to BOA database.

4. To maximize the potential of collaborative initiatives with universities and harness the research capabilities they offer, as well as the enthusiastic pool of students ready to take the lead in piloting projects on local farms, it is advisable to draw upon the experiences and lessons learned from similar country projects.

Good practices

- GQSP's successful collaboration with IFAD demonstrated the synergistic partnership between the two, allowing the project to address the objectives important to IFAD while achieving a broader range of goals for GQSP.
- Utilizing local experts who transitioned from the public sector to the private industry proved effective in transferring knowledge between the two sectors, leveraging trust and industry expertise.
- GQSP's proactive approach to regulatory standards, rather than contentious negotiations, resulted in the development of more realistic compliance standards, offering insights applicable in similar scenarios.

GQSP Colombia

Relevance

QI – The GQSP programme effectively addresses the needs of QI institutions, aligning them with the government's laboratory policy as well as the government's quality productive development and reindustrialisation policies. All QI institutions underwent a thorough and adaptable diagnostic process, resulting in individualised roadmaps that enhance sustainability and technical competence within the quality system. GQSP played a crucial role in reducing disparities among quality infrastructure institutions. The Laboratory Network was a reference for the "BuscaLab" tool (established by National Policies). This tool consolidated seven databases for SME usage. Global Tool LabNet served as an early reference during Buscalab development. *[EQ 1.a]*

SMEs – The programme effectively addressed the needs of SMEs within the chemical value chain by implementing a tailored intervention strategy. The strategy began with a thorough study of three prioritized sectors, followed by the design of different kinds of Technical Support Programmes (TSP) for each prioritized gap identified, including a sustainability pilot. Then an individual diagnosis and long-term action plan for each SME was implemented. This presented a significant challenge due to the diversity of the subsectors, positions in the value chain, products, size, and maturity levels in quality practices. Implementation revealed new needs, sometimes extending support to additional links in the chain, such as SME suppliers, resulting in an expanded reach. While many SME needs were met, specific expected outcomes, such as COSMOS, Green Seal certifications, or Reference Materials accreditation, are still pending.[4] Demonstrative cases from SMEs produced significant findings and results, posing a challenge for scaling up, with no clear indication of the strategy to be followed and the directly responsible party. Among the global tools, the knowledge hub was sporadically used by some SMEs for consultations. *[EQ 1.b]*

Selection of sector - Opting for the chemical value chain was a good choice, as its selection signifies a convergence of interests among the Government of Colombia, SECO, and the

[4] Latest information provided by the GQSP Colombia team *after* the data collection phase for this evaluation was completed may suggest that there are two new SMEs certified with Cosmos® and two new SMEs certified with Green Seal. However, the evaluation team could not verify the data at the late stage of the evaluation.

associated industrial sector. These stakeholders collectively harbour a strong interest in propelling the growth of product offerings in the international market. The prioritisation of the chemical value chain serves the dual purpose of fostering productivity and encouraging diversification. Elevating the quality and competitiveness within this chemical chain generates a cascading impact on other strategic sectors. The chemical industry emerged as an appealing business sector, boasting significant international potential spurred by heightened demand over the past decade. Another favourable aspect bolstering the selection of this value chain is that the SMEs operating within it already exhibit a maturity baseline, encompassing compliance with national legal, technical, and administrative requirements. These enterprises actively engage in commercial activities within the local market, and some were exporting their products before the GQSP intervention. *[EQ 1.c]*

Effectiveness

QI – The GQSP has made significant strides in enhancing the QI by providing technical assistance to 8 national QI entities and 31 laboratories. Key achievements include implementing a new accreditation scheme, improved capabilities in metrology, strengthened inspection and control mechanisms, and adopting over 70 technical standards. Notably, there has been successful establishment of a new accreditation scheme for producers of reference materials in Colombia. The most notable improvements are in capacity building, efficiency, reducing response times, and improving service offerings. The programme has also enhanced understanding of users' needs and the importance of direct interaction in fieldwork. The programme's systemic strengthening approach, involving the public, private, and mixed sectors, has promoted cooperation, articulation, and communication among QI institutions and laboratories. Interaction and learning initiatives with international peers and experts have contributed to increased technical capabilities and international recognition. QI stakeholders are fully satisfied with the programme's support; they expressed an interest in continuing with the roadmap for system improvement. Challenges persist within the QI system, including centralising offices in large cities. Ongoing issues involve surveillance and control and the need for guidance in implementing regulations, which sometimes require better socialisation and sometimes do not apply to specific subsectors. Additionally, addressing the gap in the number of accredited laboratories remains a priority. *[EQ 2.a]*

SMEs – Firms have expressed complete satisfaction with the comprehensive support they received, which, in many instances, surpassed the roadmap strategy, thanks to the proactive approach of the UNIDO team. The selection process of companies played a pivotal role in the success of the technical support plans, including the implementation of demonstrative cases and ensuring the effective adoption of technical standards and regulations. Following the intervention strategy, sixty-four companies benefited across seven lines of technical support. Approximately 11,000 professionals from diverse areas and disciplines are estimated to have undergone training within the framework of the GQSP, significantly increasing awareness and knowledge regarding compliance with international standards and regulations on a broad scale. Management levels of SMEs actively participated in the process, resulting in a shift in perception where resources allocated to quality standards and regulations compliance are now viewed as an investment rather than a cost. The firms strengthened their operations and enhanced compliance with international standards and technical regulations. *[EQ 2.b]*

Awareness – The appropriation of a quality culture by QI institutions is evident; staff empowerment has evolved to focus on raising awareness about the importance of their role in the system. Promoting this quality culture has brought about a closer relationship between QI institutions and users, transforming them into solution managers and increasing cooperation, communication, and synergy between institutions. Participation in

the programme has provided sectorial chambers with essential information to share with partner companies. They now believe they have the knowledge to effectively guide member companies on quality issues and compliance with international standards, fulfilling the mission of delivering value-added services. SMEs have embraced the importance of integrating quality into their organizational culture at all levels. Their increased knowledge of processes and products provides greater security and confidently warrants the quality of their products. SMEs take pride in their products, knowing they comply with international standards. They also share their knowledge and emphasize the importance of quality with other actors, such as providers, partners, and customers. *[EQ 2.c]*

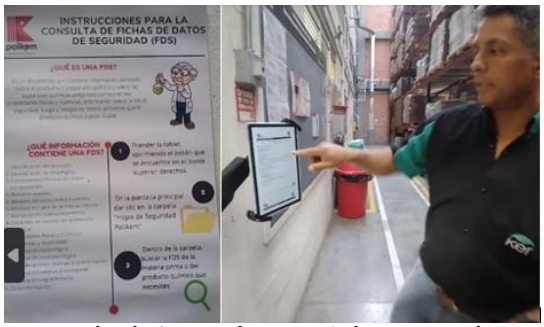
Impact

SME competitiveness - Indications of quality improvement and heightened competitiveness are evident in SMEs benefiting from the programme. Two SMEs have successfully exported to Spain and the United States. Meanwhile, three others are currently negotiating exports to five international markets, with one aiming to complete the process by November 2023. The early generation of export opportunities by beneficiary companies validates the achievement of GQSP objectives. While some SMEs express short-term interest in local market growth and have enhanced competitiveness through product improvement, differentiation, and cost reduction via process optimization, they also harbour long-term export plans. To have an impact related to increased competitiveness and exportation at a larger scale, stakeholders recognize the necessity for time, resources. The SMEs have the potential to improve export in future due to the results achieved, the commercial potential of the value chain and the increasing international demand. Nevertheless, more investment and commercial support are required. The lessons learned about the impact should be considered for the GQSP second phase for the phytotherapeutics value chain. To further promote trade, stakeholders emphasize the importance of actions that connect companies with potential clients in the international market. Notably, this project did not address these aspects. According to the national counterpart and SECO, the GQSP did not cover the commercial approach because they have a portfolio with programmes that already address these aspects. These complementary programmes could enhance the effectiveness of the intervention. *[EQ 3.a]*

Impact beyond the pilots – The Chemicals Value Chain comprises multiple subsectors. The products serve as inputs to various industries, extending the impact beyond the pilot phase due to the sector's inherent nature. Companies in the chemical value chain, known for their adaptable production processes, have the potential to expand and replicate internally by introducing new products and externally by providing a roadmap for other industry players. For example, in only one (GHS implementation) of eleven assistance lines, the replication efforts have benefited around 5,000 products, turning participating companies into agents of change within the chemical sector. Empowered by efficiency gains and strengthened capabilities from the GQSP, QI institutions and laboratories can extend their intervention to other sectors and value chains. A future challenge involves developing a clear strategy for scaling up success stories across the industry, especially post-medium-term results with increased competitiveness and exports. Addressing this challenge lies within the purview of stakeholders at the ministry and institutional levels associated with the Chemical Industry. *[EQ 3.b]*

Photos: GQSP Colombia

Fabric organization based on COSMOS certification, GLOCOSME SME, 23.10.2023 Medellin, Photo by evaluator



Quality information «public spot» with instructions and tablet available 24/7, POLIKEM, 23.10.2023 Medellin, Photo by evaluator

Laboratory staff using the new equipment for chemicals density analysis, Control Body SIC, 27.10.2023, Bogota, Photo By: SIC Staff

Containers and labels before and after the application of the Green Seal certification, POLIKEM, 24.10.2023, Medellin, Photo by: POLIKEM Staff

Coherence

The programme sustained robust connections with all stakeholders, driven by its proactive approach, a well-established organizational structure, and a UNIDO team equipped with a chemistry academic background and extensive experience in programme implementation. On the other hand, despite institutions' basic understanding of their roles in the quality system, implementing the GQSP enhanced coordination, connectivity, and communication channels. An opportunity for improvement lies in promoting more interaction among SMEs by establishing spaces for sharing, thereby fostering collaboration, knowledge exchange, and potential business relationships. *[EQ 4.a]*

Sustainability

The programme has implemented initiatives and provided tools to encourage sustainability among counterparts. Positive factors for sustainability, such as institutional strengthening, a culture of quality, and empowerment, have been achieved. The Ministry of Commerce aims to uphold these results by advocating for decrees and regulatory tools within its jurisdiction, seeking international cooperation for fund management, and forming alliances with other public institutions. For QI institution's results sustainability, investing to complete pending tasks is important. Clear leadership is necessary to enhance surveillance, control, monitoring, and voluntary compliance with rules and regulations in the sector. Sectorial chambers generated dependency on UNIDO and still need to establish their sustainability plans. SMEs are committed to sustaining results; some managers are currently formulating sustainability strategies and allocating budgets. In the long term, the sustainability of SMEs' results and continuous improvement hinge primarily on product

demand and additional investment; otherwise, they will not be able to grow on their own. *[EQ 5.a]*

Secondary evaluation criteria

Efficiency - GQSP Colombia effectively managed resources, successfully meeting planned goals and additional activities without exceeding the budget. The local counterpart contributed 15% of the budget (in cash). An increase of 30% in the total operating budget occurred in November 2020 due to factors related to Outcome 1 (Strengthening QI). Due to COVID-19, the programme implemented many activities virtually, resulting in cost savings and allowing increased investment in field activities. As of May 2023, 92% of the budget has been executed, and project activity implementation progressed to almost 87%.[5] Other stakeholders, such as laboratories and SMEs, contributed infrastructure, equipment, and human resources. *[EQ 6.a]*

RBM, monitoring, evaluation and reporting - GQSP Colombia employed an efficient monitoring system for implementation reports and complied with information requests from HQ. Nevertheless, a direct connection between the two levels should be improved. To bolster monitoring, it is advised to incorporate outcomes-level indicators for obtaining medium-term information. While Implementation Reports indicate the percentage progress in activity execution, the recommendation is to include information on indicators in the Logical Framework Matrix, depicting planned targets, progress in the current period, and cumulatively. *[EQ 7.a]*

Digital transformation- The GQSP contributed to the digital transformation of QI institutions through tools like BuscaLab, advancements in technological infrastructure, process digitalization, modernization, the establishment of online services, and staff training in digital tools. The context of the COVID-19 pandemic accelerated the development of digital skills among staff in participating institutions. *[EQ 8.a]*

Gender mainstreaming - During implementation, GQSP Colombia incorporated a basic gender approach. In Colombia, gender considerations are widespread, and most institutions have their gender approach. On average, 63% of participants in programme activities were women. Females were active and well-represented in various spaces like PSC, events, and international exchanges. Several cases featured women as SME owners or comprising the majority of staff. *[EQ 9.a]*

Environment- The GQSP contributed to promoting actions related to environment and the provision of safe products for the industry, human and animal health through the strengthening of QI institutions and improvement in compliance with standards and regulations by SMEs. International markets impose increasingly strict standards, regulations, and requirements (such as COSMOS or Green Seal certifications) related to environmental care. Compliance with these regulations is an environmental responsibility and an essential business requirement. *[EQ 10.a]*

Social considerations - No directly related social problems are identified because the counterparts in this value chain are SMEs and established institutions. In the second phase, it would be pertinent to consider analysing social issues related to raw primary material suppliers. *[EQ 11.a]*

[5] Latest information provided by the GQSP Colombia team *after* the data collection phase for this evaluation was completed suggests that as of November 30th 2023, 100% of the implementation was reached and more than 99% of the budget was executed. However, the evaluation team could not verify the data at the late stage of the evaluation.

Performance of partners - Stakeholders participated and contributed within their roles and scopes. The GQSP Colombia received support from SECO Colombia. UNIDO fulfilled its responsibilities satisfactorily, successfully managing the programme's implementation across a diverse value chain. The Ministry of Commerce and QI institutions demonstrated active, coordinated commitment and collaborated from the beginning, improving their participation as the project progressed. As an opportunity for improvement, the second phase should streamline the composition of the PSC and establish a broad technical committee to enable everyone to contribute while maintaining a smaller PSC with a core group of participants. *[EQ 10.a]*

Suggested areas of action

1. It is necessary to map all the interventions of the SECO, the Ministry of Commerce, Industry and Tourism of Colombia (MINCIT), and Colombia Competitiva portfolios to identify actions that promote the second phase. Particular emphasis should be placed on complementing the lines of marketing, export promotion, and financing for SMEs. Finally, the programme could develop connection processes between interventions. From the state side, continuing working on industrial development policy is also necessary.
2. Colombia Productiva, QI institutions, laboratories, and SMEs must incorporate strategies into their sustainability plans to scale results in different sectors, value chains, and product lines, depending on each case.
3. The country should get sustained investment to achieve the long-term impact of exports and to develop a chemical industry sector capable of growing, sustaining itself, and being resilient to externalities. Although stakeholders have made significant progress in the first phase, more is needed to reach the next level; there is a risk that successful SMEs will not be able to grow and increase their exportation volumes.
4. The theory of change for the GQSP in Colombia needs a review, particularly at the impact level. Mentions issues that should be addressed in interventions or assumptions, such as the role of the end consumer. The medium-term impact aims to improve competitiveness and access to international markets. However, certain assumptions, such as the expansion of demonstration cases or the participation of external participants, could contribute to this result.
5. There are differences in evaluating the efficiency of global tools between headquarters and the national level. A thorough analysis of future resources allocated to global tools is recommended; perhaps more than development, the second phase should invest in disseminating the successful tools identified in the first phase and socialising the tools that were not ready until 2023.

Good practices

- To replicate the identification methodology for select participating SMEs and stakeholders diagnosis.
- To have a team with technical experience in the value chain and implementing cooperation programmes that are working in office and fieldwork.
- To conduct the "Measurement the impact of support" surveys at the end of the SMEs' participation, allowed to understand the usefulness of the intervention.

GQSP Peru

Relevance

QI – The GQSP contributed to reaching national plans and strategic plans for Quality Infrastructure (QI) institutions. The programme conducted each participant's diagnosis and work plans according to the scope, time and resources assigned. The GQSP benefited two QI institutions, INACAL as one institution with different mandates (standardization, accreditation, metrology), and SENASA, as well as seventeen laboratories. Despite progress,

QI institutions and laboratories still need to work on issues related to political will and budgets. The GQSP was strongly focused on INACAL during the first phase. For the second phase, it is important to strengthen other QI institutions - especially those that did not participate actively in the first phase-. The global tool "Quality along the Value Chain (QI4VC)" was implemented in Peru. LabNet, despite its usefulness and the project effort to register accredited CABs in coordination with INACAL, was not used among users, especially those in the private sector. *[EQ 1.a]*

SMEs – The GQSP conducted a thorough value chain analysis, followed by a diagnosis and personalized technical assistance plans addressing the specific needs of four coffee and three cocoa cooperatives. Multiple initiatives were undertaken, including the construction of post-harvest infrastructure and laboratory equipment, along with capacity building and technical support to ensure compliance with standards and regulations. The programme extended its coverage to 3,743 cooperative members. However, as of mid-October 2023, the delivery of some equipment was pending due to several rounds of requests for quotations to obtain the equipment with the necessary requirement and clarification requests to providers following UNIDO procedures. This delay affected producers, particularly during the high-demand season. It is crucial to address regulatory technical support and metrology issues in the subsequent links of the coffee and cocoa chain, specifically for collectors and threshers. *[EQ 1.b]*

Selection of sector – The selection of cocoa and coffee value chains was appropriate due to their economic relevance, export potential, similar structures, and shared challenges. Quality is crucial for competitiveness in these commodities, as international markets demand consistent quality and volume over time. The unified approach in Quality Management for coffee and cocoa enables coordinated and efficient utilization of shared resources. Challenges identified in the GQSP for the coffee and cocoa sector include constant international market demands increment, lengthy processes (e.g., bureaucratic processes for export), and limited working capital in small cooperatives. *[EQ 1.c]*

Effectiveness

QI – After the GQSP implementation, the technical competence of QI in Peru was strengthened. In the Standardization Directorate of INACAL – the National Standards Body - processes were digitalized, and seventeen guides for coffee and cocoa standards were created, generating four new standards. The Accreditation Directorate introduced a flexible scope of accreditation service that allowed laboratories to expand their offer. Simultaneously, the Metrology Directorate has developed four new metrological services for the value chain through donated equipment and training. In addition, it strengthened its services by providing technical assistance to cooperatives and other infrastructure actors. The results included streamlining procedures, reducing times and increasing demand for services. Participating laboratories received training, accreditation, technical assistance and equipment, expanding the quality and coverage of services. However, the sustainability of these results faces challenges, such as INACAL's limited budget and the need for more significant investment, self-management and international cooperation. Some actors did not join, and the continuity of the laboratories depends mainly on the demand for services. *[EQ 2.a]*

SMEs – The programme significantly enhanced the quality awareness of participating cooperatives and producers, fostering adherence to international standards and technical regulations. In coffee cooperatives, demonstrative models were applied to each farm, benefiting 62 producers, while cocoa cooperatives strengthened four collection centres; in this case, the beneficiaries' number is unknown. Cooperatives financed infrastructure and laboratories, contributing 20% to 38% of total investment. Quality indicators in coffee cooperatives improved, measured in the individual diagnosis phase and reviewed in 2023.

Coffee SMEs promoted quality awareness among producers through sensory and physical analyses. Some cooperatives introduced traceability procedures. Cocoa SMEs adhered to technical standards, revitalizing cocoa production with improved post-harvest processes. Variability in compliance and sustainability is linked to resource and internal structure differences among cooperatives. Expanding successful practices requires substantial investment; both chains need more financing options. *[EQ 2.b]*

Awareness – Quality awareness and culture improved in all participants. The GQSP developed communication campaigns with information for multiple audiences on different channels and social networks. The GQSP Peru contributed to encouraging the use of QI services and laboratories. On the other hand, cooperatives and participating members are aware of the quality culture; however, understanding the importance of compliance with voluntary standards still needs to be completely reached. On the other hand, some QI institutions need to improve their level of participation for the second phase. Including a prevention approach in value chains susceptible to exogenous factors (climatic issues, pests, market fluctuations, among others) would also be essential. *[EQ 2.c]*

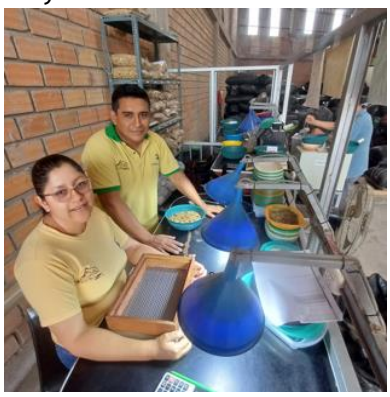
Impact

SME competitiveness – Until November 2023, the seven participating cooperatives improved their production processes, and five have made progress in their quality indicators. In particular, two cooperatives successfully exported micro-lots in 2023: one to Belgium (cocoa) and the other to the United States (coffee). While the positive effects are evident, cooperatives must intensify their efforts in terms of quality and volume to ensure constant competitiveness and observe the impact on exports. To facilitate this, it is crucial to strengthen cooperative managers and give them access to financing products. Additionally, entities such as the Ministry of Foreign Trade and Tourism, the Ministry of Production, Promperú, sector chambers and the private sector are required to support SMEs to improve connections with international markets and participation in commercial events. Several international cooperation organizations work through all types of programmes in the coffee and cocoa chain; it is essential to map the interventions and identify which ones execute complementary actions (marketing issues) and promote collaboration. *[EQ 3.a]*

Impact beyond the pilots –The GQSP impacts other value chains and can be replicated in new cooperatives and geographic areas; also, potential internal replication is required in the beneficiary cooperatives to improve competitiveness and volume. The strengthening of QI institutions and laboratories, along with their results, benefits all sectors of the country; for example, INACAL is applying intervention methodologies and results of the GQSP to provide its services to other value chains (e.g., palm oil). The results obtained through technical support methodology for cooperatives and the prototype model in partners can be replicated in new cooperatives and expanded to different regions of the country. The replication is also identified internally in the cooperatives; for example, the case of a cooperative that replicated the GQSP model in a family garden project with the Fairtrade International organization is reported. Finally, the replication and expansion of the activities carried out with the GQSP with all members are fundamental requirements for cooperatives to achieve competitiveness and increase their production and export volumes. *[EQ 3.b]*

Photos: GQSP Peru


Collection centre - Drying modules and laboratory, ALLIMA Cacao Cooperative 16.10.2023 Photo by evaluator

Collection centre and laboratoy, Aproselvanor Coffee Cooperative San Martin 17.10.2023 Photo by evaluator

Coherence

The GQSP established connections with all actors involved in the project. With some of them, coordination and fluid communication relations were established, while it represented a challenge with others. The GQSP promoted cooperation, articulation and communication horizontally between QI institutions and laboratories and vertically between these entities and the cooperatives. Cooperation links were also established between cooperatives. The programme established relationships with other QI entities and laboratories, socializing the project and opening spaces for participation and collaboration. Some actors participated partially, and others did not join. The GQSP team dedicated resources to establishing close relationships with the cooperatives, visits, fluid communication and follow-up in San Martín. For this, the field technician hired by UNIDO was a key factor. *[EQ 4.a]*

Sustainability

The GQSP has established all the necessary conditions to guarantee the sustainability of the intervention results. However, more resources are needed to maintain this momentum. The factors favourable to sustainability are that all participants have internalized the importance of their role in maintaining quality and were empowered by the processes and results. On the other hand, the prototypes in the cooperatives were successful; therefore, beneficiary members are highly committed to sharing knowledge and supporting other partners. Finally, a working synergy was also activated between the QI institutions; all participants have material and a base of trained professionals to continue the processes. The critical factors are the lack of budget and credit lines, the high staff turnover and

pending GQSP activities related to the delivery of equipment. Finally, it was identified that some QI institutions still focus on their mission without adopting a systemic view. *[EQ 5.a]*

Secondary evaluation criteria

Efficiency - GQSP Peru managed resources efficiently; as of July 2023, approximately 90.25% has been executed. The QIs, laboratories and SMEs contributed resources to the extent possible. Delays in execution arose for various reasons: (i) at the beginning of the project due to agreements and negotiations between the parties related to the organizational structure of the GQSP, (ii) in the last year due to issues related to cooperatives, such as the lack of communication to partners about activities on the farm, bureaucratic processes for the acquisition of equipment and climatic challenges in the areas of intervention. The initial selection of cooperatives and relationship building required time and resources due to the coffee and cocoa sector's post-COVID situation and social dynamics. The investment of resources was profitable, avoiding problems in implementation, so the appointment of a field technician in the San Martín area was one of the best investments since it was the permanent link with the cooperatives and provided technical training. QI institutions strategically managed their resources and ensured that investment in the coffee and cocoa value chain was replicable in other value chains. *[EQ 6.a]*

RBM, monitoring, evaluation and reporting - GQSP Peru developed a comprehensive, complete and efficient M&E system. The GQSP Peru did not develop a ToC for the value chain but did take the global design as a reference. Based on the Logical Framework Matrix of the initial design, the review and improvement of the technical details and quality of the indicators in the inception report was prepared. All implementation reports presented data and information on achievements and a format that includes activity-level indicators with target, current and cumulative progress. There needs to be more information or tools that connect the national M&E system and the global level. *[EQ 7.a]*

Digital transformation - The GQSP contributed to digitalizing the process of developing new standards at INACAL; five modules were digitized, and the institution should finish the pending modules. Awareness was raised in cooperatives about the importance of digitizing their information for analysis and decision-making. Some cooperatives have already digitized and used information. They have georeferenced databases of farms, hectares, production volume, location of special production and forestation, a space for collaboration between cooperatives is identified here. Producers seek support to learn technical content from the guides in a more accessible way, preferably through tools such as WhatsApp. This is crucial considering that the average age of the members is around 50 years old, and their level of education is basic. During the pandemic, all participants acquired skills for work and virtual training. *[EQ 8.a]*

Gender mainstreaming - During the execution of the GQSP, the gender approach was not emphasized. Disaggregated participation indicators were found. In the coffee and cocoa value chain, the presence of men is predominant. According to interviewers, women's participation at the technical and management levels has improved. 16% of the cooperative members are women. Most attendees at technical training events were men. For example, in the training for the certification of cocoa tasters, of the twenty-seven participants, seven were women. In the QI institutions, of eight interviewees at the management level, three were women. For the GQSP second phase, the gender approach should be strengthened. One option is to provide additional support to cooperatives that support women. For example, one of the beneficiary cooperatives produces a line of coffee called "8 montes – produced 100% by women"; they seek support to access HACCP Certification to export their product. *[EQ 9.a]*

Environment - By encouraging compliance with international norms and standards, the GQSP promotes environmental protection at the level of cooperatives and producers. Through training and awareness, technical standards make known the importance of conserving and managing natural resources. Quality standards and environmental protection have become important to access international markets, especially if it is marketed with certifications such as Organic and Fairtrade. *[EQ 10.a]*

Social considerations - There are important social aspects around coffee and cocoa production. The GQSP did not work directly on these issues. The prioritized topics in the coffee and cocoa sector of the participating cooperatives are generational renewal and the generation of income for women and youth through value-added products. These social issues can be considered for a second phase with direct work or coordination with other organizations. *[EQ 11.a]*

Performance of partners - In the GQSP programme, key stakeholders performed their roles effectively, fostering good synergy among most actors. UNIDO actively and assertively collaborated with all participants to advance the project. QI institutions fulfilled their responsibilities during implementation, and cooperatives responded actively within their capabilities. However, it is necessary to establish better connections if the programme seeks to include new cooperatives in the future since, in this first phase, the call process could have been more successful (13% responded). It is also necessary to improve connections with institutions related to health permits for processed and unprocessed products. The active participation of sectoral chambers and the private sector is considered crucial for the success of the second phase. *[EQ 11.a]*

Suggested areas of action

1. For the second phase, the Ministry of Production must be more active to consolidate all Quality Infrastructure (QI) institutions (it is necessary to go beyond the leading role of INACAL). It is important that the General Directorate of Environmental Health (DIGESA, with emphasis on processed products) and the National Agrarian Health Service (SENASA, with emphasis on unprocessed products) actively participate in the programme's second phase. To this end, it is recommended to involve the Ministry of Health and the Ministry of Agriculture authorities at high levels.
2. Disseminate to all quality institutions, coffee and cocoa sector stakeholders, chamber of commerce and new potential participants the results achieved in the first phase to take advantage of the momentum and generate interest.
3. Analyse the convenience of extending the Strengthening of quality to the following links in the coffee and cocoa chain (collectors, threshers, etc.) due to its impact on the processes before export to ensure traceability.
4. Promote the participation of actors that strengthen value chains and cooperatives in marketing issues, such as the Ministry of Production, Ministry of Foreign Trade, Promperu, sectorial chambers and regional governments.
5. Including a prevention approach in the quality culture is important, especially in value chains sensitive to exogenous factors (climate issues, pests, market fluctuations, increasing international requirements, etc.). The gender approach must also be strengthened.
6. Increase investment to complete the processes initiated as the platform of the Standardization Directorate in INACAL. Search for financing lines for cooperatives.

Good practices

- Hiring a full-time technical officer in the region is essential to maintain the relationship with the cooperatives, constantly monitor, and advance the interventions appropriately.
- To promote quality services, it is necessary to start by analysing the work in the territory to know the realities and, based on those needs, find the required products.

- Share project expectations clearly with critical partners to establish a relationship of trust so that initiatives can be developed without delay and with the necessary institutional support.
- Design the monitoring and evaluation system based on an initial inception report and include in the progress reports the logical framework with the indicators at the level of activities and outputs with the planned goals and the cumulative progress to date.

GQSP South Africa

Relevance

QI - The GQSP SA is responding very well to the needs of the QI institutions and it is in-line with the government priorities. Particularly relevant are the strengthening of the labs, the development of national standards for the essential and vegetable oils sector and the creation of the Multi-Stakeholder Quality Forum (MSQF). The GQSP global knowledge products is of limited value like for instance the LabNet. SA has a strong national lab-association (NLA) itself. While there should be more consultation between GQSP global and country projects, it appears to be improving. *[EQ 1.a]*

SMEs – The GQSP SA is responding very well to the needs of the targeted SMEs and value chain, in particular the smaller SMEs, which are the primary target group. The tailor-made training is hugely appreciated by SMEs, including the practical 16 point quality control manual. Also, the new national standards for the essential and vegetable oils sector are seen as a true empowerment. The strengthening of the QI institutions is much appreciated, in particular the three labs for testing. To strengthen the Southern African Essential Oil Producers' Association (SAEOPA) is also critical for the sector. Supporting SMEs is in line with government priorities. However, while the quality infrastructure is important, the SMEs face many other challenges in order to be successful (e.g., access to markets, access to finance, receiving permits to export indigenous material, etc.). The GQSP SA Phase 2 is therefor going beyond the quality focus and includes for instance support to accessing finance, which indicates to some extent a shift from a quality programme to a value-chain development programme. *[EQ 1.b]*

Selection of sector - There are many good reasons for the selection of the essential and vegetable oils sector such as the prevalence of SMEs in the sector, the government priority given to the sector, the high number of indigenous species in SA, the significant demand for essential oils form indigenous species in particular from Europe, essential oils being a high value added product, the prevalence of organic farming in the sector, the neglection of the sector in the past, the employment potential in the rural areas, about half of the SMEs are run by women, the very committed producers' association, and that the sector was not on the radar of the laboratories. At the same time, there are some question regarding the selection of the sector. Economically speaking, the essential oils sector in SA is with about 90 SMEs small and employment with a few hundred people is limited as of now. Only 15 established SMEs are currently exporting of which some are well established having been in business for 30 years. While there is significant global demand for essential oils, the question is if the newer SMEs can succeed on the global market. Essential and vegetable oils is a complicated value chain compared with other crops. One issue is the required permits to trade with indigenous species. And the sector does not attract significant investment until now. *[EQ 1.c]*

Effectiveness

QI - The technical competence of the National Quality Infrastructure System has been enhanced in SA related to the essential and vegetable oils sector. While the work needs to

continue, the QI is overall ready to fully support the sector. However, the labs have only received few samples of essential oils for testing as of now (Sep. 2023). Two new standards have been developed and three more are in the pipeline. The target is 10 national standards. This work must continue. The first laboratory has just been accredited (Sept. 2023). The two others not yet. They are preparing for accreditation. COVID significantly delayed the accreditation. The training of the labs was very much appreciated and must continue in particular with regard to the new standards. The equipment provided by the project (optical rotation equipment, refractometer) filled an important gap in order to test essential oils. The Multi Stakeholder Quality Forum (MSQF) as an umbrella body bringing together the different QI institutions is a useful result of the GQSP SA. It strengthens the "system approach." Thanks to the GQSP and producers association SAEOPA the government entities are much closer to the SMEs and the Legal Metrology unit of the National Regulator of Compulsory Specifications is no longer seen as "police". This is a major achievement. *[EQ 2.a]*

SMEs – While COVID delayed the process, the SMEs have improved their quality management with regard to soil management, selection of plants/seeds, avoid contamination, cleaning process of machines, correct labelling, more testing, etc. There are indications that also the oil quality has improved. While the established companies already complied with international standards prior to the GQSP, more testing is need in order to know if the smaller and newer SMEs meet the international and national standards. The small and newer SMEs have only recently started to use the labs for testing not least because the testing is rather expensive which is why the GQSP is subsidizing the testing. The strengthening of the producers' association SAEOPA is a major result of the project. The support provided by SAEOPA is of great help to the SMEs. While SAEOPS is key for the effectiveness of the GQSP SA, SAEOPA is still very small with very limited financial and human resources capacities. It largely depends on one very dedicated director who is beyond the retirement age. The GQSP SA Phase 2 is therefore supporting SAEOPA to develop service lines which are intended to generate income to make SAEOPA sustainable. *[EQ 2.b]*

Awareness - The awareness for quality has significantly improved among the SMEs but also other actors related to quality infrastructure relevant to the essential and vegetable oils sector. This is perhaps the biggest achievement of the GQSP SA. Also, the communication between SMEs and QI institutions has improved. The producers' association SAEOPA plays a key role in the quality awareness creation, but as mentioned above, is a fragile organisation. The Multi Stakeholder Quality Forum (MSQF) is also important for the quality awareness and regulatory environment. The C4Q is seen a great tool. The C4Q tool was developed originally as a pilot project within the auspices of the GQSP-SA project. It was subsequently improved under the leadership of UNIDO headquarters and GQSP Ghana and converted to an on-line tool. *[EQ 2.c]*

Impact

SME competitiveness - According the latest data available from the Department for Trade, Industry and Competition (dtic) export of essential oils are not growing, while imports of essential oils go up (2022). While it is perhaps too early to see an impact, the sector faces many challenges – besides quality - in order to be able to enhance exports. The GQSP theory of change was too optimist with regard to impact within the project period and was not sufficiently taking into account the many factors (assumptions) that affect sales. However, many young producers target the export market so there is a certain potential that exports will grow in future (some likelihood of impact). Also, the available data on import and export include mass market essential oils used for the industry like for instance citrus oil. The data does not differentiate between mass market and indigenous essential oils. The SMEs in the sector face many challenges in order to enhance sales. The domestic demand for essential

oils from indigenous plants is limited and stronger abroad, in particular in Europe. It that sense, export is the right objective. The permits required to produce and trade with indigenous material is a challenge and harms the sector (Negoya Protocol). Some SMEs have it, others don't. In addition, imports from other countries such as Madagascar do not require a permit which puts the SA producers at a disadvantage. Cost and the price is an issue. There are high cost - labour, energy, testing, organic certification - compared to other countries (e.g. Zambia, Madagascar, India, China, Egypt). The price is also volatile as the demand and supply for oil changes quickly. The farmers and producers also need technical knowledge about farming and processing. SMEs also need equipment (e.g., distillator) and business management skills. SMEs need financing for equipment, seedlings, testing, etc. But accessing credit is a major challenge in South Africa. Moreover, SMEs need market intelligence in order to access markets. There is a big divide between the established and newer SMEs. The small and newer ones struggle. The established do ok. The GQSP is a necessary intervention, but not sufficient to enhance the competitiveness of the SMEs. *[EQ 3.a]*

Impact beyond the pilots – The GQSP SA had some impact beyond the essential and vegetable oils sector in SA in particular the Multi-Stakeholder Quality Forum (MSQF). The MSQF is not specific to the essential oils business. Moreover, the Southern Africa Essential Oils Producers Association (SAEOP) is beneficial to neighbouring SADC countries and the association has members from these countries. Also, the strengthened QI can serve other sectors in particular the labs can test other products with the additional equipment supplied. The laboratories can also test samples from other countries. Finally, the GQSP SA can serve as a model for how to enhance quality of a specific sector in SA. *[EQ 3.b]*

Photos: GQSP South Africa

Optical rotation equipment testing essential oils, NMISA Organic Analysis Laboratory, 19.9.2023, Photo by evaluator

Testing essential oils, NMISA Organic Analysis Laboratory, 19.9.2023, Photo by evaluator

Samples of essential oils, NMISA Organic Analysis Laboratory, 19.9.2023, Photo by evaluator

Oil bought on the market by evaluator being tested at Agriculture Research Council (ARC), Pretoria, 22.9.2023, Photo by evaluator

Coherence

The GQSP SA is extremely well connected with all relevant partners of the quality infrastructure in SA and the essential and vegetable oils sector, in particular the producers' association SAEOPA, the SMEs, the QI institutions, government counterparts, bilateral partners. In fact, the GQSP made a major contribution in bringing all relevant actors together, in particular through the Multi-Stakeholder Quality Forum (MSQF) and the producers' association SAEOPA. The GQSP CTA and the Director of SAEOPA are the main drivers of the well-connected and coordinated project. Both are very dedicated. The four SECO-supported biotrade projects have shared objectives with some synergies (although not too many). For instance, a few essential oils producers participated in a delegation to a trade fair in Spain organised by the Swiss Import Promotion Programme (SIPPO). There is limited collaboration with other UNIDO or UN projects in the country, although UNIDO is in the UN results-group area "inclusive and sustainable growth" where the GQSP SA fits well. There is perhaps a potential for synergies with other UNIDO GEF funded projects in the energy sector. *[EQ 4.a]*

Sustainability

While the government QI institutions are established institutions which are likely to provide the quality services in future, the SME producers' of essential and vegetable oils must overcome many challenges faced – apart from quality - in order to translate the benefits of the GQSP into long lasting benefits, i.e. enhanced sales. A positive factor contributing to long lasting effects of the GQSP is the strong capacity building component at the level of QI institutions and at the level of SMEs. Moreover, the training programme for SMEs was transferred from the GQSP to the producers' association SAEOPA. Also, the secretariat of the Multi-Stakeholder Quality Forum has been handed over to the National Laboratory Association. The GQSP has contributed to a good communication between the various stakeholders which is a key factor for the future. Yet, two out of three laboratories still need accreditation. Moreover, there are several challenging factors for the sustainability of the benefits of the GQSP. The producers' association SAEOPA is a crucial but uncertain factor for the future of the essential oils sector. The director is beyond retirement age and there are not sufficient financial resources to pay a reasonable salary to the director and the secretary. The SMEs must overcome the many challenges faced (see above). In particular access to funding, cost of testing, permits to trade and produce indigenous species or access to markets. *[EQ 5.a]*

Secondary evaluation criteria

Efficiency - The GQSP SA has delivered results in an economic and timely manner. The CTA is a great asset for the GQSP SA and a lot depends on the CTA. *[EQ 6.a]*

RBM, monitoring, evaluation and reporting - Monitoring and reporting are only partly linked to the global level. The reporting on corporate indicators is a challenge. There are attempts by GQSP HQ to better support the country teams on this. Still, not all data available at the country level are used for the aggregated reporting at the global level. For instance, the important quantitative results of the narrative survey among SMEs are not used at the global level.[6] And the present final GQSP evaluation can't fully compensate for an in-depth evaluation of the GQSP SA. *[EQ 7.a]*

[6] Improving the quality of essential and vegetable oils in Southern Africa: Micro-narratives of change and progress, GQSP, UNIDO, 2023.

Digital transformation - The QI in SA is already reasonably strong in using digital tools. Apart from two websites built with support from the GQSP[7], digital transformation is not a key dimension of the project. Still, COVID forced the project to work online (e.g., webinars) which had a positive effect on QI institutions and SMEs in terms of strengthened capacity with regard to online interaction. *[EQ 8.a]*

Gender mainstreaming - While women empowerment is not an explicit objective of the GQSP SA, the essential and vegetable oils sector has many female entrepreneurs. About half the member of the producers' association SAEOPA are women entrepreneurs. As such, essential oils is a good sector for women empowerment. *[EQ 9.a]*

Environment - Biodiversity is high in South Africa and protecting the environment is an important dimension of the GQSP. Many essential and vegetable oils are produced organically and are considered part of the biotrade sector. However, the process of distilling essential and vegetable oils is quite energy intense. Phase 2 of the GQSP SA intends to find alternative sources of energy. *[EQ 10.a]*

Social considerations - There is a gap between established producers of essential oils which are mainly white people and the new producers which are mainly black people. The GQSP is mainly promoting new producers who have been in the sector for a least two years, being previously disadvantaged. There is apparently no child labour in the sector. *[EQ 11.a]*

Performance of partners - All actors play their role satisfactory. There is an excellent communication and collaboration among the various partners. The Government is fully supportive of the GQSP. The producers' association and UNIDO play key roles in promoting the essential and vegetable oils sector. The Multi-Stakeholder Quality Forum contributes to an excellent collaboration among the various partners. SECO also plays a very constructive role. *[EQ 12.a]*

Suggested areas of action

1. The GQSP SA should rather not expand into other areas than QI (e.g., access to finance). The GQSP SA can't address all problems of the essential oils sector under the umbrella of a quality programme. Ideally, the GQSP could be supplemented with a separate value-chain development project. For this, the essential oils sector could reach out to another development partner.
2. Better define the main target SME beneficiaries in SA. SMEs is rather general as it includes established (and successful) as well as very small, new and struggling companies facing very different challenges.
3. The GQSP SA must strengthen the long-term sustainability of the approach. For instance, exchange with the GQSP global level on how to strengthen a business associations like SAEOPA in order to make it sustainable.
4. The theory of change of the GQSP SA is too simplistic suggesting that with an improved QI and SME quality compliance export will grow. In reality, export depends on many other factors. The ToC needs to be revised (consideration for phase II) to better reflect the limited scope of the GQSP SA and the need for many other factors (conditions) that need to be in place for the essential oils sector to enhance export (impact).

Good practices

- To work with a dedicated producers' association like SAEOPA is a success factor of the GQSP SA.

[7] https://www.saeopa.co.za/ (producers' Association SAEOPA)
https://www.qualityforumsa.org/ (Quality Forum South Africa, Multi-Stakeholder Quality Forum)

- To conduct a survey among SMEs such as the "micro-narratives of change and progress" is a good practice which could be replicated in other GQSP countries. This is an important tool to know the contribution of the GQSP at the level of SMEs.
- The way the GQSP SA and the Multi-Stakeholder Quality Forum (MSQF) brings everyone together right from the beginning is a good practice.
- The tailor-made trainings for SMEs of the essential oils sector in SA are very useful and a good practices. The trainings adhere to a very practical approach to improve the production of essential and vegetable oils (16 quality control points).

GQSP Kyrgyzstan

Relevance

QI - The GQSP Kyrgyzstan is responding well to the needs of the QI institutions, both at the level of capital and the Issyk-Kul region. Particularly relevant is the support to the QI institutions in the Issyk-Kul region (Karakol, Cholpon-Ata) as they have very limited financial resources from the government and the need for laboratory equipment is high. The QI in Kyrgyzstan is relevant primarily for the implementation of the technical regulations regarding food safety of the Eurasian Economic Union (EAEU). There is also a demand from China, but there are no accredited laboratories that can test all substances required by China. SMEs have to go to Kazakhstan for testing which is expensive. All QI stakeholders met during this evaluation would appreciate a continuation of the UNIDO support. The GQSP global hub is very little known. Still 11 labs are registered in the LabNet. *[EQ 1.a]*

SMEs – While there is a general *need* to enhance the capacity of SMEs in the fruit sector to adhere to quality and standards, the concrete *demand* from the SMEs in the Issyk-Kul region to strengthen quality management is very limited. Only two companies from the Issyk-Kul region were willing to participate in the GQSP Kyrgyzstan. The third company is from Chui oblast which was added due to a lack of interest in the Issyk-Kul region. In principle, Hazard Analysis and Critical Control Points (HACCP), ISO 22000 and Food Safety Standards (FSS) are important for SMEs. The GQSP had a specific focus on ISO 22000 certification for food safety management as the most relevant standards for SMEs in the fruit value chain. But there is limited awareness and demand for this standards among the SMEs. *[EQ 1.b]*

Selection of sector – The fruit sector has a long tradition and is a relevant value chain in Kyrgyzstan. Products are exported mainly to neighbouring countries and there is a potential for more export to these countries. The GQSP built on a rapid market assessment of horticultural sub-sectors in three regions of Kyrgyzstan (conducted by ILO). Based on the results of the assessment, Issyk-Kul was selected mainly for apples and apricots. However, the selection of the region and sector is not beyond doubt. During the inception phase of the GQSP, UNIDO found that Issyk-Kul region has a limited number of processing entities and their basic infrastructure remains underdeveloped. Moreover, fruits grow mainly on small household farms which limits the capacity to enhance export volumes. In addition, fruits are vulnerable to the climate in the rather high altitude in the North of Kyrgyzstan (Karakol is on approx. 1,800 meter above sea level). An early spring frost in 2023 destroyed the entire apricots harvest and part of the apple harvest. *[EQ 1.c]*

Effectiveness

QI – The capacity of the NQI was somewhat enhanced by the GQSP and the NQI is in a better position to provide a number of services. Several testing and calibration laboratories were equipped and trained on new testing equipment. Some also received reagents. The equipment provided by the GQSP to the NQI is greatly appreciated by stakeholders. The trainings and advisory services provided by the GQSP are mostly appreciated. Several EU

regulations were translated into Russian but only one into Kyrgyz. However, results achieved are below expectations and the NQI has still gaps. While the test results are accepted by EAEU countries - they were already accepted before the GQSP -, they are not accepted internationally (e.g. EU, China). For instance, the certification of the three participating SMEs with ISO 22000 was done by international entities (SGS, CertInternational, TÜV) and not by Kyrgyz entities because there are no Kyrgyz certification bodies. The two CSM labs in the Issyk-Kul regions are not yet accredited (it is expected to happen soon). Progress in the area of standardization and accreditation was limited during the GQSP. The laboratories have still limited capacity to test pesticides and they can only test a few substances of the 400 registered pesticides in the country. Also, no laboratory can give the certification for organic production. The results achieved during the GQSP was below expectation for several reasons. Project implementation was hampered by an inadequate project implementation unit (e.g., limited background in QI), partly unsatisfactory performance of UNIDO international experts (e.g., limited language skills and inadequate cultural sensitiveness), partly unsatisfactory performance of national experts (e.g., not fully released from government duties), frequent changes in the government affecting the project ownership, the retirement of the UNIDO country director in 2021, and a well intended but ineffective crisis management from UNIDO HQ (e.g., not sufficient country visits, no- replacement of UNIDO country representative). Also, COVID-19 severely affected the global supply chains and delivery of equipment. *[EQ 2.a]*

SMEs – There is very small effect at the level of SMEs. Only three companies have improved the quality management system and received the ISO 22000 certificate under GQSP. The three participating companies are satisfied with the support received and would welcome further collaboration. EcoFloris is a beautiful small company outside of Bishkek producing delicious tee and sweets. The company greatly benefited from UNIDO (including from a predecessor UNIDO project). Sazanovskiy LLC is a well-run Russian-owned fruit juice production company in the Issyk-Kul oblast. Oberon LLC is a fruit and vegetable warehouse company in Balykchy on the shore of the Issyk-Kul lake. It is the largest logistics centre in the region with a state-of-the art cooling facility (ultra low oxygen technology). As such, it is questionable if the company really depends on a UNIDO subsidized certification process (the company was already ISO 22000 certified prior to the GQSP). A major weakness of the GQSP in Kyrgyzstan was that it had no partnership with a fruit producer association which could have leveraged the effects. It appears that there is a lack of a strong fruit producers association in the Issyk-Kul region. So, while the EU and Chinese standards are a major challenge for Kyrgyz SMEs, they showed very little interest in participating in the GQSP. SMEs only comply with standards of the EAEU and avoid expenditure for additional testing. It was already clear after the inception phase that the number of processing entities is limited (inception report p. 6). Moreover, when it became evident to the SMEs that the support was not about physical infrastructure or equipment, interest and commitment faded. In spite of this, the Project Steering Committee decided to continue with the project. *[EQ 2.b]*

Awareness – As part of the GQSP, the website of the Centre of Standardization and Metrology (CSM) was modernized and national standards were digitalized for easier access to SMEs (https://www.nism.gov.kg). However, the effect of the GQSP on the SMEs in terms of awareness for quality is limited. The awareness for quality among the SMEs in the fruit sector in the Issyk-Kul region is inadequate which is also reflected in the fact that the laboratories in the Issyk-Kul region have not many clients from the fruit sector. SMEs are not aware of the need for testing for food safety and most SMEs are producing for the local market only. Awareness creating (outcome 3) would be important to convince SMEs to invest in quality management (outcome 2). *[EQ 2.c]*

Impact

SME competitiveness – There is very little impact at the level of SMEs in terms of enhanced competitiveness and export. Even if the GQSP would have been effective at the level of outcome 2 (which it was not), in order to enhance export (impact) many other conditions would need to be in place which in fact the theory of change developed for the GQSP Kyrgyzstan reflects very well. The theory of change clearly shows that it requires much more than better quality to enhance export. Some of the main challenges hampering export are the lack of market intelligence and information on export requirements, seasonal production and limited storage/cooling facilities, low prices payed on the Russian and Kazakhstan market or small volumes due to small farms. There are potential export markets for fruits from the Issyk-Kul region such as Uzbekistan, Armenia or Mongolia. Export to EU countries appears too ambitious in the current context. Overall, given the limited financial volume of the project and the complexity of enhancing export, the expected long term results of the GQSP were not realistic. Rather than enhancing export, a more realistic project objective (impact) would be enhanced income or employment. *[EQ 3.a]*

Impact beyond the pilots – The strengthening of the QI by the GQSP in Kyrgyzstan is – in the long run - beneficial for the entire agricultural sector in the Issyk-Kul region, not only the fruit sector. *[EQ 3.b]*

Coherence

The NQI is managed by different ministries (i.e., ministries for health, economy and agriculture) which requires good coordination. Moreover, there are a number of development partners supporting the NQI in Kyrgyzstan such as the World Bank, the ADB, the Islamic Development Bank, WHO, FAO, Japan, GIZ or PTB (Physikalisch-Technische Bundesanstalt). Some information sharing took place for instance between GIZ and PTB in order to avoid duplication. While the GQSP is mainly working in the north, GIZ is mainly working in the south. However, it appears that an effective national coordination mechanism bringing all actors of the NQI together is missing. A multi-stakeholder quality forum like in South Africa might be a good idea. *[EQ 4.a]*

Photos: GQSP Kyrgyzstan

Sazanovskiy LLC, fruit juice production company, Issyk-Kul Oblast, 26.10.2023, Photo by Zhanybek Saatov

Oberon LLC, fruit and vegetable warehouse company, Balykchy, 27.10.2023, Photo by Zhanybek Saatov

Metrology Department, CSM, Bishkek.
25.10.2023, Photo by Zhanybek Saatov

Centre for State Sanitary and
Epidemiological Supervision, Karakol.
26.10.2023, Photo by Zhanybek Saatov

Sustainability

The results at the level of the NQI institutions are likely to be sustainable. The GQSP mainly supported existing government NQI institutions which will continue providing their services after the end of the project. Some lasting capacity has been created through training. Meetings with NQI staff reveal a strong commitment to provide continuing testing services to SMEs. However, there are some challenges in terms of sustainability. First, the QI is fragmented as different entities are managed by different ministries. A multi-stakeholder quality platform bringing together all NQI actors would be useful. Second, the CSM in the Issyk-Kul region depend to a large extent on fees generated from services provided. As of now, the demand from the SMEs of the services is limited which means that the financial resources of the CSM are also limited. More awareness creation for quality among SMEs is required (outcome 3). The three companies supported by the GQSP appear to be strong enough to continue and perhaps expend their business. *[EQ 5.a]*

Secondary evaluation criteria

Efficiency – The GQSP Kyrgyzstan failed to deliver the expected results in a timely manner. The original project duration (Oct. 2019-Sept. 2022) was extended by one year until August 2023. The original project budget (Euro 864,500) was reduce by EUR 200,000 and the resources were redirecting to the GQSP Indonesia. Project implementation was hampered by several factors, i.e., an inadequate project implementation unit (e.g., limited background in QI), frequent changes in the government affecting the project ownership and steering, the retirement – and non-replacement - of the UNIDO country representative in 2021, a well-intended but ineffective crisis management from UNIDO HQ. Communication between UNIDO HQ and national actors was also hampered by the absence of a common language. Finally, COVID-19 severely affected the global supply chains and delivery of equipment. *[EQ 6.a]*

RBM, monitoring, evaluation and reporting – The reporting is adequate and follows the standard GQSP reporting format. The reporting, including minutes of project Steering Committee meetings, reflect challenges encountered in project implementation. *[EQ 7.a]*

Digital transformation – The GQSP Kyrgyzstan did not make a significant contribution to digital transformation. It was not intended to do so. Still, there are some digital aspects such as the modernized website of the Centre of Standardization and Metrology, the digitalisation of some national standards for easier access, or the digital components of

some equipment. Moreover, COVID-19 forced the project to work online (e.g. webinars, meetings). *[EQ 8.a]*

Gender mainstreaming – The GQSP Kyrgyzstan had no a particular focus on empowering women. However, a good number of the staff in QI institutions are women. In general, men and women equally benefitted from the GQSP. EcoFloris is led by a women. *[EQ 9.a]*

Environment – Addressing environmental and climate related challenges was not a particular focus of the GQSP Kyrgyzstan. However, the project reviewed the capacities of the laboratories in Kyrgyzstan to test products for toxic elements and pesticides. *[EQ 10.a]*

Social considerations – The North of Kyrgyzstan and the Issyk-Kul region have not been the prime target of development assistance in the past because they are more developed compared to the South of Kyrgyzstan which is more vulnerable to poverty due to high density of population and less employment. Therefore the selection of the Issyk-Kul region is only partly obvious. *[EQ 11.a]*

Performance of partners – UNIDO, the PMU and the main national counterpart did not live up to expectations. The different partners expressed frustration about the cooperation of other partners involved in the project. The project management at UNIDO HQ in Vienna made efforts to rescue the project. It changed the PMU and supported the national experts with international experts. However, in the end the efforts were only partially effective. It would probably have been necessary for the project manager to visit Kyrgyzstan more often in order to expedite project implementation and to support the new PMU, in particular since the UNIDO country director retired in 2021 (and was not replaced). The government counterpart was not sufficiently supportive either. Decision taking took a long time and issues highlighted by UNIDO in Steering Committee meetings were not adequately addressed. Still, the Centre for Standardization and Metrology has a new leadership since 2022. This leadership is very interested in a continued partnership with UNIDO. *[EQ 12.a]*

Suggested areas of action

UNIDO and SECO should not completely rule out a second phase of the GQSP in Kyrgyzstan. There is still a need to strengthen the NQI in the country as well as supporting the SMEs in the fruit sector. If a second phase is considered, lessons learned from the first phase can be taken into account (they can also be relevant for the GQSP in other countries):

1. Create a national quality infrastructure platform like in South Africa (Multi-stakeholder Quality Forum) in order to bring together all relevant QI actors.
2. Put a particular emphasis on awareness creation for quality among SMEs (outcome 3). In terms of sequencing, this should be undertaken at an early stage of the project.
3. Identify a business association as a key partner to work with in order to scale up the outreach to SMEs.
4. Establish a strong PMU with strong competences in QI and sufficient familiarity with the quality standards in the region, i.e., the Eurasian Economic Union.
5. Clearly separate project staff from government staff.
6. Establish clear criteria for the selection of companies that are supported and subsidized with public resources from UNIDO/SECO. The criteria should include for instance company size, financial situation, geographical location, etc. avoid subsidizing financially strong companies.
7. Consider expanding to other regions in Kyrgyzstan. The target region was too small.

Good practices

- The theory of change developed for the GQSP Kyrgyzstan is well done. Among others, it adequately reflects the complexity of enhancing competitiveness and export.

GQSP Georgia

Relevance

QI – The GQSP Georgia is responding very well to the needs of the QI institutions, it is in-line with the government priorities and the EU market requirements specifically the EU food safety legislation as part of the Deep and Comprehensive Free Trade Area (DCFTA) Agreement. The GQSP is particularly relevant for the revitalisation of the GeLab, the Georgian Laboratories Association, the training of lab staff and the training of the trainers through the GeLab, and the two studies, the "value chain study" and the "roadmap" for laboratory infrastructure development, although the roadmap appears to be more relevant compared with the values chain study. The "roadmap" is based on the UNIDO methodology of laboratory policy development, which reflects a value added of a UNIDO global tool. Still, the roadmap could have been more lab specific. The implementation of the roadmap – which is not part of the GQSP - is a challenge as there are very limited financial resources (e.g., to buy equipment, for staff salary, etc.). 21 labs are registered in the LabNet. The LabNet, another UNIDO global tool, served as a tool to map available conformity assessment bodies. GQSP on LinkedIn is partly useful, as it pushes information. There is a language barrier. Many people in Georgia do not speak English. *[EQ 1.a]*

SMEs – The GQSP Georgia – a "special measure" GQSP country - is not really responding to the current needs of the targeted SMEs of the fruit and vegetable sector as there is little demand for testing from the private sector. The main reason is that most of the exported fruit and vegetables go to CIS countries, in particular Russia which have limited requirements in terms of quality. In addition, there is inadequate law enforcement, although domestic food safety control is slowly starting. At the moment, there is no pressure to comply with quality standards. There are exceptions like wine which is frequently tested. While the fruit and vegetable sector has a lot of export potential and the QI will be important at one point, the sector faces many challenges which are bigger than the quality challenge. In particular, the small land (plot) ownership (land reform is needed), low volume production, only seasonal production, farming is not attractive (low pay), migration to urban areas, consumers can't afford (expensive) high quality products, no storage (e.g., cooling for Blueberries), lack of electricity, not enough tractors, not enough investment in roads, ports, cargo terminals, etc. *[EQ 1.b]*

Selection of sector – The fruits and vegetable sector is important for Georgia and the agro sector is a government priority. The value chain study provides a solid analysis of the export potential of the fruits and vegetable sector. However, the four in-depth analysis included in the value chain study were not really necessary as there is a limited link between the GQSP Georgia – special measure country - and the four products selected for in-depth analysis (walnut, blueberry, apples, greens). In fact, the broader agro sector would have been sufficient as the different sub-sectors of the agro sector face similar challenges in term of quality management. It is worth highlighting that the use of pesticides is a big issue in the country which should be addressed, if the GQSP continues. The pesticides are not registered in such a way that they can be traced for control (in accordance with international requirements) and it is not clear which pesticides are used and the labs don't know for which pesticides they have to test. *[EQ 1.c]*

Effectiveness

QI - With the limited resources of the GQSP Georgia a relatively significant contribution was made to strengthen the QI in Georgia. In particular, the GeLab has become a crucial element in the QI architecture in the country. It plays an important platform for bringing together the different actors and sharing of information and knowledge. It is also well networked internationally (e.g., EURACHEM). It is a valuable platform to share information and knowledge. With UNIDO support, the GeLab provides highly appreciated trainings to its

members which enhanced the technical competences in the laboratories. The translation of documents (e.g. EU regulations) from English into Georgian are of great value. However, there is still a lot to do to strengthen the QI in Georgia. First, the GeLab is a weak organisation and requires further strengthening. It has no offices (it is hosted by the wine laboratory) and has no regular staff (mainly honorary work). Second, the labs can't measure everything needed. There are still many important gaps and samples have to be sent to EU countries. Third, there is a big competition among laboratories. They don't work together. Inter-laboratory comparison is very limited which would be very important. Fourth, there are few accredited conformity assessment bodies for certification because there is no big demand. Inspectors come from abroad. Fifth, the labs don't have sufficient income because there is not sufficient demand for testing. Sixth, there is a shortage of qualified staff in the labs and the capacity for testing is limited. Seventh, there is also a lack of financial resources to buy equipment and the salaries of lab staff are very low. Eighth, a key challenges is the maintenance of lab equipment. Georgia often lacks the technicians to fix it. Service engineers are needed. Ninth, the public labs are subsidized and can offer services at lower prices compared to private labs (unhealthy competition). There is a need to define the roles of the public and private labs. Tenth, QI is not part of the higher education system. Eleventh, Georgia is using EU and old soviet standards, also because many do not understand English. The translation of the ISO standards is important. The government can only translate about 30 standards a year because of lack of financial resources. Twelfth, the capacity to measure residues of pesticides is limited. Thirteenth, in order to be certified organic according to EU standards, the Georgian labs are not accredited and the test results are not accepted. SMEs test products in the EU (e.g., organic wine, organic hazelnut, honey). *[EQ 2.a]*

SMEs – This evaluation has no evidence that the SME compliance with international standards and technical regulations is enhanced because of the GQSP. The SMEs were not the direct beneficiaries of the GQSP in Georgia ("special measure" GQSP country). However, it appears from the discussion with stakeholders that the quality in the fruit and vegetable sector is steadily increasing. Still, as most of the fruit and vegetable exports go to CIS countries there is a limited incentive to comply with EU standards. The exception are hazelnuts which are exported to EU countries and which comply with EU standards. The most potent driver for change would be the implementation of EU food safety legislation as part of the Deep and Comprehensive Free Trade Area (DCFTA) Agreement. What is needed is the enforcement by the government of this legislation and related official controls. Also, the private sector needs to have better access to new regulations and standards catalogue. *[EQ 2.b]*

Awareness - The two studies financed by the GQSP - the "value chain study" and the "roadmap" - have contributed to an enhanced awareness in the government about the important role of laboratories. The development of the roadmap itself was an important process in terms of policy dialogue and awareness building. The GeLab is an important platform for policy dialogue with the government. In fact, the GQSP and the GeLab contributed to the establishment of a government working group to develop a new laboratory concept. Still, there is a limited quality awareness in the agro sector. Quality is largely reduced to visual quality related to size, colour and skin. The association agreement with the EU is a key driver of change. There are a lot of obligation to comply and there is a lot of support from the EU. *[EQ 2.c]*

Impact

SME competitiveness - There is no evidence available to the evaluation that would indicated an improved market access and increased exports because of the GQSP. Although agricultural exports are up in 2023, this is mainly because of enhanced export to Russia due to the EU sanctions against Russia. This causality shows that many factors have an influence

on export, apart from meeting quality standards. For instance, an important factor hampering export are the cumbersome custom procedures. The theory of change of the GQSP Georgia is too simplistic and too linear and does not take sufficiently into account the many other factors that affect export. While the long term objective to enhance export to EU countries might be valid, a more realistic objective for the GQSP Georgia would be to enhance food safety for the domestic market. This would already be a major achievement. *[EQ 3.a]*

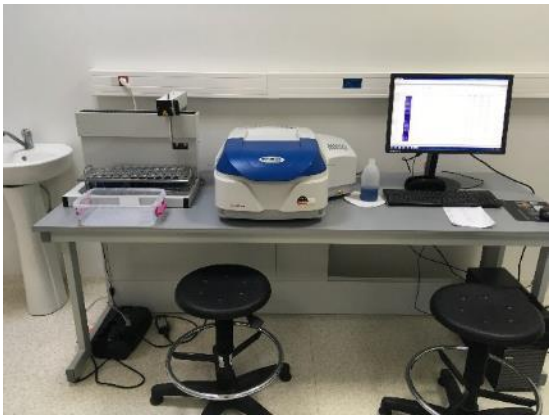
Impact beyond the pilots – The strengthening of the QI by the GQSP in Georgia is – in the long run - beneficial for the entire agricultural sector, not only for the fruit and vegetable sector. Building on the "roadmap" the Ministry of Environment Protection and Agriculture is working on a strategy aimed at enhancing the Georgian food and agricultural laboratories. This strategy, in turn, has the potential to serve as a model for developing laboratories operating in various other sectors (such as construction, cosmetics, pharmacy, medicine, etc.). *[EQ 3.b]*

Photos: GQSP Georgia

Wine testing, Irma Chanturia Wine Laboratory, Tbilisi, 3.10.2023, Photo by evaluator

Agroecological Learning-Scientific-Diagnostic Laboratory, Georgian Technical University, Tbilisi, 3.10.2023, Photo by evaluator

G.Natadze Sanitation, Hygiene and Medical Ecology Scientific-Research Institute, Tbilisi, 3.10.2023, Photo by evaluator



Soil testing, Laboratory at the Scientific-research Centre of Agriculture (SRCA), Natakhtari, 4.10.203, Photo by evaluator

Coherence

The GQSP, through the GeLab, has made an important contribution to bring together the different actors of the QI thereby enhancing coherence of various activities. Still, coherence between FAO and UNIDO could be improved. FAO commissioned a study on laboratory needs (2022) which was similar to the "roadmap" prepared under the GQSP. The EU, UNDP, USAID, the Swiss Agency for Development and Cooperation (SDC) and the Czech Development Agency are some of the other development partners supporting the agricultural sector. Within the framework of the European Neighbourhood Programme for Agriculture and Rural Development (ENPARD) an EU funded project is working together with GeLab. GeLab was mandated through the Czech Development Agency to assess specific

laboratory needs based on SME needs. The EU funded projects constitutes a coherent continuation of the GQSP. With regard to a new UNDP value chain project, the hope is that UNDP will build on the GQSP value chain study. *[EQ 4.a]*

Sustainability

The training provided by the GeLab has created some additional capacity in the laboratories which are likely to be beneficial in future. The GQSP through the GeLab has also trained several trainers, which is a basis for continued training activities. More strategically, the implementation of the "roadmap" would be ideal for the sustainability of the impulses given by the GQSP. Of the seven pathways recommended by the "roadmap", the strengthening of the GeLab is central to the make the benefits of the GQSP last because the GeLab is crucial as facilitator of the QI community, for policy dialogue with the government and for capacity building of its member laboratories. The number of GeLab members increased from 23 to 40 which is a good sign in terms of sustainability. However, the income form membership fees is not sufficient. The GeLab requires an income source in order to hire some staff and to have office space. This is necessary to put the GeLab on a sustainable basis. There are four possible revenue streams to make the GeLab sustainable, i.e., (1) training courses with fees, (2) organising conferences with participation fees, (3) proficiency testing, inter-laboratory comparison or (4) certification programmes. *[EQ 5.a]*

Secondary evaluation criteria

Efficiency - The GQSP Georgia has delivered the expected results at the output level as planned in a relatively short period of time (July 2020 - November 2022). With the relatively small budget of Euro 339,000 the GQSP Georgia has conducted quite significant number of activities, including two important studies, 12 trainings, strengthening of the GeLab, translations of documents, etc. Due to COVID, travel expenditure were lower which allowed for organizing more online training. *[EQ 6.a]*

RBM, monitoring, evaluation and reporting - As the number of activities is rather limited, the reporting is straight forward. The monitoring and reporting is adequate, although the present final GQSP evaluation can't fully compensate for an in-depth evaluation of the GQSP Georgia. *[EQ 7.a]*

Digital transformation - The GQSP Georgia did not make a significant contribution to digital transformation. It was not intended to do so. Still, there are some digital aspects like the support provided to the development of the GeLab website, the online training (highly appreciated) and some recommendations in the "roadmap" such as the lack of certain equipment and the Laboratory Information Management System. An electronic database of laboratories of Georgia was created. The database provides information about laboratories in Georgia, which is a way for SMEs interested in laboratory services to find information about the existence of a specific laboratory. GeLab is also on LinkedIn. *[EQ 8.a]*

Gender mainstreaming - While the GQSP does not have an explicit focus on women, many more women than men benefitted from the GQSP because most lab staff in Georgia is female. A large majority of participants in the trainings organized by the GQSP were therefore women. *[EQ 9.a]*

Environment - Environmental protection is not at the forefront of the GQSP Georgia. Still, the GQSP contributed to create awareness regarding several environmental dimensions such as the use of pesticides in the fruit and vegetable sector, organic farming or the importance of lab safety to prevent hazardous emissions. The "roadmap" highlights the challenge of lack of testing capacities on contamination with pesticides and insufficient consideration of laboratory safety as well as waste management. The "value chain" study

also highlights several environmental aspects such as the use of plastic, circular economy, organic production. *[EQ 10.a]*

Social considerations - Low salaries of laboratory staff was a recurring topic raised during the evaluation mission. The "value chain study" and the "roadmap" addressed the challenge of unemployment and low salaries of laboratory staff. *[EQ 11.a]*

Performance of partners - All actors plaid their roles and there is an excellent communication and collaboration among the various partners. The GeLab and its representatives play the key role in the GQSP Georgia. It plays a central role in bringing together the various partners. The (former) UNIDO/GQSP National Technical Advisor is a great asset for the project. She is very well connected and respected. Also, the UNIDO experts are very much appreciated. *[EQ 12.a]*

Suggested areas of action

1. There should be a second phase of the GQSP in Georgia thereby contributing the implementation of the "roadmap". Any follow up activity should be well coordinated with the ENPARD project, FAO, UNDP, and the Czech development agency. [ENPARD: European Neighbourhood Programme for Agriculture and Rural Development]
2. The second phase of the GQSP Georgia should focus on the in the "roadmap" proposed pathway no. 2, i.e., the strengthening of the GeLab. The GeLab is critical for the success of strengthening the QI in Georgia. Support could strengthen the GeLab secretariat, training capacity, communication and marketing capacity, as well as client orientation.
3. The Gelab should expand its services. This could include for instance Proficiency Testing (PT), staff certification (e.g. internal audit, sampling technicians, chemical technics), the organisation of events, the organisation of study tours abroad. All services should generate income for sustainability. A particular focus should be on the continued provision of training with a focus on practical training.
4. A second phase of the GQSP and the GeLab should pay attention to the issue of pesticides used in the F&V sector. Capacities should be built to measure residues of pesticides. Pesticides should be registered so that labs know what to test for.
5. The GQSP Georgia should be expanded to include the outreach to SMEs (outcome 2).

Good practices

- Strengthening the GeLab, the Georgian Laboratory Association, was a very good idea. It was possible to enhance awareness for quality among various stakeholder, engage in policy dialogue with the government and to enhance capacity of the Georgian Laboratories with rather limited resources.
- The training of lab staff and the training of trainers was very successful, in spite of the fact that all trainings were conducted online due to COVID. The selection of topics was good and the trainers were excellent.
- The "roadmap" shows the way forward for the various actors of the QI in Georgia to further strengthen the quality infrastructure in Georgia.

4.2 Assessment of global knowledge tools

Finding: Overall, the review of the global knowledge tools reflects notable progress and achievements in the finalization, implementation, and promotion of these tools under the GQSP. Several advocacy documents have been issued, and efforts have been directed towards awareness and enhancing the tools' impact. Some of the tools may benefit from refinements to ensure greater relevance and usability among stakeholders.

During 2022, special efforts have been made to accelerate the finalization, implementation and promotion of the global tools, including the launch of the Quality Infrastructure for

Sustainable Development Index. Advocacy documents on standards for sustainable development, remote conformity assessment, gender equality in global trade, smart quality infrastructure and a handbook on innovation management have been issued.

The seven tools that are the focus of the review are:

1. **Quality Infrastructure for Sustainable Development (Qi4sd) Index:** Measuring fit-for-purpose Quality Infrastructure system in support of the Sustainable Development Goals.
2. **Standards Compliance Analytics:** Explore, compare and assess countries' compliance record with trade standards in major markets.
3. **Quality Policy Training Programme:** a practical tool, offering a step-by-step approach to help quality infrastructure practitioners and policymakers design robust, holistic, and demand-driven quality infrastructure systems, with the online course comprising six modules and participants receiving a certificate upon successful completion.
4. **Laboratory Network (LABNET):** An interactive tool that supports small and medium-sized enterprises to identify the right provider of conformity assessment services by detailing information on available conformity assessment bodies within a specific country.
5. **Quality along the Value Chain (QI4VC):** Assessing quality-related gaps along the value chain and providing tailored interventions to address them through a systematic methodology.
6. **Quality Infrastructure and Trade:** An online training that supports systemic Quality Infrastructure development.
7. **Culture for Quality (C4Q) TOOL:** Identifying and holistically assessing beliefs, values, and behaviors to promote quality management in a value chain ecosystem.

Since the mid-term evaluation, a clear progress is noted in implementing the tools.

Chart 2: GQSP Knowledge Hub

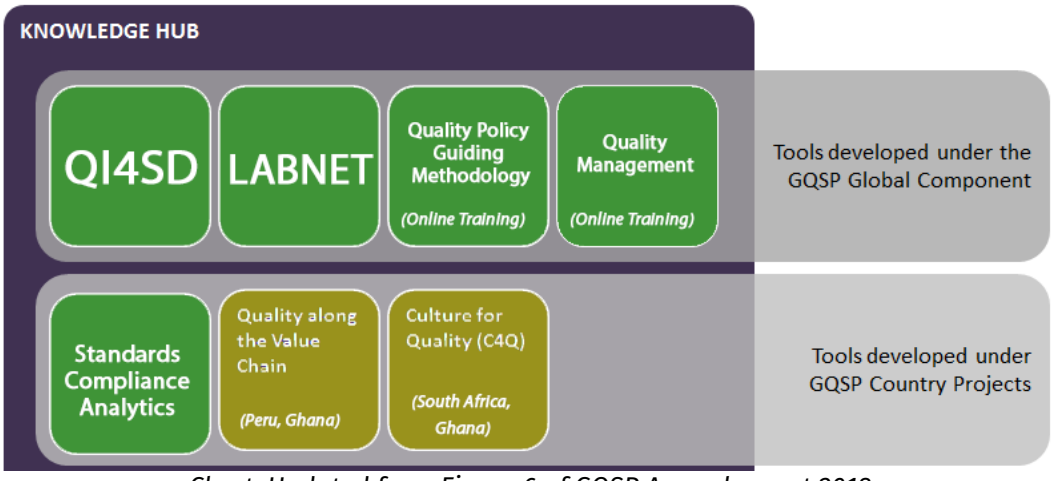


Chart: Updated from Figure 6 of GQSP Annual report 2018.

Tools developed outside the GQSP: In addition to the seven tools developed under the GQSP project, at the global component and country projects, the UNIDO documentation describes seven additional tools that focus on various aspects of trade capacity development and quality infrastructure[8] : Quality Infrastructure For Trade Facilitation (Qi4tf) Toolkit, Trade Capacity Building Resource Guide, Laboratory Policy Development

[8] UNIDO Tools & Methodologies brochure

Guide, Roadmap To Quality, Good Governance In Quality Infrastructure, Innovation Management, Blockchain For Value Chains (Bc4vc).

The usefulness of the seven tools under the GQSP is assessed as either not considered useful (red), somewhat useful (yellow) and very useful (green).

The tools have been grouped according to their intended audience, namely policy makers, QI institutions and / or conformity assessment bodies (CABs) or Small / Medium Enterprises (SMEs).

Table 6: Assessment of GQSP global tools

<table>
<tr><th>Intended Audience</th><th>Tools</th><th>Out-come</th><th>Reach / Pilot activities</th><th>Progress</th><th>Quality</th><th>Usefulness</th></tr>
<tr><td rowspan="3">Tools for Policy Makers</td><td>1. Quality Infrastructure for Sustainable Development Index (QI4SD)</td><td>1</td><td>All GQSP countries</td><td>was finalized and launched</td><td>Needs improvement</td><td>Useful as a global index</td></tr>
<tr><td colspan="6">The Quality Infrastructure for Sustainable Development Index (QI4SD) holds immense value for stakeholders within the Quality Infrastructure (QI) network, standing out for its uniqueness across various dimensions:
Criteria Coverage: The tool comprehensively addresses a wide range of criteria, contributing to its holistic evaluation of sustainable development within the Quality Infrastructure.
International Collaboration: Its uniqueness extends to the involvement of diverse international organizations members of the INETQI network enriching the data pool and enhancing the tool's global perspective. UNIDO has taken leadership in its development, convening multiple international partners.
Data Source Reliability and Integrity: The QI4SD maintains a high standard of reliability and integrity in its data sources, ensuring the credibility of the information it presents.
Detailed Index Parameters: The tool distinguishes itself through its meticulous attention to detail in defining index parameters, providing a nuanced and thorough analysis.
User-Friendly Website: Its modern, comprehensive, and user-friendly website design adds to the tool's accessibility and usability, facilitating a seamless experience for stakeholders.
Transparency on Country Data: The QI4SD excels in transparency, offering stakeholders a high degree of visibility into country-specific data, fostering trust and informed decision-making.
This tool represents a groundbreaking innovation in the QI field, with the potential to emerge as a primary global indicator for Quality Infrastructure. It holds the promise of integration into national strategic indicators across numerous countries. However, to realize its full potential, the tool requires attention to specific areas, including the definition of a frequency for updates, addressing information gaps, and establishing improved coordination with other SECO/global projects.
More details and recommendations in the Annex 1.</td></tr>
<tr><td>2. Standards Compliance Analytics (previously Rejection Analysis)</td><td>1 / 3</td><td>All GQSP countries</td><td>Currently online and accessible</td><td>Needs improvement</td><td>Used by some stakeholders</td></tr>
</table>

<table>
<tr><td></td><td>
This tool stands out for its distinctive approach, actively sourcing data from authorities worldwide and consistently expanding its network of customs authorities.

Online Accessibility: Positioned online for easy accessibility, ensuring stakeholders can readily engage with its features and insights.
Customized Reporting: The online platform offers tailored reports across three critical levels—global, country comparison, and country profile. It provides a comprehensive overview and facilitates comparisons of countries' compliance performance. Users can customize reports based on market dynamics, specific years, and product categories.
Quality Assurance: The tool underwent a thorough peer review process, ensuring the reliability and credibility of the information it presents. Continuous efforts in data updates, maintenance, and technical enhancements underscore its commitment to quality assurance.
Expansion: Demonstrating a forward-looking approach, the tool consistently reaches out to new market authorities, actively expanding its coverage to offer a more inclusive and global perspective.
Stakeholder Engagement: Despite extensive communication efforts at both global and country levels, interviews with stakeholders indicate limited utilization of the tool. Understanding and addressing the factors contributing to this underutilization could further enhance its impact.

More details and recommendations in the Annex 1.
<table>
<tr><td>3. Quality Policy Guiding Methodology</td><td>3</td><td>GQSP Global</td><td>Available online</td><td>Detailed Publications</td><td>Used for NQP initiatives</td></tr>
</table>
No further comments on MTE.

This tool was developed by UNIDO, in collaboration with its INetQI partners. The tool includes Quality Policy Guiding Principles, a set of documents to assist practitioners and policymakers globally in creating robust and demand-driven quality infrastructure systems.

In addition to the fact that it is the result of a collaborative effort of the QI international organizations, this tool’s robustness is derived from UNIDO’s long experience in the development of national and regional quality policies.

The publication was the basis of the national Quality policy initiatives showcasing its usefulness.
</td></tr>
<tr><td>Tools for QI institutions & CABs</td><td>
<table>
<tr><td>4. Laboratory Network</td><td>1</td><td>All GQSP countries</td><td>Currently online and accessible</td><td>The issue of incomplete data remains</td><td>Limited use by SMEs</td></tr>
</table>
Same comments as the MTE on limited entries, accuracy and completeness if data remain.

The LABNET tool is voluntary to laboratories and its population is not complete or updated.

More details and recommendations in the Annex 1.
<table>
<tr><td>5. Quality along the Value Chain (QI4VC)</td><td>2</td><td>Peru, Ghana</td><td>Draft applied and piloted</td><td>Methodology to be peer reviewed</td><td>Useful tool for VC selection and intervention</td></tr>
</table>
Still needs peer review & validation

The implementation of the tool allows a more informed process of selection of the VCs and the determination of the bottle necks in the VCs. Was not implemented in the visited country projects.
</td></tr>
</table>

Tools for QI institutions/ SMEs	**6. Quality Management Online Training**	2	Promotion in all GQSP countries	Available	Robust content	Useful for QI institutions and SMEs
	Same comments as MTE. Online training courses are well organized. More details and recommendations in the Annex 1.					
	7. Culture for Quality (C4Q)	3	South Africa, Ghana	Draft piloted	Draft available for use	Qualtrics Online tool used
	The results of the assessments conducted in Ghana and South Africa showcase the added value of the tool. Despite the impact of the project on the dissemination of quality culture, the tool was not implemented at other country projects. The October 2022 draft revision of the methodology "Step-by-Step Guide for the Application of the Culture for Quality (C4Q) tool using Qualtrics" provide response to the comments of the MTE on the need for a quantitative scoring of responses for an increased usefulness. A scoring methodology is outlined and the Qualtrics online software for interactive data collection during workshops is explained, leading to an increased usefulness.					

Table: evaluation team.

4.3 Overall findings

Relevance

Finding: The GQSP is a relevant programme. The vast majority of stakeholders interviewed expressed appreciation for the GQSP, both at the level of the Quality Infrastructure (QI) institutions and the level of the SMEs, although the demand for QI services from SMEs in the selected value chains is in several countries still limited. Most value chains selected are well justified. A few can be questioned.

Chart 3:Relevance rating of seven GQSP country projects

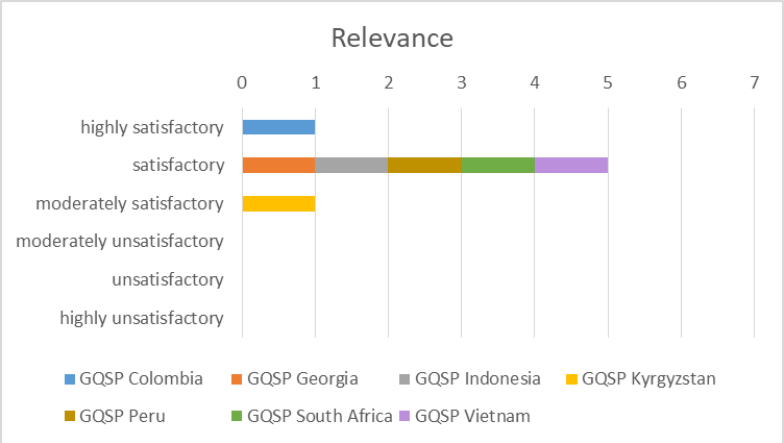


Chart: Ratings by evaluation team.

QI - The GQSP responds well to the needs of the QI institutions in the seven countries visited by this evaluation and the GQSP is well aligned with government priorities. While the emphasis in each country vary, the GQSP is relevant for standardization bodies,

accreditation bodies, laboratories, inspection department and certification bodies. The GQSP is relevant for the provision of essential services by the QI institutions to SMEs in the selected value chains including standards development and the validation of product conformity with international requirements. The GQSP technical support activities demonstrate professionalism and alignment with international practices. Efforts to address proficiency testing, equipment calibration and laboratory quality enhancement signify the project's commitment to enhancing quality and safety. Overall, the needs of most QI institutions continue to be high and there are still gaps for instance in terms of testing capacities (e.g., pesticides). The GQSP global knowledge management is of limited relevance to the national QI institutions, however many laboratories are registered on the LabNet, although more public than private laboratories. *[EQ 1.a]*

SMEs - The GQSP is responding well to the needs of the targeted SMEs and value chains, in particular the smaller SMEs, which are the primary target group of the GQSP. Supporting SMEs is also in line with government priorities. The GQSP trainings and advisory services are appreciated by SMEs, in particular when tailor-made. Also, the services provided by the QI institutions are relevant for the SMEs. However, need and demand are not the same. Demand reflects the willingness to pay for the satisfaction of needs. In some GQSP countries, the demand for QI services from SMEs in the selected value chains is still limited (e.g., South Africa, Georgia, Kyrgyzstan, Indonesia, Vietnam). The partly limited demand is related to the fact that the export target countries may not be those countries with the highest international standards thereby reducing the pressure for testing. More general, quality is not the only priority as SMEs face many other challenges – apart from quality awareness and management – in order to aim for enhancing export such as low volume production, seasonal production, scarce working capital, low consumers purchasing power for high quality products, limited storage/cooling facilities, lack of electricity, insufficient investment in infrastructure. The GQSP global knowledge products are very little known by the SMEs. *[EQ 1.b]*

Value chains - Overall, the selections of the value chains for the GQSP is supported by most stakeholders interviewed for this evaluation in the different countries. Quality management is critical in all value chains. And all sectors selected are government priorities. The value chains were selected based on thorough analyses, although no common methodology was applied. The selected value chains vary greatly from essential oils in South Africa, mango in Vietnam or chemicals in Colombia. As such, very little synergies can be created between the value chains selected in the different GQSP countries, as was already stated in the mid-term evaluation (2021). However, not all selected value chains are fully convincing. For instance, some value chains are rather small in economic terms (e.g. essential oils in South Africa, fruits in the Issyk-Kul region of Kyrgyzstan) and it is not evident to what extent the sectors have a realistic growth potential compared for example with the high potential of the Colombian chemicals sector or the fish products from Indonesia. Some small value chains may contribute to growth in larger sectors (e.g., the essential and vegetable oils sector in SA are destined for the cosmetics, food and heath sectors.) *[EQ 1.c]*

Effectiveness

Finding: Overall, the GQSP is effective. The GQSP is however more effective at the level of the QI than at the level of the SMEs. While the SMEs participating in the GQSP benefit, the number of SMEs reached by the GQSP is overall rather limited. Still, the GQSP made a significant contribution to enhancing the awareness for quality across all types of beneficiaries.

Chart 4: Effectiveness rating of seven GQSP country projects

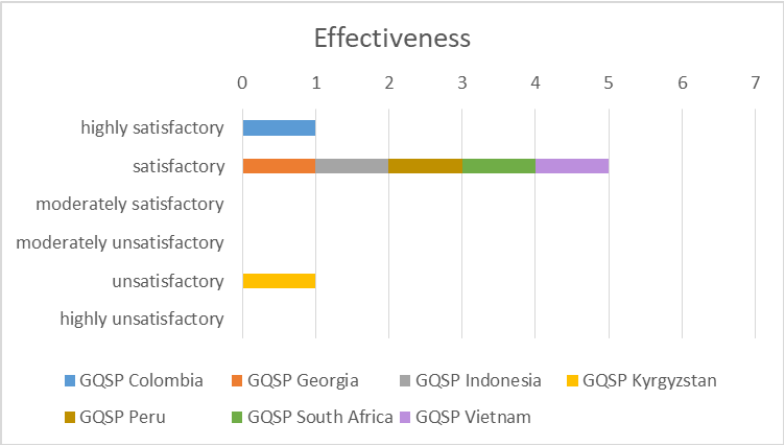


Chart: Ratings by evaluation team.

QI - The technical competencies of the QIs in the seven GQSP countries visited during this evaluation have clearly been strengthened. Capacity-building activities provided by international QI experts have yielded tangible benefits for various entities including the standardization bodies, laboratories and certification bodies. The GQSP has brought about improvements also through the development of new or revised standards, the translation of international standards and new testing and certification activities. The selected equipment provided by the GQSP have filled important gaps. *[EQ 2.a]*

The overall positive finding from the country visits is also reflected in the GQSP global level reporting. The portfolio analysis conducted for this evaluation of results at the outcome level for all 12 GQSP countries (Annex 2) shows that 139 QI institutions were strengthened. Although the figure is somewhat inflated as it includes the 43 CABs from the GQSP Georgia which were indirectly supported through strengthening the Georgian Laboratory Association (GeLab) the result is significant as the target was to strengthen 95 QI institutions. Also, the GQSP reports that 151 standard-setting processes were supported, more than three times the target of 44. Moreover, the GQSP reports under outcome 1 that 9,315 actors from QI gained skills. However, of these 7,800 are from the GQSP Indonesia. Without the results from the GQSP Indonesia, the result is 1,515 actors gained skills. Still, since the target was 343 the results is nevertheless more than four times the target. On average, 104 actors gained skills in the 12 GQSP countries (without GQSP Indonesia, including special measures countries). The median is between 47 and 59 (including GQSP Indonesia).

The implementation of the GQSP was not without challenges. A key factor hampering the implementation of the GQSP in all countries was COVID-19. Visits to QI institutions were not possible or delayed, trainings had to be conducted online and the delivery of equipment was affected due to disruptions in the global supply chain. The GQSP managed by and large to mitigate these difficulties. In fact, in some countries more money was invested in training because of the COVID related travel ban. Overall, the QIs were capacitated to support the selected value chains and they are in the process of providing services to the selected value chains. This is not to say that there are no more needs. The work on quality standards needs to continue (e.g., for essential oils in South Africa), quality policies need to be approved (e.g., Indonesia), more laboratories need accreditation (e.g., Kyrgyzstan), private laboratories should be better engaged (e.g., Vietnam), national laboratory associations further strengthened (e.g., Georgia), the QI should be more decentralized (e.g., Colombia) and some QI institutions have very small budgets (e.g., INACAL in Peru). Progress made and remaining needs at the level of QI institutions are reasons for a continued support provided by the second phase of the GQSP.

SMEs - In six of the seven countries visited, the GQSP contributed to enhancing the benefitting SMEs' compliance with international standards and technical regulations, in

particular in the GQSP Indonesia, Vietnam, Colombia, Peru and South Africa. The GQSP contributed to enhanced farming techniques, improved production processes, to adhering to technical standards, to enhanced product safety, to enhance product traceability, to extended product shelf life, to better packaging and labelling resulting in several certifications (e.g. Green Seal, COSMOS, GMP/HACCP certifications) and increased customer satisfaction. In Georgia – a special measure country - the SMEs were not direct beneficiaries of the GQSP.

Despite these achievements, challenges remain such as a lack of information on market requirements or reasons for rejections as well as limited access to conformity assessment services or lack of financing. And, while the targeted SMEs in South Africa claim to have improved their quality management, more testing is need in order to know if the smaller and newer SMEs meet the international standards for essential oils.

More importantly, the total number of SMEs reached is rather limited. In Kyrgyzstan, only three companies have improved the quality management system and received the ISO 22000 certificate. The GQSP South Africa reports that according to a survey 30 SMEs claim to have increased the quality of their essential oil. In Peru, 62 producers directly benefited from infrastructure construction on their farms. In Colombia, 64 companies benefited across of technical support. The limited number of benefitting SME is also reflected in the GQSP global level reporting. Our portfolio analysis of results under outcome 2 for all 12 GQSP countries (Annex 2) shows that a total of 376 firms are reported to have improved management practices. This is only 18% of the original target to reach 2,125 firms. Moreover, from the reported 376 firms with improved management practices, 304 are from Indonesia. Seven countries report no firms with improved management practices (of which four are special measures countries). Of those five countries that report firms with improved management practices, GQSP Colombia has reached 53[9], which is the second highest after the GQSP Indonesia. Three countries report less than 10 firms with improved management practices. In total, 10 GQSP countries report no or less than 10 firms with improved management practices. Clearly, there is some underreporting. For instance, the above mentioned survey among 43 SMEs in the essential oils sector in South Africa showing that 30 companies (70%) have improved quality is not reflected in the global reporting. Still, the reporting at the global level confirms the overall somewhat limited quantitative outreach at the level of the SMEs.

Of the 6,389 SME actors gaining skills, 4,928 are from Indonesia (Annex 2). Without Indonesia, the result is 1,461 (target 1,785). According to the reporting, no SME actors gained skills in the four special measure countries. On average, 209 actors gained skills in the GQSP project countries (without Indonesia and without the special measures countries). The median is between 90 and 125 (including GQSP Indonesia, without special measures countries). For one important indicator “the number of producers gaining access to new markets” only the GQSP Indonesia has provided data (683). *[EQ 2.b]*

Awareness – Overall, the GQSP had a significant effect in terms of enhancing awareness for quality at the country level. Stakeholders with enhance awareness for quality are with SMEs, cooperatives, associations, QI institution and governments. In several countries, the GQSP has contributed or is contributing to improve the policy environment for quality (GQSP Indonesia, GQSP Vietnam, GQSP, South Africa, GQSP Georgia). In general, staff in testing laboratories are client (SME) oriented. Different GQSP activities have contributed to enhanced awareness ranging from workshops, trainings, policy dialogue or advisory services. In some cases, specific activities enhance the awareness for quality such as the launch of the "Indonesian Shrimp Brand" by the GQSP Indonesia, the creation of a Multi

[9] The latest estimate is 64 companies (2023).

Stakeholder Quality Forum and the use of the C4Q tool by the GQSP South Africa or two studies on value chain and laboratories conducted by the GQSP Georgia.

The positive finding from the country visits is also reflected in the GQSP global level reporting. Our portfolio analysis of results at the outcome level for all 12 GQSP countries (Annex 2) shows significant results reported under outcome 3: 13,415 actors gaining awareness (target 6,455). Ten GQSP countries reported results. On average, 1,118 actors gained awareness in the GQSP countries. The median is between 110 and 161.

Still, more awareness for quality is required in particular among producer SMEs and along the value chains. *[EQ 2.c]*

Impact

Finding: Until now, the competitiveness and export of the participating SMEs has not increased significantly, although it varies between the different GQSP countries. Export depends on many factors, of which meeting international quality standards is only one dimension. The GQSP has positive effects beyond the selected value chains.

Chart 5: Impact rating of seven GQSP country projects

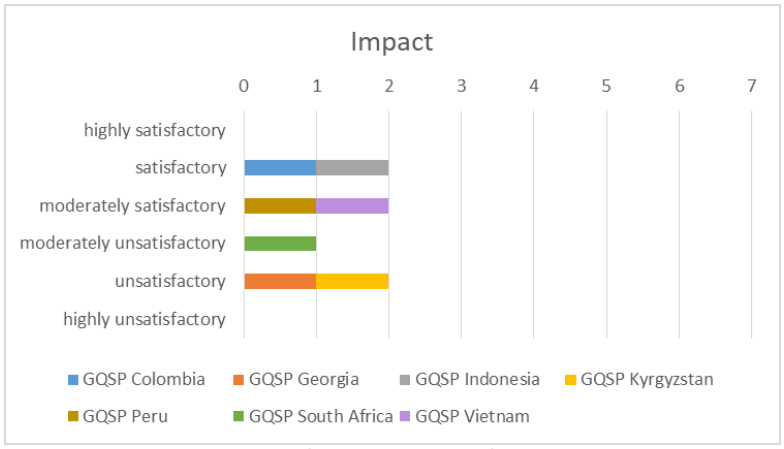


Chart: Ratings by evaluation team.

SMEs competitiveness - In two of the seven GQSP countries visited stakeholders report reasonable increase in export of the target SMEs (GQSP Colombia, GQSP Indonesia).[10] The GQSP Peru reports that two cooperatives successfully exported micro-lots in 2023. In two countries, we found evidence of potential for more export (GQSP Vietnam, GQSP South Africa). In two countries, we found no evidence for enhanced export or export potential as a result of the GQSP (GQSP Georgia, GQSP Kyrgyzstan). Impact in terms of enhanced export is a long-term result which is difficult to achieve during a four year project period. The evaluation team found that enhancing export depends on many factors of which meeting international quality standards is only one. Stakeholders highlighted the many challenges hampering exports. The challenges range from lack of market intelligence and information on export requirements, to lack of trade agreements, to lack of platforms bringing together companies with potential international clients, to seasonal production and small volumes, to lack of business management skills, to limited access to finance for SMEs to procure equipment, to weak infrastructure such as roads, ports, electricity, etc. Another key factor is cost. For instance, in South Africa the comparatively high cost of production of essential

[10] Latest information provided by the GQSP Vietnam team *after* the data collection phase for this evaluation was completed may suggest an increase in export of mango and pomelo in 2023.

oils (labour, energy, testing) is a challenge. Also, low prices paid in some export countries (e.g., CIS countries) limit the incentive to export.

Our portfolio analysis of the results framework and the impact stories (GQSP 2023) for all 12 GQSP countries (Annex 2) also found very little data on increased exports, one of the key indicator established by the GQSP to measure enhance competitiveness. Moreover, many of the results reported in the impact stories (Annex 2) are not results at the impact level but rather at the activities or output levels (e.g., number of persons trained). In addition, some impact stories include *expected* results rather than *actual* results.

Overall, it appears that the overall intervention logic of the GQSP is too optimistic and the generic theory of change of the GQSP is too simplistic not sufficiently reflecting the complexity of enhancing competitiveness and export (see conclusions chapter and theory of change analysis, Annex 3). *[EQ 3.a]*

Impact beyond the pilots – Based on the interactions with stakeholders in the seven countries visited it is It is fair to say that the GQSP has an effect beyond the selected value chains. The evaluation found that the capacities built and the awareness created at the level of the QI institutions are also beneficial for sectors which are not the target sectors of the GQSP. Conformity assessment bodies, standardization bodies, and ministry departments have received support that can be easily up-scaled to similar value chains and potentially beyond. In addition, equipment for laboratories have rarely a single product testing purpose and can be used for testing a range of different products. The value chain approach is also perceived as an interesting model. For instance in Indonesia, the government has embarked on the development of GQSP-like initiatives for the lobster farming value chain. In Vietnam some pack-houses have expanded their activities to include durian fruit and fruit associations are creating sub-associations for durian. In South Africa, the Multi-Stakeholder Quality Forum created in the context of the GQSP is not only addressing the selected sector. In Peru, the GQSP model was replicated with a Fairtrade International Garden Project. There are also benefits to other countries. For instance, Cambodia is apparently aiming at replicating the Indonesian GQSP experience and the Southern Africa Essential Oils Producers Association (SAEOP) is beneficial to neighbouring countries as the association has also members from these countries. The GQSP Colombia encompasses a value chain with several subsectors. The products of this value chain are inputs to other industries and therefore the impact beyond the pilots is the nature of the chemicals sector. In Georgia, the GeLab provides services to many laboratories beyond the fruits and vegetables sector. *[EQ 3.b]*

Coherence

Finding: Overall, coherence is a strength of the GQSP reflected in many different ways. The GQSP is clearly not operating in an isolated manner.

In three of the seven GQSP country projects, coherence is highly satisfactory (GQSP Colombia, GQSP Indonesia, GQSP South Africa). In these countries, coherence is an important success factor. In three other GQSP country projects, coherence is satisfactory (GQSP Georgia, GQSP Peru, GQSP Vietnam). Overall, it is fair to say that the GQSP has paid sufficient attention to coherence. The GQSP has made an important contribution to bring together the different actors of QI including industry associations, cooperatives, SMEs, essential quality infrastructure institutions, government counterparts and bilateral partners. These various partnerships not only prevent duplication but also promote enduring collaborations essential for programme's success.

Chart 6: Coherence rating of seven GQSP country projects

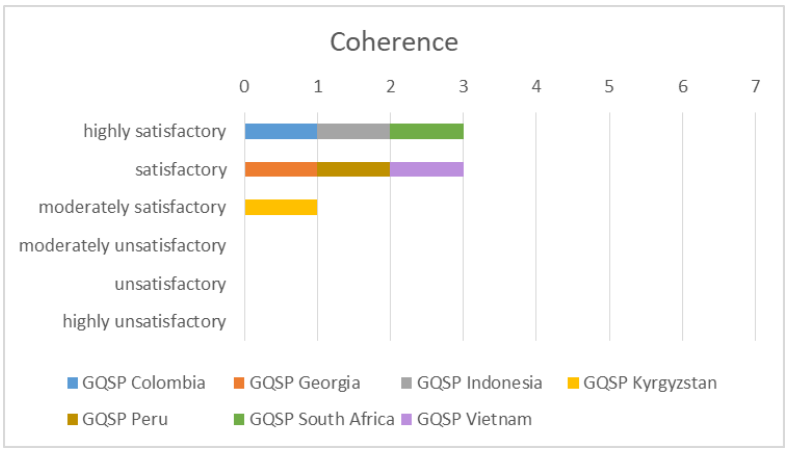


Chart: Ratings by evaluation team.

In South Africa, the GQSP is extremely well connected with all relevant partners of the quality infrastructure and the essential oils sector, in particular the producers' association SAEOPA, the SMEs, the QI institutions, government counterparts, bilateral partners. In fact, the GQSP made a major contribution in bringing all relevant actors together, in particular through the Multi-Stakeholder Quality Forum (MSQF) and the producers' association SAEOPA. In Colombia, a well-structured organizational setup, clear participant roles, and an established work team have fostered effective coordination and communication at all levels. In Indonesia, the GQSP demonstrated unwavering dedication to coordination and collaboration with diverse stakeholders, cultivating synergies with 98 public and private partners, both domestic and international. In Vietnam, the GQSP successfully facilitated a joint application (UNIDO-IFAD) for the MPTF's COVID-19 recovery call, expanding its scope to encompass additional areas, such as an extra pomelo value chain. In Peru, the GQSP stood out for its multilevel approach, methodology and specialization in coffee and cocoa quality in the San Martín area, where, despite there being various interventions, there were no duplications and one of the organizations which is working in the same sector (Rikolto) collaborated in one of the evaluation processes. In Georgia, the GeLab made an important contribution to bring together the different actors of the QI thereby enhancing coherence of various activities. *[EQ 4.a]*

Sustainability

Finding: While the sustainability of the results achieved of the GQSP is enhanced by several factors such as quality awareness and capacity building, sustainability is challenged by several factors most importantly by factors of financial nature.

Chart 7: Sustainability rating of seven GQSP country projects

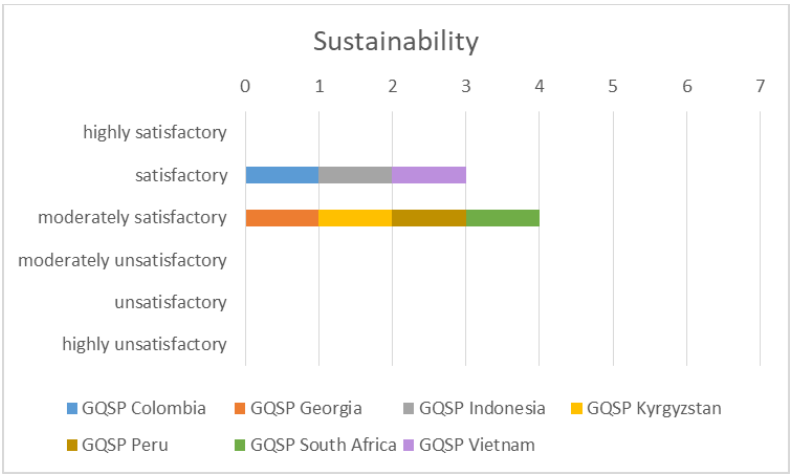


Chart: Ratings by evaluation team.

The sustainability of the results achieved of the GQSP is moderately satisfactory in four GQSP country projects (GQSP Georgia, GQSP Kyrgyzstan, GQSP Peru, GQSP South Africa). In three of the seven countries visited the sustainability of the results achieved is satisfactory (GQSP Colombia, GQSP Indonesia, GQSP Vietnam). Positive factors contributing to long lasting effects of the GQSP are the quality awareness built among the various stakeholders, new government regulations, the capacity building component at the level of QI institutions and at the level of SMEs, the customized strategies tailored to the unique needs of each value chain, the trainings of trainers or the engagement of local assistants and experts.

At the same time, many factors challenge the sustainability of the results. The lack of resources is the most critical factor challenging the sustainability of the results achieved. In Vietnam and Georgia, challenges persist regarding the laboratory financing and equipment maintenance. In Peru, the QI institutions and laboratories need a budget to complete the processes initiated by the GQSP and expand the services offered. In South Africa, the producers' association SAEOPA is a crucial but underfunded actor for the future of the essential oils sector. In Kyrgyzstan, some laboratories depend to a large extent on fees generated from services provided which given the limited demand from the SMEs means that the financial resources are also very limited. There are other than financial factors that pose a challenge to sustainability. In Indonesia, uncertainties in government policies and structural transformations within ministry departments may introduce challenges affecting the sustainability of some project benefits. In Peru high staff turnover in the public sector and cooperatives pose a certain challenge for sustainability. Finally, there are many external factors like climate change or changing market demands which pose risks to the SMEs and value chains. While external factors are beyond the control of the GQSP they can be addressed with mitigation or adaptation measures. *[EQ 5.a]*

Secondary evaluation criteria

The secondary evaluation criteria were not at the centre of this evaluation. However, the evaluation team collected some data in relation to these criteria (see chapter 4.1). Table 7 summarizes the rapid assessments.

Table 7: Secondary evaluation criteria - ratings and findings

Secondary evaluation criteria	Ratings	Findings
Efficiency *[EQ 6.a]*	satisfactory	Despite some COVID-19-related delays, overall the GQSP has efficiently and economically delivered results. The key factor for delivery are the strong PMUs, CTAs, NPCs.
RMB, monitoring, evaluation and reporting *[EQ 7.a]*	moderately satisfactory	While the monitoring and reporting provides solid data on activities and outputs, reporting at the level of outcomes and impact is rather weak. Similarly, the aggregated reporting on outcome and impact at the global level (all country results together) is not satisfactory. This weakness was already stressed by the mid-term evaluation and the GQSP is working on improving the monitoring and reporting framework for the second phase of the GQSP. The mid-term evaluation and the present final GQSP evaluation can't fully compensate for in-depth evaluations of individual GQSP country projects.
Digital transformation *[EQ 8.a]*	moderately satisfactory	While not an objective of the GQSP, the programme contributed to the digital transformation in various ways, such as creating multiple websites and databases and digitalising

		bureaucratic processes. Moreover, many of the equipment procured as part of the GQSP have a digital component. In addition, COVID-19 forced the GQSP to work online (e.g. for webinars) which had a lasting positive effect on stakeholders digital skills.
Gender mainstreaming *[EQ 9.a]*	satisfactory	The document "Advancing Gender Equality through Global Trade" (UNIDO/GQSP, 2022) reflects the GQSP's contribution to gender mainstreaming and women's empowerment. Interactions with stakeholders confirmed the significant share of female staff in QI institutions who benefited from the GQSP. Also, some of the value chains selected have a significant share of female beneficiaries. However, gender equality is not an objective of the GQSP and the programme could pursue gender equality more explicitly and systematically.
Environment *[EQ 10.a]*	satisfactory	The GQSP makes a reasonable contributions to environmental protection through various ways such as eco-friendly certification scheme, pesticides monitoring system, testing of water and soil quality, product safety, addressing laboratory waste management or the disseminating of environmental regulations.
Social considerations *[EQ 11.a]*	moderately satisfactory	This is the least prominent dimension of the GQSP. However, more sales will lead to more income and/or more employment also in some rural areas and poor communities. Also, the promotion of safety standards in laboratories or SMEs can be consider a contribution to social objectives.
Performance of partners *[EQ 12.a-d]*	highly satisfactory	With very few exceptions, the performance of all partners – i.e. national partners, UNIDO, SECO - was excellent. The strong performance of all partners of the GQSP is a key factor for the results achieved.

Table: Ratings and findings by evaluation team.

5. Conclusions and summary assessments of evaluation criteria

While the GQSP is a global programme, it is also an accumulation of 12 similar but also very different country projects under one umbrella. Consequently, this evaluation is both a programme evaluation and an evaluation of seven GQSP country projects which is reflected in the findings by GQSP country projects (chapter 4.1). And while it is possible to arrive at overall findings (chapter 4.3) and conclusions across the different country projects, there is a limit to how far one can go.

In this conclusion chapter, we would like to answer the three overarching evaluation questions.

What are the results at the country level?

As shown in the findings chapter (chapter 4), the GQSP has achieved many results. The main results of the GQSP at the country level are strengthened quality infrastructures (outcome 1). This is where the results are most visible and tangible. There is no doubt that the GQSP made a significant contribution to strengthening QI institutions (CABs, NABs, NMIs, NSBs). Also, the GQSP has made a considerable contribution to enhancing the awareness for quality at various levels including government entities, QI institutions, business associations and SMEs (outcome 3). The strengthening of quality infrastructures is clearly a comparative advantage of the GQSP and of UNIDO.

The results at the level of SMEs are mixed (outcome 2). The GQSP contributed to enhancing the benefitting SMEs' compliance with international standards and technical regulations. However, the demand from SMEs for QI services is – for various reasons - not robust yet. And while there has been progress in building awareness for quality, the awareness for *voluntary compliance* with norms and standards needs further strengthening. Moreover, the absolute number of SMEs reached is overall rather limited (see "effectiveness" in chapter 4.3). While there is clearly some underreporting, this evaluation concludes that the results at the level of SMEs are limited in terms of scale. This is partly, but not only, because of the approach in the GQSP special measure countries. In the GQSP "special measure" countries, the GQSP supports the QI (outcome 1) and awareness for quality (outcome 3). SMEs are not supported and therefore results at the SMEs level are either absent, unknown or not recorded. However, as showed above, outcome 2 is the most important and most challenging outcome in order to achieve the overall objective of enhanced competitiveness and export. Without achieving outcome 2, it is unlikely for the GQSP to achieve the overall objective.

With the exception of the GQSP Indonesia and Colombia, this evaluation did not find evidence that the SME competitiveness in terms of enhanced export has increased significantly until now.[11] Export depends on many factors, of which meeting international quality standards is only one dimension.

Does the overall intervention logic of the GQSP work?

The generic theory of change of the GQSP works only partially. In particular, the causality between GQSP interventions and the ultimate objective (impact) of greater international competitiveness and increased exports for SMEs in the beneficiary countries is weak. The GQSP is not a comprehensive value chain development or trade promotion programme. The GQSP has a focus on one of many dimension of enhancing competitiveness, i.e., on the

[11] Latest information provided by the GQSP Vietnam team *after* the data collection phase for this evaluation was completed suggests an increase in export of mango and pomelo in 2023.

quality of the production process and final products. The GQSP is primarily a technical programme (focusing on quality and standards) and not a broader value chain development or trade promotion programme. The truth is that even good quality products will not automatically enhance export or increase sales. Many high-quality products fail on markets. Competitiveness and export promotion require more than quality. Quality is a necessary condition, but it is not sufficient. As such, the generic GQSP ToC is too simplistic (see Annex 3). Unlike for instance the ToC developed for the GQSP Kyrgyzstan which clearly reflects the many conditions that need to be in place in order to enhance export and the limited scope of the GQSP. The theory of change of the GQSP Kyrgyzstan clearly shows that it requires much more than better quality to enhance export. The focus on export is very ambitious in the first place. Business development is usually a slow steady process and to first enhance sales on the domestic market would perhaps be a more realistic objective.

The ToC of the GQSP is not supported with empirical evidence that higher quality leads to more export. Or rather, there is a lack of empirical evidence showing the contribution of higher quality to enhancing export. How important is quality considering all other factors (conditions) necessary to enhance export? What is required is an empirical study which shows the causality between quality and sales. While intuitively the causality appears plausible, the question is how strong is the quality-effect on sales given other factors which have effects on sales (demand, price, promotion, point of sale, trade barriers, etc.). The methodological challenge is to isolate the quality-effect on sales/export from other factors. How strong is quality as a determinant of sales? While the original GQSP project document (2017) stresses that "*UNIDO is fully engaged with social science theory and research-based evidence that allows the organization to address realistically and successfully the complexity of processes of change*", this evaluation found little research-based evidence in the documentation provided by the GQSP showing a causality between quality and export, with the exception of the impact assessment of the GQSP Indonesia (2023), which provides some evidence.

The ToC is also partly weak at lower levels of the results hierarchy. In particular, having an enhanced national quality infrastructure does not necessary lead to SMEs making *use* of the quality services. For instance, some SMEs do not use the testing services, because they are too expensive (that is why the GQSP is subsidizing the testing in some countries). The limited use of the QI services can also be because of lack of awareness. This would imply that the sequencing of the theory of change should be reviewed. Perhaps the outcome 1 (strengthening QI) and outcome 3 (enhance awareness for quality) should come first followed by outcome 2 (support to SMEs). In addition, outcome 2 should perhaps not be limited to quality improvements, but also other support activities such as trade promotion or how to scale up production in terms of volume.

What is more, the ToC is based on some fundamental assumptions such as

- SMEs are willing to increase the quality of their production process and products,
- SMEs are willing to use the quality infrastructure services,
- SMEs have the resources to enhance the quality (or have access to resources),
- Product quality is a strong determinant of sales.

All these assumptions may be accurate – or not. In any case, they are neither addressed in the old nor in the new GQSP overall theory of change.

How useful are the global knowledge tools at the country level?

The global knowledge tools are of very limited use at the level of the GQSP country projects. Most stakeholders interviewed for this evaluation have very limited awareness of the global knowledge hub and products. While QI staff have some knowledge (e.g., LabNet), the global

knowledge tools are largely unknown to the SMEs, although some are designed to be also use by SMEs such as the LabNet or the QI4VC tool.

However, the global knowledge products are global public goods which are relevant for the broader quality community as the mid-term evaluation has already found. (see chapter 4.2 above)

The number of users of the global tools should not be the primary indicator of success, given that many of these tools operate at the strategic level (such as the QI4SD Index, SCA, QI4VC) or cater to specific users (like LabNet and Quality Policy Methodology). Therefore, the type and relevance of users carry greater significance than sheer user numbers.

Despite limited current utilization at the country level, the global knowledge tools represent a ground-breaking innovation in the quality infrastructure field, recognized worldwide for their potential as global reference and benchmarking instruments. As global public goods, they hold significance for the broader quality community. To maximize their impact and preserve the gain realised so far, continued financial support for development and maintenance is essential. Addressing specific areas, such as defining update frequencies and improving coordination with other projects, is crucial. National adaptation and linkage are advised to enhance awareness and utilization, ensuring these tools become integral components of national Quality Infrastructures.

Summary assessments of evaluation criteria

Adhering the UNIDO evaluation practice, the evaluation team was asked to rate the evaluation criteria based on above findings using the template provided by the UNIDO Independent Evaluation Unit (IEU). The assessment is a summary of previous chapters and reflects the situation as of November 2023.

Table 8: GQSP - Summary assessments of evaluation criteria

	Evaluation criteria *[Evaluation question #]*	**Rating by evaluation team**
A	**Progress to impact** *[EQ 3.a]*	moderately satisfactory
B	**Project design**	-
1	• Overall design /theory of change *[overarching evaluation question 2.]*	moderately satisfactory
2	• Project results framework/log frame *[EQ 7.a]*	moderately satisfactory
C	**Project performance and progress towards results**	-
1	• Relevance *[EQ 1.a-c]*	satisfactory
2	• Coherence *[EQ 4.a]*	satisfactory
3	• Effectiveness *[EQ 2.a-c]*	satisfactory
4	• Efficiency *[EQ 6.a]*	satisfactory
5	• Sustainability of benefits *[EQ 5.a]*	moderately satisfactory
D	**Gender mainstreaming**	satisfactory
E	**Project implementation management**	-
1	• Results-based management (RBM) *[EQ 7.a]*	moderately satisfactory
2	• Monitoring and Evaluation, Reporting *[EQ 7.a]*	moderately satisfactory
F	**Performance of partners**	-
1	• UNIDO *[EQ 12.a]*	highly satisfactory
2	• National counterparts *[EQ 12.a]*	highly satisfactory
3	• Implementing partner (if applicable)	-
4	• Donor *[EQ 12.a]*	highly satisfactory
G	**Environmental and Social Safeguards (ESS), Disability and Human Rights**	-

1	• Environmental Safeguards *[EQ 10.a]*	satisfactory
2	• Social Safeguards, Disability and Human Rights *[EQ 11.a]*	moderately satisfactory
H	**Overall Assessment**	**satisfactory**

Table: Evaluation team, based on UNIDO template provided by IEU.

6. Recommendations

As stated above, while the GQSP is a global programme, it is also an accumulation of 12 similar but very different country projects under one umbrella. This is reflected in the "suggested areas of action" by GQSP country projects (chapter 4.1). They vary a lot between the different GQSP country projects. In addition, this evaluation makes some strategic cross-cutting recommendations at the overall programme level. The recommendations are based on all findings (chapter 4.1, 4.2, 4.3) and conclusions (chapter 5).

1. **SME outreach and target SMEs**
    a. First, the GQSP must develop strategies to reach out to many more SMEs in order to enhance the effectiveness and impact of the programme. For instance, the GQSP could give particular attention to strengthening business associations of the selected value chains as a way to scale up outreach. [Responsibility: GQSP management]
    b. Second, the GQSP must better define the main target beneficiaries. The category "SMEs" is too broad and includes well established (and well financed) as well as very small and new companies (with weak finances). The different sub-categories of SMEs face very different realities as well as challenges and require different support. The GQSP should at the same time clearly outline what it expects from SMEs (e.g., co-financing). [Responsibility: GQSP management]
    c. Third, GQSP country projects should always include outcome 2 if the overall objective is to enhance the competitiveness of SMEs. As such, the "special measure" approach should be abandoned. This implies that the GQSP in "special measure" countries should – depending on the available resources - either be discontinued or elevated to "regular" GQSP country projects including outcome 2. [Responsibility: GQSP management, UNIDO, SECO]
2. **Capacity building of Quality Infrastructure (QI) -** To propel the GQSP project to the next level of capacity building of Quality Infrastructure (QI), it is recommended to complement existing methodologies, such as theoretical training and in-house support, with innovative approaches like attachment training, reverse attachment and experience exchange with more advanced QI institutions of other countries. While theoretical training lays the foundation, hands-on experiences and collaborative learning opportunities can significantly enhance the practical skills and knowledge of QI practitioners. *Attachment training*[12] in a more experienced organization allows participants to apply theoretical concepts in a real-world setting, acquiring practical skills and learning from experienced professionals. *Reverse attachments*[13] where personnel from more advanced institutions pass time

[12] *Attachment training*: after the theoretical training, personnel from a less developed QI institution go for training in a more developed institution, this would usually allow for on-site training of personnel, understanding how to apply the knowledge acquired, discussing with peers on the job and finding solutions to specific issues they face at home. Linking with another institution to exchange experience and guide laboratory work can save years of trials and failures. Experience shows that this usually yields to concrete results while more training using classical methods can be a loss of time.

[13] *Reverse attachment:* an operation level personnel from an advanced QI institution (lab operator, certification scheme developer, food safety inspector), visits the QI institution for a short to medium period to conduct on the job training to a specific institution. During the reverse attachment, the expert has the mission to enhance a specific process and specific personnel qualification in the less

with the beneficiary institution, fosters a dynamic exchange of best practices and insights. Furthermore, facilitating experience exchange with other countries' QI institutions provides a valuable platform for benchmarking and learning from diverse contexts. These additional capacity-building methodologies can build on the already achieved benefits, fostering a more holistic and adaptable approach to strengthening the capabilities of QI institutions under the GQSP project. [Responsibility: GQSP management, QI institutions]

3. **Empirical evidence**: The GQSP should invest more in collecting data on effectiveness and impact at the level of SMEs. For that, the GQSP should conduct impact assessments as it was done by the GQSPs Indonesia. Moreover, the GQSP should commission a research study which shows the causality between quality and sales, i.e., how strong is the quality-effect on sales given other factors which have effects on sales (demand, price, promotion, point of sale, volume, trade barriers, etc.). The methodological challenge is to isolate the quality-effect on sales/export from other factors. The research study should build on existing empirical research conducted by academia exploring the relationship between quality and sales. [Responsibility: GQSP management]
4. **Theory of change**: The theory of change needs to be revised, in particular at the impact level. The ToC needs to better reflect the limited scope of the GQSP and the many other factors (conditions) that need to be in place to enhance competitiveness and export (impact). The ToC must better elaborate the many assumptions underlying the ToC of the GQSP. The ToC also needs to be more stringent, clearly describing the means-ends relationships (causality). The sequencing of the three outcomes may also be revisited. Outcome 1 (QI) and 3 (awareness) may come first, followed by outcome 2 (SMEs). The GQSP should also reconsider its long-term objective. While enhancing competitiveness is reasonable, enhancing export is very ambitious, perhaps too ambitious. GQSP should consider enhanced income or employment as long-term objective. These are probably more realistic objectives and also more relevant objectives from an SDG point of view. [Responsibility: GQSP management]
5. **Trade promotion**: If export should remain the primary objective of the GQSP, UNIDO and SECO should consider developing a parallel trade promotion programme which can address other challenges faced by SMEs (other than quality), such as finding new clients or building new supply channels.[14] Such a parallel trade promotion programme should take place in the same countries and same sectors as the GQSP in order to assure the necessary synergies. [Responsibility: UNIDO, SECO]
6. **Sustainability**: The GQSP must strengthen the long-term sustainability of the approach, in particular the financial sustainability of the institutions involved. It should now plan for the future on the assumption that after phase 2 of the GQSP the programme will be terminated. The question is: What needs to be done during phase 2 to enhance sustainability? This should be done at the level of all three outcomes (QI, SMEs, awareness). A particular focus must be on supporting institutions in developing self-financing schemes (e.g., for QI institutions or business associations). [Responsibility: GQSP management, QI institutions, business associations]
7. **Global knowledge hub**: Position the global knowledge products as global public goods beneficial to a large audience beyond the GQSP countries. De-emphasis the

developed QI institution, so a tailored on the job training is delivered to the QI personnel and a specific objective is achieved for this QI institution.

[14] E.g., the Swiss Import Promotion Programme (SIPPO) could be expanded.

direct relevance of the global knowledge projects for the implementation of the GQSP country projects. To maximize the impact of the global knowledge products and preserve the gain realised so far. Continued financial support for development and maintenance is essential. [Responsibility: GQSP management, UNIDO]

Table 9: Management response table

#	Recommendation	Management Actions	Responsible Person	Target Date
1.	**SME outreach and target SMEs:** 1. Develop strategies to reach out to many more SMEs in order to enhance the effectiveness and impact of the programme 2. Better define the main target beneficiaries 3. GQSP country projects should always include outcome 2 if the overall objective is to enhance the competitiveness of SMEs	Identify and share good practices of outreach and develop guidance on how to upscale the engagement of SMEs. Encourage country project teams to better define the target audience based on the country and sector context. We do not agree with the evaluators suggestion to abandon the special measures, which we consider to have not been understood in terms of the political dimension involved nor in respect to the punctual objectives they pursue.	GQSP Programme Manager, TCS/SME	Dec 2024
2.	**Capacity building of Quality Infrastructure (QI):** Complement existing methodologies with innovative approaches like attachment training, reverse attachment and experience exchange with more advanced QI institutions of other countries	Identify innovative capacity building approaches and develop guidance on how to incorporate them in QI development.	GQSP Programme Manager, TCS/SME	Dec 2024
3.	**Empirical evidence:** Invest more in collecting data on effectiveness and impact at the level of SMEs	Commission a research study which shows the causality between quality and sales.	GQSP Programme Manager, TCS/SME	June 2024
4.	**Theory of change:** Revise the theory of change, in particular at the impact level.	Revise the ToC to show the complexity of trade and exports.	GQSP Programme Manager, Programme Coordinator and extended team, TCS/SME	June 2024
5.	**Trade promotion**:	SECO has several interventions in its priority	UNIDO and SECO	2024

	If export should remain the primary objective of the GQSP, UNIDO and SECO should consider developing a parallel trade promotion programme which can address other challenges faced by SMEs (other than quality)	countries geared towards improving exports. Consider how to better integrate trade promotion efforts/link to existing trade promotion initiatives, e.g. increase the synergies with existing or to be developed interventions (in particular SIPPO, but not only), to ensure that the export promotion dimension is addressed.		
6.	**Sustainability:** Strengthen the long-term sustainability of the approach, in particular the financial sustainability of the institutions involved	Incorporate the development of business plans into institutional capacity building as fundamental instruments to support financial sustainability.	GQSP Programme Manager, TCS/SME	Continuous
7.	**Global knowledge hub**: Position the global knowledge products as global public goods beneficial to a large audience beyond the GQSP countries	Promote the knowledge products and knowledge hub to a wider audience beyond the GQSP.	GQSP Programme Manager, and Programme Coordinator (and coordinator of the UNIDO Knowledge Hub), TCS/SME	Continuous

7. Lessons Learned and good practices

Lessons learned

1. Each GQSP country is different and each GQSP country project is different. There is a limit to commonalities.
2. While supporting a limited number of QI institutions is straight forward, supporting a large number of SMEs is much more challenging.
3. The selection process (criteria) of participating SMEs is important.
4. Enhancing export of SMEs is very challenging and depends on many factors in addition to quality management.
5. To “use” one value chain as an example for strengthen the country QI system was a good idea.
6. The selection of the right value chain to be supported is not easy. There are always reasons for and against specific choices. Not all sectors face the same complexity in terms of number of challenges. In other words: some sectors are easier to support than others.

7. The use of national languages is a critical factor for the success of the GQSP. The QI related terminologies are challenging.
8. The selection of CTAs or NPCs is crucial for the success of the project; so is the collaboration between the various GQSP partners.
9. The UNIDO international experts on quality and standards are highly qualified and appreciated. The strengthening of quality infrastructures is a comparative advantage of the GQSP and UNIDO.

Good practices

There are many good practices to be learned from the GQSP projects. Rather than aggregating them – largely impossible – we present them by country:

GQSP Indonesia

- Leveraging students to spearhead pilot implementation of Standard Operating Procedures (SOPs) in local farm in their communities.
- Cooperation with university researchers to experiment on processes that could help finding solutions specific to the value chains and the country ecosystems.
- Conducting impact analysis to follow the results of implementing the SOPs and draw lessons on when and how the SOPs can bring added value.
- Conducting cost efficiency analysis to identify, once conduced, if costs could have been used differently for specific activities and demonstrate the adherence to the budget limits and financial spending procedures.

GQSP Vietnam

- GQSP's successful collaboration with IFAD demonstrated the synergistic partnership between the two, allowing the project to address the objectives important to IFAD while achieving a broader range of goals for GQSP.
- Utilizing local experts who transitioned from the public sector to the private industry proved effective in transferring knowledge between the two sectors, leveraging trust and industry expertise.
- GQSP's proactive approach to regulatory standards, rather than contentious negotiations, resulted in the development of more realistic compliance standards, offering insights applicable in similar scenarios.

GQSP South Africa

- To work with a dedicated producers' association like SAEOPA is a success factor of the GQSP SA.
- To conduct a survey among SMEs such as the "micro-narratives of change and progress" is a good practice which could be replicated in other GQSP countries. This is an important tool to know the contribution of the GQSP at the level of SMEs.
- The way the GQSP SA and the Multi-Stakeholder Quality Forum (MSQF) brings everyone together right from the beginning is a good practice.
- The tailor-made trainings for SMEs of the essential oils sector in SA are very useful and a good practices. The trainings adhere to a very practical approach to improve the production of essential and vegetable oils (16 quality control points).

GQSP Kyrgyzstan

- The theory of change developed for the GQSP Kyrgyzstan is well done. Among others, it adequately reflects the complexity of enhancing competitiveness and export.

Colombia

- To replicate the identification methodology for select participating SMEs and stakeholders diagnosis.

- To have a team with technical experience in the value chain and implementing cooperation programmes that are working in office and fieldwork.
- To conduct satisfaction and impact surveys at the end of the SMEs participation, which allowed to understand the usefulness of the content and its impact.

Peru

- Hiring a full-time technical officer in the region is essential to maintain the relationship with the cooperatives, constantly monitor, and advance the interventions appropriately.
- To promote quality services, it is necessary to start by analysing the work in the territory to know the realities and, based on those needs, find the required products.
- Share project expectations clearly with critical partners to establish a relationship of trust so that initiatives can be developed without delay and with the necessary institutional support.
- Design the monitoring and evaluation system based on an initial inception report and include in the progress reports the logical framework with the indicators at the level of activities and outputs with the planned goals and the cumulative progress to date.

Georgia

- Strengthening the GeLab, the Georgian Laboratory Association, was a very good idea. It was possible to enhance awareness for quality among various stakeholder, engage in policy dialogue with the government and to enhance capacity of the Georgian Laboratories with rather limited resources.
- The training of lab staff and the training of trainers was very successful, in spite of the fact that all trainings were conducted online due to COVID. The selection of topics was good and the trainers were excellent.
- The “roadmap” shows the way forward for the various actors of the QI in Georgia to further strengthen the quality infrastructure in Georgia.

8. Annexes

Annex 1: Assessment of global knowledge tools

Tool N1: Quality Infrastructure for Sustainable Development Index (QI4SD)
To unlock its full potential, the QI for Sustainable Development Index (QI4SD) demands strategic enhancements in several areas. Specifically, attention should be directed towards defining a frequency for updates, bridging information gaps, and fostering improved coordination with other SECO/global projects.
The pivotal launch of the QI4SD platform in 2022 marked a significant advancement. Covering 137 countries, this tool presents a comprehensive framework of indicators, offering a succinct overview of a country's or region's Quality Infrastructure (QI) readiness to support Sustainable Development Goals (SDGs).
Considerations and Challenges:

- Undefined updating periods leading to the perception of outdated data as wrong data. Also, another index, despite being less accurate and detailed, gains momentum due to yearly updates.
- Instances of incorrect data for certain countries.
- Missing data for developing countries, impacting their QI scoring.
- The design of the “Conformity assessment” parameter is sometimes unfair to developing economies:
    - it doesn’t include the number of CABs or growth in number/scopes,
    - it refers to 1 out of 27 IAF Association members (QINET) rewarding countries where the CBs are members of this specific association.
    - The parameter “Number of recognized certificates from ISO database” is reflecting the number of certificates accepted by the country and not issued by its QI and accepted by others. Countries that do not produce certificates but accept a big number of foreign certificates are rewarded.

It is recommended to explore collaboration with other SECO-funded projects supporting indexes to enhance synergies and overall effectiveness.
The use of Trade Policy Reviews from WTO https://www.wto.org/english/tratop_e/tpr_e/tpr_e.htm may help as benchmarking mechanism, ensuring the accuracy of the QI4SD tool.
Tool N 2: Standards Compliance Analytics (previously Rejection Analysis)

- **Name Change in 2021:** The tool underwent a name change to Standards Compliance Analytics, highlighting its positive impact and focus on standards compliance.
- **Comprehensive Statistics with HS Codes:** Utilizing HS codes, the tool provides in-depth statistics for a variety of value chains, accommodating differences in compliance levels, exported qualities, and reasons for rejection.
- **Role of Workshops:** Workshops played a crucial role in raising awareness about the tool and presenting updated reports, offering valuable insights into rejections from selected export markets.
- **Recommendation for Linkage:** Strongly recommended to establish a linkage between the Standards Compliance Analytics tool and locally available rejection information.

- **Accessible Data Sources:** Rejection information is available not only at the government department level but also from exporters with firsthand experience.
- **Non coverage of Buyer Rejections:** the rejections can be beyond the standards compliance requirements and customs rejection, the tool may gain in covering buyer rejections, considering additional criteria like shelf life, quality, price, cultural considerations and product appearance.
- **Secure Platform for Exchange:** The recommended linkage can be facilitated through a secure platform, encouraging collaboration between exporters and government departments in sharing rejection information within specific value chains and countries.

Tool N 4: Laboratory Network LABNET

The LABNET tool maintains a voluntary participation model for laboratories, contributing to a population that is neither complete nor regularly updated. This poses challenges in providing comprehensive and accurate information. The following points may support the enhancement of the tool usefulness:

Enhanced Data Integration Opportunities: To address the limitations in completeness and accuracy, there is a notable suggestion that the LABNET tool could significantly benefit from linking with the ILAC/IAF databases of Accreditation bodies and accredited CABs. These databases are recognized for their completeness, currency, and accuracy.

Certsearch Database by IAF: the International Accreditation Forum (IAF) introduced the "Certsearch" database in 2022, making it mandatory for all management system certification bodies. Considering its mandatory nature and broader coverage, the integration of LABNET with Certsearch could enhance the tool's reliability and alignment with industry standards.

Tool N 6: Quality Management Online Training

The Quality Policy Guiding Methodology, as evaluated in the mid-term assessment, served as the foundational resource for national Quality Policy initiatives.

The updates on the implementation of the tool can be summarized in the following points:

- **User Experience Enhancements:** Considering user experience concerns, exploration of a potential transfer to another platform is needed, in view of challenges in account creation and login processes, sometimes you need to login twice, while the trend worldwide is easy login by integrating with email servers or social media accounts.
- **Adaptation to Open-Source Software:** In response to evolving online training needs, the training section is undergoing revision to align with the open-source software Moodle. This adaptation aims to enable decentralized training development and expand efforts in line with UNIDO requirements.
- **Strategic Promotion Efforts:** Strategic efforts to promote online tools involve linking the Knowledge Hub to the Global Trade Helpdesk (GTH) for e-learning. Considerations for further integration of the Standards Compliance Analytics and LabNet tools are being explored.
- **Linkages with External Platforms:** Linking with the UN SDG Learn platform resulted in a significant increase in active users and certificates issued, it's noted that this linkage may dilute information on users from beneficiary countries of the project.
- **Ongoing Optimization:** Ongoing adjustments aim to optimize accessibility and impact across diverse platforms and user communities, ensuring the continued effectiveness and relevance of the Quality Policy Guiding Methodology.

Annex 2: Portfolio analysis of results reported at the GQSP global level

As stated in the inception report (section "subject, scope and focus"), the focus of the terminal evaluation is on component 2 of the GQSP, i.e., the country interventions. Moreover, the evaluation places emphasis on assessing progress towards achieving outcomes. The evaluation matrix in the inception report shows that the portfolio analysis should contribute to assessing three evaluation criteria: effectiveness, impact and sustainability and to answer the related evaluation questions.

The portfolio analysis examined the results framework included in the GQSP Annual Report 2022. The main focus was on analysing key results reported (not all results). Key results are considered those results that are highlighted by the GQSP in the animated online document *Improving Trade Changing Lives (Table A).*

A particular focus was on disaggregating the data by GQSP country projects, i.e., the portfolio. The disaggregation of the data was based on a data used by the GQSP team to aggregate results reported by the GQSP country projects. The results are presented in Table B.

The portfolio analysis further analysed the document "Impact Stories" produced in 2023. The main focus was on identifying key results and to distinguish between activities/outputs, outcomes and impact as well as actual versus expected results. The results are presented in Table C.

Table A: Key results highlighted by the GQSP

○ 3,158 firms and smallholders with improved management practices ○ 9,315 actors trained in different technical areas ○ 35 global fora organized with more than 6,500 participants ○ 70 publications launched (incl. language versions) ○ 3 online training course made publicly available through the UNIDO Knowledge Hub	○ 1,400 producers accessed new markets ○ 139 quality infrastructure institutions strengthened ▪ 8 National Standardization Bodies ▪ 7 National Metrology institutes ▪ 9 National Accreditation Agencies ▪ 115 Conformity Assessment Bodies ○ 5 global tools developed ○ 151 standard-setting processes supported ○ 11 ISO handbooks developed (incl. language versions)

Source: Improving Trade Changing Lives, GQSP, 2023.

Analysis of results framework

- Several results are beyond targets.
- Practically no data at impact level; only one figure for Indonesia.
- Overall outcome level:
  - Significant result: 139 quality infrastructure institutions strengthened (target 95); although the figure is inflated by 43 (40) CABs in Georgia (special measure country), which are indirectly supported through an association of laboratories.
  - Of the 3,158 firms with improved management practices, 3,145 are from Indonesia. This is odd and most likely incomplete.
  - "# of producers gaining access to new markets": only data from Indonesia (638). How are the 1,400 mentioned in the document "Improving Trade Changing Lives"

calculated? In another places it says “Overall, by 2022, the GQSP …supported 1,400 producers to gain access to new markets, (GQSP Inception Report (Phase 2), GQSP, 2023. P 3). “Supporting” is not the same as actually have gained access to new markets.

- Outcome 1:
  - Significant result: 151 standard-setting processes supported, more than three times the target of 44.
  - Some results are distorted by high results in one country, in particular Indonesia e.g., of the 9,315 actors gaining skills, 7,800 are from Indonesia. Without Indonesia, the result is 1,515 actors gaining skills (target 343). That means that even without Indonesia it is a very good result (more the four times the target). On average, 104 actors gained skills in the 11 GQSP countries (without Indonesia, including special measures countries). The median is between 47 and 59 (including Indonesia).
- Outcome 2:
  - “# of producers gaining access to new markets”: this important indicator is largely missing; only data from Indonesia (overall outcome level)
  - Some results are distorted by high results in one country, in particular Indonesia.
  - A total of 376 firms are reported to have improved management practices. This is only 18% of the original target to reach 2,125 firms. Moreover, from the reported 376 firms with improved management practices, 304 are from Indonesia. Seven countries report no firms with improved management practices (of which four are special measures countries). Of those five countries that report firms with improved management practices, GQSP Colombia has reached 53[15], which is the second highest after the GQSP Indonesia. Three countries report less than 10 firms with improved management practices. In total, 10 GQSP countries report no or less than 10 firms with improved management practices. Clearly, there is some underreporting.
  - Of the 6,389 actors gaining skills, 4,928 are from Indonesia. Without Indonesia, the result is 1,461 (target 1,785). No SME actors gained skills in the four special measure countries (according to the reporting). On average, 209 actors gained skills in the GQSP project countries (without Indonesia and without the special measures countries). The median is between 90 and 125 (including Indonesia, without special measures countries).
- Outcome 3: The results reported under outcome 3 are significant and clearly beyond target:
  - 13,415 actors gaining awareness (target 6,455)
  - 67 (70) tools and guidelines produced (target 40).

[15] The latest estimate is 64 companies (2023).

Table B: Disaggregated results by GQSP country projects, based on <u>selected</u> results reported in the results framework in the GQSP Annual Report 2022

Results	**GQSP country projects (portfolio)** (special measures countries)													
	Albania	Colombia	Costa Rica	Ghana	Georgia	Indonesia	Kyrgyzstan	Peru	Philippines	South Africa	Ukraine	Vietnam	Total	Target
IMPACT: Improved framework conditions for SMEs and greater international competitiveness of the country.														
% reduction of rejections from the external markets													--	--
Increase in export volumes (as a % and in mio. USD) of goods and services in the supported value chains/sectors						12.14							--	--
OVERALL OUTCOME: Compliance capacity of the country with regard to quality and standards is strengthened, thus facilitating market access for SMEs and ultimately increasing exports														
# of institutions established or strengthened (QI inst., CABs)	3	34	0	11	43	18	3	20	0	3	5	4	**139 (?)***	95
# of firms with improved management practices						3,145	4					9	**3,158**	**118**

# of producers gaining access to new markets						683							**683** (1,400?)	**320**
Component 2: Country Projects														
Outcome 1: Technical competence and sustainability of the National Quality Infrastructure System enhanced														
Output 1.2.2. Technical competence of the QI at the institutional level strengthened.														
# of National Standards Bodies strengthened *		1		1	1	1	1	1	0	0	1		**8** (?)*	7
# of standard-setting processes supported	0	75	3	20	0	26	0	4	0	4	18	1	**151**	**44**
# of Accreditation Bodies strengthened*	0	1	0	1	1	1	0	1	0	0	1		**9** (?)*	
# of National Metrology Institutes strengthened*	0	1	0	1	1	1	1	1	0	0	0	1	**7***	
# of actors gaining skills (# of certificates issued)	61	477	12	90	7	7,800	59	387	11	0	37	374	**9,315**	**343**
Output 1.2.3. Technical competence of the QI at the service provider's level strengthened.														
# of CABs strengthened*	0	31	0	8	40	3	5	17	0	3	2	6	**115***	**58**
Outcome 2. SME compliance with international standards and technical regulations enhanced.														
# of firms with improved	0	53	0	6	0	304	4	0	0	0	0	9	376	2,125

management practices														
# of actors gaining skills (# of certificates issued)	0	15	0	125	0	4,928	31	289	0	90	10	901	6,389	1,785
Outcome 3. Awareness for quality is enhanced.														
# of interventions (advice) for informed policies	0	2	3	2	0	8	0	0	0	0	?	9	24	13
# awareness raising events	0	15	1	5	0	41	1	20	0	7	5	8	103	64
# of actors gaining awareness	0	2,509	5	110	0	6,404	90	2,434	19	973	161	710	13,415	6,455
# of tools and guidelines produced	0	7	1	2	0	13	0	16	2	23	1	2	**67** (70?)	**40**
* the 139 institutions established or strengthened is an aggregated figure of results at the level of outcome 1 (8+9+7+115=139).														

Table: Evaluation Team, based on results framework included in the GQSP Annual Report 2022 and additional data provided by GQSP.

Analysis of impact stories

- Very diverse results.
- Mix of activities, outputs, outcomes and impact.
- Very little on impact.
- Very little results related to SMEs (only Kyrgyzstan and South Africa).
- Very little on increased export.
- Very few strong figures.
- Some stories include expected results, not actual results. Expected result are no impact stories (yet).
- The impact stories are only a selection of results; still one can assume that the main results are included.

Table C: Results reported in Impact Stories

GQSP country projects (portfolio)	**From document: Impact Stories, GQSP, 2023** colour code: activities/outputs, outcomes, impact, expected results (not actual results)
Albania	- QI institutions in Albania will be capacitated, in line with international standards, guidelines and good practice, to boost their governance and participation in related regional and international QI systems. - Public and private MAPs & F&V value chain stakeholders will be engaged, and their roles and responsibilities for assuring quality and increasing sustainability strengthened, to mainstream international quality standards and requirements. (MAPs = medicinal and aromatic plants, F&V = fruit and vegetables) - International quality standards and new technologies will be promoted to farmers, producers and exporters to improve their production and quality management practice, and support them in improving compliance with international standards and foreign technical regulations.
Colombia	- With UNIDO's support, the SIC [Superintendence of Industry and Commerce] began implementing new national metrological regulations for prepackaged products that came into force in 2021. More than 130 quality infrastructure officials and 21 control inspectors were trained. - The SIC was supported technically to double the capacity of accredited scopes in its laboratory and received equipment to verify products that previously could not be verified. A guide for producers and consumers was also published with the main changes related to the prohibition of misleading packaging legislation (SIC = Superintendence of Industry and Commerce of Colombia, the highest national authority in legal metrology and consumer protection) - Thanks to these strengthened capacities, Colombian consumers of prepackaged products can now be sure that they are receiving high-quality products with the right content, boosting their confidence.
Costa Rica	- To support the sector in achieving and proving compliance with European regulations, UNIDO undertook a comprehensive global assessment of the beef value chain. The SIRIGABB national traceability system was connected to the mobile applications. Now all the information concerning the life of an individual animal is stored in electronic ear tags, allowing for proof of compliance with the traceability requirements of the EU. - Costa Rican farmers can now register any health events and medications in the national electronic system to ensure traceability according to the EU requirements. In addition, the establishment of a connection with the mobile applications used in the farms considerably reduces the margin of error and times in data management. Thanks to this, livestock farmers are one step closer to exporting their beef to the EU market.
Ghana	- Key actors and experts in the value chain, including palm tree farmers and medium-sized companies, received training to understand and implement the

	requirements of the Roundtable on Sustainable Palm Oil (RSPO) standards—sustainability standards that conform to the ISEAL standardsetting codes. - The Golden Star Oil Palm Farmers Association—a group of 63 smallholder farmers—has received assistance to obtain certification to the RSPO – Independent Smallholder Standard. This sustainable certification means the farmers are producing vegetable oil responsibly, contributing to safeguarding the environment. - In addition to producing palm oil safely and sustainably, with the implementation and certification to RSPO the group of farmers have increased their production yield. The group produces an average of 18 tonnes per hectare, three times above the national average yield for smallholders. The higher yields have translated into increased incomes and improved livelihoods for the smallholders and their dependents, while also helping them protect their natural environment.
Georgia	- GeLab has been upgraded to serve as a capable service center and now plays a significant role in promoting laboratory infrastructure development in Georgia, catalyzing quality assurance along the country's fruit and vegetable value chain. - The GQSP Georgia also has supported GeLab in establishing a training center to provide quality trainings to local laboratories, including equipping trainers in the field of microbiological and chemical testing. - Over 400 professionals from laboratories and other quality infrastructure institutions have been trained through GQSP Georgia, 90% of which are women.
Indonesia	- The GQSP Indonesia—in collaboration with Fisheries Centre (BBPBAP) Jepara, Central Java—has developed the Standard Operating Procedure (SOP) in Enhancing the Shelf Life and Packaging Techniques of Caulerpa spp. (often called sea grapes), one of the most popular consumed seaweed species in Indonesia. To upscale this SOP, and as an initiative to support disabled community empowerment, GQSP Indonesia and BBPBAP organized a training series on preservation and packaging techniques of fresh Caulerpa spp. for the disabled community in Jepara, called SADIFA. Within two days, 41 community members were trained … - SADIFA is now receiving requests for preserved Caulerpa from BBPBAP, which has helped them to earn additional income. - The GQSP Indonesia, in cooperation with the Indonesian Ministry of Marine Affairs and Fishery (MMAF) and the National Standardization Agency (BSN), strengthens the quality and standards compliance capacity of smallscale fish farmers towards sustainable aquaculture. The GQSP Indonesia has developed a standard operating procedure (SOP) to increase productivity and fulfill these CCRF pillars (CCRF = FAO Code of Conduct for Responsible Fisheries). - As of June 2022, 2990 fish farmers and extension workers have taken the SOP training module provided by the Fisheries Extension Center, and 951 farmers have adopted the SOP. - As an alternative to high-cost eco-label certification, the GQSP Indonesia, together with BSN and MMAF, enhanced the Indonsiean Good Aquaculture Practices (IndoGAP) certification scheme—the cheaper, local certification solution that meets the needs of around 2 million smallscale fish farmers. The GQSP supports benchmarking IndoGAP with the Global Sustainable Seafood Initiative (GSSI) to encourage global market acceptance. To date, three IndoGAP conformity assessment bodies have been certified to ISO/IEC 17065. This year, 68 farmers applied for IndoGAP, 5 of whom have been certified as part of the accreditation process.
Kyrgyzstan	- To develop a fit-for-purpose quality infrastructure system, UNIDO supported calibration and testing laboratories to implement quality management standards and improve the quality of measurements. At the micro-level, the project worked closely with stakeholders—focusing on womenled enterprises—to enhance their capacity to comply with standards, technical regulations and market requirements along the value chain. This contributes to gender equality

	and reduces prejudices around women's competences in industry, and is also achieved through tailored technical guidance for ISO 22000. - EcoFloris, a woman-led and majority women-staffed SME producing herbal and fruit tea, was supported to improve its production process, transportation and product safety. Despite the COVID-19 pandemic, EcoFloris has maintained uninterrupted production, constant release of new products, and diversification of production. - Overall, UNIDO´s support has positively impacted income generation and market opportunities for Kyrgyz SMEs.
Peru	- To consolidate the productivity and efficiency of coffee and cocoa farmers and producers in the San Martin Region, UNIDO is strengthening eight farmer cooperatives in terms of infrastructure, equipment, and technical assistance. It has supported six quality coffee laboratories and provided specialised training for 40 professionals working there. - Moreover, the project has developed and disseminated four national standards and 16 technical guidelines for the application of relevant standards to establish better processes for coffee and cocoa. - As a result of this support, farmers and producers will be able to sell their coffee at a higher price, earning more and providing them with better development opportunities for themselves, their families, and communities in the long run. Ultimately, better products lead to higher prices and increased income leads to an improved quality of life.
Philippines	- Ultimately, the efforts of the GQSP Philippines will, allow local PPE producers to compete with lower-priced, imported PPE and ensure compliance of PPE with international standards and certifications required for exporting PPE, thus improving the capacity of local manufacturers to access global markets and value chains. (PPE = personal protective equipment)
South Africa	- In 2020, the national Multistakeholder Quality Forum (MSQF) was formed, with support from the GQSP South Africa, to act as an umbrella body through which the collective strength could be leveraged of government, South African technical/ quality infrastructure institutions, and the various private sector SQAM [Standardization, quality assurance, accreditation and metrology] service providers in order to respond to the needs of industry and ensure the protection of the health and safety of consumers. This initiative brings together the specialized organizations and private sector associations that operate at national level and are active in promoting and implementing quality infrastructure activities as a tool for sustainable economic development. The MSQF members have developed a collective website through which the members' different service offerings are available in one place without duplicating what is already available on the individual websites, enabling SMEs to obtain the information they need before being referred to the correct service provider.
Ukraine	- To support the sector UNIDO, in close cooperation with the Swiss University of Bern, has put at the disposal of wooden window producers a new testing scope that will equip them to measure the thermal performance of their products, optimize their design and make them more energy efficient. - At a time when many firms have had to relocate their production, the new capacities will allow labs to provide the service remotely through simulation-based calculation, reaching their customers throughout the country. The new testing scope will become an integral part of Ukrainian laboratories' offer of services and is the first step of a wider strategy aimed at building digital capacities among labs to improve their future resilience. - Producing energy-efficient windows can enable local producers to meet domestic and international performance requirements and gain access to new markets, ultimately contributing to creating a more sustainable future in Ukraine and beyond.
Vietnam	- The GQSP Vietnam works with partners to build a reliable testing service to boost mango export in Mekong Delta, which is primarily achieved through

	capacity building for residue testing labs and developing a residue-monitoring programme for mangoes. - Hands-on training and technical support have strengthened the capacity of pesticide testing laboratories networked across Vietnam. Two testing labs also have been selected to receive intense training to increase accuracy. Key pesticide residue laboratory staff now have a greater appreciation of modern approaches to internal quality control, implementing sampling principles and practices, and interpretation of pesticide residue analytical results, following the European Plant Protection Organization's complete set of standards. - Most importantly, a scientifically valid residue-monitoring programme was developed for commonly exported mango varieties in two Mekong Delta provinces, providing a model for roll-out to the remaining horticulture sectors. Overall, the GQSP Vietnam has assisted in unlocking global markets for Vietnamese mango exports.

Table: Evaluation Team, based on GQSP Impact Stories, 2023.

Annex 3: Theory of change analysis

The mid-term evaluation of the GQSP (2021) made the following recommendation (recommendation 7):

> *Revise and adapt the GQSP theory of change to better reflect the different levels (global and country level, component 1 and 2) and the interplay between the different levels. Start with the narrative of the theory of change. Explain the means-ends relationships between the two components in a stringent way (which elements of component 1 lead to which element of component 2, and vice versa, e.g., piloting of new tools). Once the narrative is established, redraw the ToC figure …. Make explicit the fundamental assumptions in order for the GQSP interventions to lead to impact (increased export). Vigorously assess the assumptions underlying the claim that the three GQSP outcomes will ultimately contribute to more export.*

The GQSP has revised the theory of change which is included in the new programme document for the GQSP phase 2. The theory of change encompasses a narrative and a figure. Some reflections:

- **New ToC figure** (Chart A):
  - The new ToC figure is like the original ToC figure too simplistic and does not reflect the complexity of competitiveness and export promotion. It suggests that in order to enhance competitiveness and export (ultimate objective), it is sufficient to strengthened compliance capacity with regard to quality and standards through the wide adoption of standards and good practices (transformation goal). In comparison, the theory of change prepared for the GQSP Kyrgyzstan reflects the complexity of competitiveness much better (Chart B).
  - The means-ends relationships (the three green arrows) are too generic in the new ToC figure (Chart A). The causality links do not show in a stringent way (which element A leads to which element B). In comparison, the ToC of the GQSP Kyrgyzstan makes an effort to show all the relevant means-ends relationships (the coloured lines).
  - The assumptions are missing in the new ToC figure. In comparison, the ToC figure for the GQSP Kyrgyzstan includes 10 key assumptions.
  - The ToC figure does not show the interplay between the two levels of the GQSP, i.e. the global and the country level (although two "GQSP contributions" included are at the global level, i.e., "though leadership" and "global public goods")
- **New ToC narrative** (GQSP programme document phase 2, 2023, p. 16-18):
  - The ToC narrative of the new ToC is better compared with the new ToC figure. In particular, it elaborates the conditions required for enterprises to meet market requirements and become competitive ("key condition 4") such as improved cost competitiveness (i.e. through enhanced productivity), improved quality (i.e. through standards compliance) and improved delivery capacity (i.e. through enhanced collective capacity, cluster development, and other collective efforts).
  - While hinting at the complexity of enhancing competitiveness under "key condition 4", the ToC narrative then largely ignores the complexity and focusses on improving quality. While this is the core mandate of the GQSP, the other conditions need to be highlighted and addressed as "assumptions" of the GQSP which are beyond the control of the GQSP. However, assumptions are not addressed in the new narrative. (e.g., "SMEs

are ready for investments to improve productivity", "the infrastructure (e.g. ports) in the country enables export").

- The ToC narrative does not explain precisely how the two levels of the GQSP, i.e. the global and the country level interact. The two "GQSP contributions" at the global level, i.e., "though leadership" and "global public goods" are described in a very generic way.
- The narrative acknowledges that at the country-level projects could have a more targeted theory of change adjusted to the specific country context. However, the theories of change used at the country level are very similar to the theory of change provided at the global level, with the exception of the GQSP Indonesia and the GQSP Kyrgyzstan.

Chart A: Theory of change – GQSP phase 2 – ignoring the complexity of enhancing competitiveness

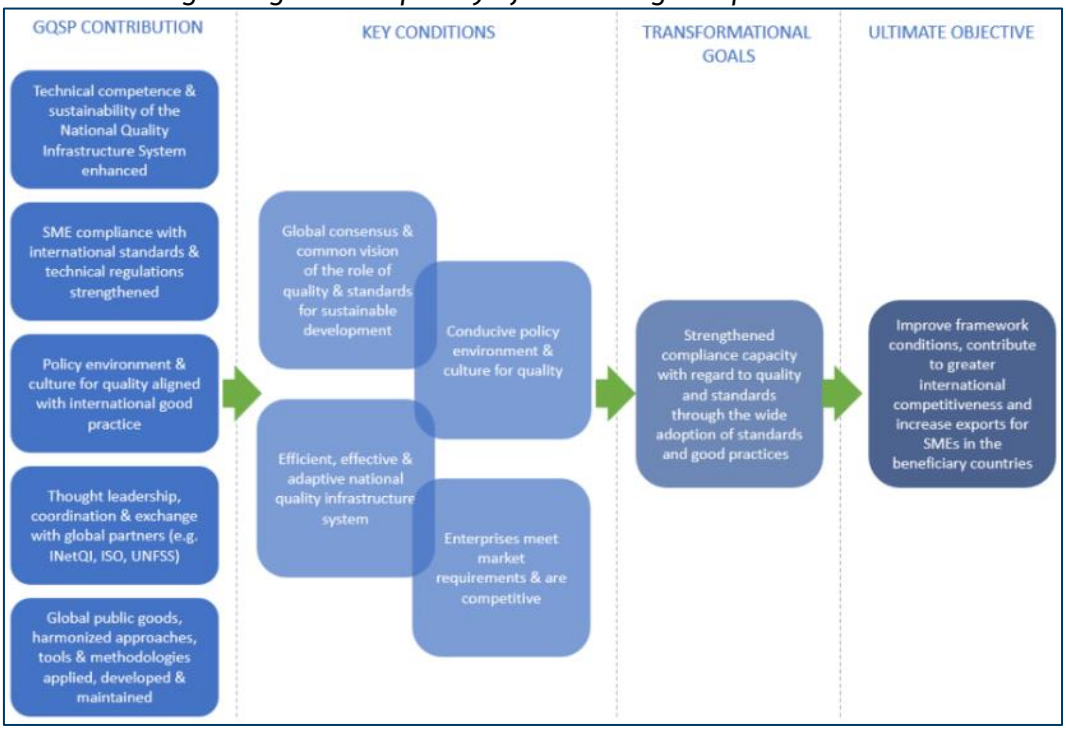


Chart: GQSP programme document phase 2, 2023, p. 19

Chart B: Theory of change GQSP Kyrgyzstan – reflecting the complexity of enhancing competitiveness

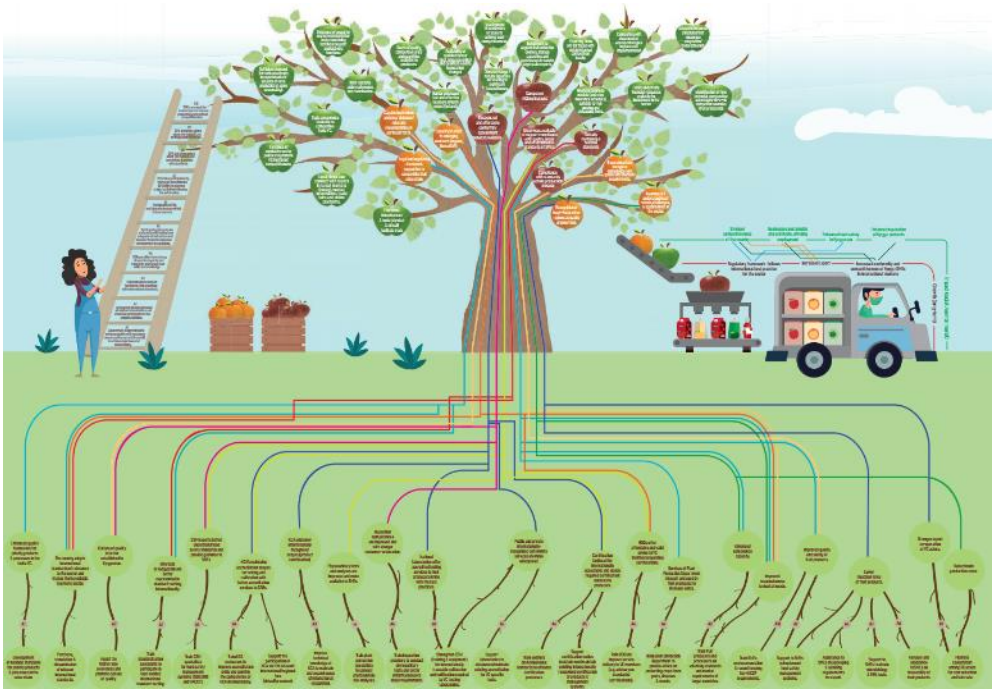


Chart: Brochure Theory of Change GQSP Kyrgyzstan

Annex 4: List of persons interviewed or in focus group discussions

Global level

- Mr Steffen Kaeser, Programme Manager, GQSP, UNIDO, Vienna
- Ms Dorina Nati, Programme Coordinator, GQSP, UNIDO, Vienna
- Mr Bernard Bau, Project Manager, GQSP South Africa, UNIDO, Vienna
- Mr Juan Pablo Diaz-Castillo, Programme Manager, GQSP Colombia, Peru and Kyryzstan, UNIDO, Vienna
- Mr Nima Bahramalian, Project Manager, GQSP Indonesia, GQSP Vietnam and GQSP Philippines, UNIDO, Vienna
- Ms Hnin Yin Cho - Project Assistant, GQSP, UNIDO, Vienna
- Mr Etienne Jenni, Programme Manager, Trade Promotion, State Secretariat for Economic Affairs SECO, Bern
- Mr Patrick Sieber, Programme Manager, Trade Promotion, State Secretariat for Economic Affairs SECO, Bern

Indonesia

- Mr Cahyadi - Assistant Deputy for Aquaculture Development, Coordinating Ministry for Maritime Affairs and Investment - Jakarta
- Ms Violette Ruppanner - Head of Economic Cooperation and Development (SECO), Embassy of Switzerland in Indonesia, Jakarta
- Ms Dine Chandra Devi – National Program Officer SECO, Embassy of Switzerland in Indonesia, Jakarta
- Mr Salil Dutt - Officer in Charge of UNIDO Jakarta Office - UNIDO - Jakarta
- Mr Sudari Pawiro - NCTA - PSO team of GQSP Indonesia - Jakarta
- Ms Ita Sualia - COO - PSO team of GQSP Indonesia - Jakarta
- Ms Noordiana Kamilya - PA - PSO team of GQSP Indonesia - Jakarta
- Ms Aliyah Sakinah - Jr. Value Chain Expert - PSO team of GQSP Indonesia - Jakarta
- Ms Nency Maharani - Team Assistant - PSO team of GQSP Indonesia - Jakarta
- Ms Bu Suhaimi A. Kasman (Nanu) - Head of Collaboration Team - National Standardization Body (BSN) - Thamrin, Jakarta
- Mr Heru Suseno - Director of Standard Development for Agro, Chemicals, Health and Halal - National Standardization Body (BSN) - Thamrin, Jakarta
- Ms Rosalia Surtiasih - National Standardization Body (BSN) - Thamrin, Jakarta
- Mr Pak Andri Gandi - Standardization Analyst - National Standardization Body (BSN) - Thamrin, Jakarta
- Ms Bu Yurridha Amarin Mahardinis - Standardization Analyst - National Standardization Body (BSN) - Thamrin, Jakarta
- Ms Triningsih Herlinawati - Director of Strengthening Standard and Conformity Assessment - National Standardization Body (BSN) - Thamrin, Jakarta
- Mr Pak Agustinus Praba Drijarkara - Director of Laboratorium Accreditation - National Standardization Body (BSN) - Thamrin, Jakarta
- Ms Umi Nuraeni - Deputy Director of National Standards for Measurement Units of Radiation and Biology - National Standardization Body (BSN) - Thamrin, Jakarta
- Mr Y. Kristianto Widiwardono - Deputy for National Standards Units of Measurement - National Standardization Body (BSN) - Thamrin, Jakarta
- Ms Umi Nuraeni - Deputy Director of National Standards for Measurement Units of Radiation and Biology - National Standardization Body (BSN) - Thamrin, Jakarta
- Mr Y. Kristianto Widiwardono - Deputy for National Standards Units of Measurement - National Standardization Body (BSN) - Thamrin, Jakarta
- Ms Lia Sugihartini - Coordinator for Fishery Industry of the Directorate of Processing and Quality Improvement - Directorate General of Product Competitiveness, MMAF - Gambir, Jakarta

- Mr Catur Wicaksono - Coordinator for Standardization of the Directorate of Processing and Quality Improvement - Directorate General of Product Competitiveness, MMAF - Gambir, Jakarta
- Ms Bu Ety Kurniawati - Inspector Mutu - National Center for Examination of Marine and Fisheries Product Implementation (BBP3KP), MMAF - Gambir, Jakarta
- Ms Prihastini Ngudi Lestari - Inspector Mutu - National Center for Examination of Marine and Fisheries Product Implementation (BBP3KP), MMAF - Gambir, Jakarta
- Ms Erna Yuniarsih - Head of Cooperation Sub Division - Directorate General of Aquaculture, MMAF - Gambir, Jakarta
- Mr Asep Suhendra - Quality Manager of BBPBAT Sukabumi - Center for Freshwater Aquaculture Centre (BBPBAT), Sukabumi - Gambir, Jakarta
- Mr Aji Purbayu - Coordinator of Public Relations and Cooperation - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Gambir, Jakarta
- Ms Rizky Dewi - Sub-coordinator for Regional Cooperation - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Gambir, Jakarta
- Ms Kiki Puspita Amalia - Fisheries Inspector of Quality Control Center - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Gambir, Jakarta
- Ms Rini Widayati - PHPI - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Gambir, Jakarta
- Ms Anissa Zalsabilla - PHPI - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Gambir, Jakarta
- Mr Y. Kristianto Widiwardono - Deputy for National Standards Units of Measurement - National Standardization Body (BSN) - Serpong
- Ms Umi Nuraeni - Deputy Director of National Standards for Measurement Units of Radiation and Biology - National Standardization Body (BSN) - Serpong
- Mr RM. Ende Dezeanto - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Setu
- Ms Rini Widayati - PHPI - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Setu
- Ms Zakiyah Widowati - Leader of the team for the development of techniques and methods for fish health, quality, and HACCP testing - Agency for Control and Quality Monitoring of Marine Products and Fisheries, MMAF - Setu
- Mr Pontas Tambunan - Vice Chairman of Association - Indonesian Seaweed Industry Association (ASTRULI) - Pasar Minggu
- Mr Budhi Wibowo - Chairman of Association - Indonesian Shrimp Forum (FUI) - Pasar Minggu
- Mr Budhi Wibowo - Chairman of Association - Indonesia Fishery Product Processing & Marketing Association (AP5i) - Pasar Minggu
- Mr Mumfaizin - Chairman of Association - Association of Indonesian Milkfish Business Actors (ASPUBI) - Pasar Minggu
- Mr Imza Hermawan - Chairman of Association - Indonesian Catfish Entrepreneurs Association (APCI) - Pasar Minggu
- Mr Usup Supriatna - Head of Cooperative - Agar Mina Makmur (cooperative) - Pasar Minggu
- Mr Arman Arfah - Head of Cooperative - Serikat Pekerja Merdeka Indonesia KOSPERMINDO (cooperative) - Pasar Minggu
- Mr Irsyadi Sirajudin - Director of Jasuda - PT (LLC). Jaringan Sumber Daya - Pasar Minggu
- Mr Suyanto - Farmer - Mina Kendalbulur Lestari Group (Pangasius farmer group) - Pasar Minggu
- Mr Yudha Arief - Farmer - Kusuma Pribadi Group (Catfish farmer group) - Pasar Minggu
- Mr Murdianto/Yuni - Farmer - CV Ajaib Toha Putra - Pasar Minggu
- Mr Riyawan Saputra - Farmer - Baba Mentari (processor) - Pasar Minggu
- Ms Lusia Dwi Hartininngsih - Employee - Extension Centre of MMAF - Pasar Minggu
- Ms Lea Indah Lulu Tantina - Employee - Extension Centre of MMAF - Pasar Minggu
- Ms Yenni Nuraeni - Vice Director 2 - AUP Polytechnic - Pasar Minggu
- Ms Ita Junita Puspadewi - Vice Director 3 - AUP Polytechnic - Pasar Minggu
- Ms Sinar Pagi Sekitiana - Head of Aquaculture Program Study - AUP Polytechnic - Pasar Minggu
- Mr I Ketut Sumadiarsa - Head of Fish Processing Program Study - AUP Polytechnic - Pasar Minggu
- Ms Rufnia Ayu Afifah - Cooperative Team - AUP Polytechnic - Pasar Minggu
- Mr DH. Guntur Prabowo - Director of Karawang Polytechnic - Karawang Fisheries Polytechnic - Pasar Minggu

- Ms Romauli Juliana Napitupulu - Head of the fish processing study program - Karawang Fisheries Polytechnic - Pasar Minggu
- Ms Devi Wulansari - Lecturer on Karawang Polytechnic - Karawang Fisheries Polytechnic - Pasar Minggu
- Mr Agung - TBC - TBC - Pasar Minggu
- Mr Pak Nur Muflich Juniyanto - Head of BBPBAP Takalar - Center for Brackish Water Aquaculture (BBPBAP), Takalar - Pasar Minggu
- Mr Pak Khairil Jamal - TBC - Center for Brackish Water Aquaculture (BBPBAP), Takalar - Pasar Minggu
- Mr Irsyadi - Director of Jasuda - PT (LLC). Jaringan Sumber Daya - Pasar Minggu
- Mr DH. Guntur Prabowo - Director of Karawang Polytechnic - Karawang Fisheries Polytechnic - Karawang
- Ms Romauli Juliana Napitupulu - Head of the fish processing study program - Karawang Fisheries Polytechnic - Karawang
- Ms Devi Wulansari - Lecturer on Karawang Polytechnic - Karawang Fisheries Polytechnic - Karawang
- Ms Ghayah Fattaah Sya - Person in charge Teaching Factory - Karawang Fisheries Polytechnic - Karawang
- Mr Usup Supriatna - Head of Cooperative - Agar Mina Makmur (cooperative) - Karawang
- Mr Nima Bahramalian - Project Manager - GQSP Indonesia, GQSP Vietnam and GQSP Philippines – UNIDO, Vienna
- Ms Hnin Yin Cho - Project assistant – GQSP, UNIDO, Vienna

Vietnam

- Mr Peter Johnson, International expert on Tropical fruit value chain, GQSP Vietnam expert, online
- Dr. Tran Thanh Tung, Director, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Mr Le The Tan, Deputy Director, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Ms Le Pham Doan Trang, Pertiside Residue Lab manager, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Mr Nguyen Duc Minh, staff, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Mr Bui Quoc Thai, staff, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Ms Le Thi Thanh Thuong, staff, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Ms Nguyen Thi Phuc, staff, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Ms Le Thu Thuy, staff, Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- Mr Le Thu Lam, Vice Director, South Institute of Agriculture Engineering and Post Harvest Technology (SIAEP), Ho Chi Minh City.
- Ms Tran Thi Kim Oanh, Head of Postharvest Department, South Institute of Agriculture Engineering and Post Harvest Technology (SIAEP), Ho Chi Minh City.
- Mr Ngo Van Binh, Head of General Department, South Institute of Agriculture Engineering and Post Harvest Technology (SIAEP), Ho Chi Minh City.
- Mr Nguyen Vinh Phuc, researcher, South Institute of Agriculture Engineering and Post Harvest Technology (SIAEP), Ho Chi Minh City.
- Ms Lam Dong Pho, researcher, South Institute of Agriculture Engineering and Post Harvest Technology (SIAEP), Ho Chi Minh City.
- Mr Dang Phuc Nguyen, General Secretary of Vinafruit, Vietnam Mango Association (VMA) and Fruit and Vegetable Association (Vinafruit) , Ho Chi Minh City.
- Ms Nguyen Thi Hue, Secretariat of VMA, Vietnam Mango Association (VMA) and Fruit and Vegetable Association (Vinafruit) , Ho Chi Minh City.
- Ms Do Hong Nhung, VMA Secretary assistant, Vietnam Mango Association (VMA) and Fruit and Vegetable Association (Vinafruit) , Ho Chi Minh City.
- Mr Nguyen Phong Phu, Technical Director of Vina T&T company , Vietnam Mango Association (VMA) and Fruit and Vegetable Association (Vinafruit) , Ho Chi Minh City.
- Mr Nguyen Duy Duc, National expert on Tropical fruit value chain, Ho Chi Minh City

- Mr Nguyen Khac Huy, General Director,Hoang Phat company ,Long An province
- Ms Nguyen Nam Phuong Thao, Sale Director,Hoang Phat company ,Long An province
- Mr Nguyen Van Tai, VHT factory manager,Hoang Phat company ,Long An province
- Mr Nguyen Quoc Bao, Chaiman of Cooperative, Buoi Da Xanh Pomelo cooperative, Ben Tre province
- Ms La Thi Nga, Business Director, Buoi Da Xanh Pomelo cooperative, Ben Tre province
- Ms Le Thanh Thuy, Quality Manager, Chanh Thu company, Ben Tre province
- Mr Le Van Thoai, Director, Verification and Testing Center (DOVETEC), Dong Thap province
- Ms Vo Thi Bich Tran, Head of testing analysis department, Verification and Testing Center (DOVETEC), Dong Thap province
- Mr Pham Hoang Phi, deputy head of testing analysis department, Verification and Testing Center (DOVETEC), Dong Thap province
- Ms Huynh Thi Ngoc, deputy head of testing analysis department, Verification and Testing Center (DOVETEC), Dong Thap province
- Ms Dinh Kim Nhung, Director of Kim Nhung company, Dong Thap province
- Mr Le Hoang Tung, Director of Tan Thuan Tay cooperative, cum Chairman of Mango Farm Club in Cao Lanh, Dong Thap province.
- Mr Ba, mango orchard owner (3 ha), member of Tan Thuan Tay mango cooperative,Dong Thap province
- Ms Hoang Mai Van Anh, GQSP Vietnam project coordinator, Hanoi.
- Ms Nguyen Ngoc Dung, GQSP project assistant, GQSP Vietnam project coordinator, Hanoi
- Ms Le Thi Thanh Thao, UNIDO country representative , UNIDO country representative, Hanoi
- Mr Ta Quang Kien, former Head of Trade Policy, Agro Processing and Market Development (Agro-Trade), MARD , NAFQIPM, Was not available, questions sent by email.
- Ms Nguyen Thi Quyen, Director of International Cooperation Department , STAMEQ, Hanoi
- Ms Dinh Thi Tam, Deputy Director General, VIAEP,Hanoi
- Mr Nguyen Manh Hieu, Director of Preservation Division, VIAEP,Hanoi
- Ms Quynh, Post-harvest technology Expert, VIAEP,Hanoi
- Ms Vu Thi Nga, Post-harvest technology Expert , VIAEP,Hanoi
- Mr Mr. Jonas Grunder, Deputy Head of Cooperation, SECO office in Vietnam,Hanoi
- Mr Do Quang Huy, National Programme Officer, SECO office in Vietnam,Hanoi
- Ms Ngo Thi Phuong Dung, Deputy Director of International Cooperation, Plant Protection Department, Hanoi

Colombia

- Ms Carolina Gonzalez, UNIDO representative Colombia and Andean Region
- Mr Julien Robert, Country Director, SECO
- Mr Gabriel Cárdenas, Programmes Officer, SECO
- Ms Helen Mier, Regional Chief Technical Advisor, UNIDO
- Mr Juan Pablo Diaz-Castillo, Programme Manager, UNIDO
- Mr Javier Fernandez, GQSP National Coordinator, UNIDO
- Ms Claudia Camargo, GQSP National Quality Consultant, UNIDO
- Ms Milena Cepeda, GQSP Consultant for Laboratories, UNIDO
- Mr Mario Sánchez, GQSP Consultant for the Chemical Industry, UNIDO
- Ms Jenny Urrego, GQSP Management Systems Consultant, UNIDO
- Mr Zeus Artunduaga, GQSP Adminsitrative Officer, UNIDO
- Mr Hernán Alonso Zúñiga, Regulation Director, Ministry of Commerce
- Ms Beatriz Franco, Regulation Department Lawyer, Ministry of Commerce
- Mr Miguel Rincon, International Cooperation Department Officer, Ministry of Commerce
- Mr Sergio Rico, Sectorial Coordinator – GQSP focal point Colombia Productiva.
- Ms Dania Palacio, Senior Officer, Colombia Productiva.
- Ms Daniela Sotello, Chemicla Industry Committee Director, ANDI – Sectorial & Commercial entity
- Ms Paola Ruje, Technical Director, ACOPLASTICOS - Sectorial & Commercial entity
- Ms Maria José Isaza, Sectorial Director, ACOPLASTICOS - Sectorial & Commercial entity
- Ms Monica Vivas, Normalization Directorate, ICONTEC
- Ms Sonia Sarmiento, Normalization Leader Officer, ICONTEC
- Mr Daniel Trillos, Normalization Sub-Directorate, ICONTEC
- Ms Ana María Prieto, Research Director, SIC

- Mr Pedro Pérez Vargas, Legal Metrology Coordinator, SIC
- Ms María del Rosario Gonzalez, General Director, INM
- Ms Erika Pedraza, General Directorate Officer, INM
- Ms Juliet Villarraga, Chemical Metrology Sub-Direction, INM
- Ms Anna Porras, International Department Officer, INVIMA
- Mr Pablo Rincon, International Department Officer, INVIMA
- Ms Jenny Suarez, Biological products and medicaments Department Officer, INVIMA
- Ms Ligia Rodriguez, Cosmetics, Hygene, Department Officer, INVIMA
- Ms Marta Martinez, Techcnical Department Coordinator, INVIMA
- Ms Camila Suarez, Laboratory Department Officer, INVIMA
- Ms Tatiana Cortez, Laboratory Department Coordinator, INVIMA
- Mr Tulio Valero, Technology and Information System Department Officer, INVIMA
- Ms Yasmin Lopera, General Manager and Fundator, AOXLAB
- Mr Dario Pardo, Technical Director, AOXLAB
- Mr Jose Ignacio Rojo, General Manager, GLOCOSME – Natural ingredients enterprise
- Mr Andres Rodriguez, General Manager, SANAM – Natural ingredients enterprise
- Mr Luis Mauricio Lopez, Operations Director, POLIKEM, Industrial cleaning products
- Ms Derly Rueda, Admisnitrative Manager, PET Y SOLO PET, Post-industrial plastic
- Ms Ricardo López, Operations Director, STO Pinturas
- Ms Alexandra Rodriguez, Industrial Health Engineer, STO Pinturas
- Mr Freddy Martinez– Development and Control Engineer, STO Pinturas
- Ms Norma Perilla, General Manager, MICOTOX
- Ms Julyet Sanchez, Quality and Laboratory Officer, MICOTOX

Peru

- Mr Mauricio Chiaravalli, Country Representant, SECO, Lima.
- Mr Ricardo Paredes, National Coordinator, GQSP, Lima.
- Ms Nathalie Vela, National Coordinator, Programme for Countries Partnership, PCP.
- Mr Jorge Tello, Strategic Director and GQSP Focal Person, INACAL, Lima.
- Ms Patricia Aguilar, Acreditation Director, INACAL, Lima.
- Mr Jose Dajes, Metrology Director, INACAL, Lima.
- Ms Rosario Uria, Normalization Director, INACAL, Lima.
- Ms Lily Elliot, International Standardization Officer, INACAL, Lima.
- Mr Pedro Molina, organic Production Director, SENASA, Lima.
- Mr Cesar Arevalo, Laboratory Manager, Instituto de Cultivos Tropicales, San Martin.
- Mr Juan Carlo Cruz, Laboratories Department Director, INIA, Lima.
- Mr Jorge Morocho, Director, SERNANP Laboratory, San Martin.
- Mr Elvis Garcìa, General Manager, ADISA Coffee Cooperative, San Martin
- Mr EnrQIue Tafur, General Manager, APROECO Coffe Cooperative. , San Martin
- Mr Jose Delgado, Technical Supervisor, APROECO Coffe Cooperative, San Martin
- Mr Erik Guevara, Techncial Assitant, APROECO Coffe Cooperative, San Martin
- Mr Ander Guevara, Field Technician, APROECO Coffe Cooperative, San Martin
- Mr Gover Cueva, Quality Technician, APROECO Coffe Cooperative, San Martin
- Ms Delicia Guzman, Admisnitrative Officer, APROECO Coffe Cooperative, San Martin
- Mr Clever Sanchez , Admisnitrative Officer, APROECO Coffe Cooperative, San Martin.
- Ms Marisely Guevara, General Manager, APROSELVANOR Coffee Cooperative, San Martin
- Mr Stalin Hoyos, Manager, Frutos de Selva Coffee Cooperative, San Martin
- Mr Carlos Angulo, General Manager, ALLIMA Cocoa Cooperative, San Martin
- Mr Himer Mas, General Manager and Founder, MONTE AZUL Cacao Cooperative, San Martin
- Mr Gonzalo Rios, General Manager, ACOPAGRO Cocoa Cooperative, San Martin.

South Africa

- Dr Elsie Meintjies (Ms), CTA, GQSP SA, Pretoria
- Mr Levy Maduse, UNIDO National Programme Officer, UNIDO Regional Office, Pretoria
- Ms Claudy Steyn, Chief Director, Directorate Chemicals, Cosmetics, Plastics and Pharmaceuticals, Department of Trade, Industry and Competition (dtic), Pretoria
- Ms Sinah Mosehla, Director Cosmetics, GQSP-SA focal point, Directorate Chemicals, Cosmetics, Plastics and Pharmaceuticals, Department of Trade, Industry and Competition (dtic), Pretoria

- Ms Khosi Mayekiso, Assistant Director, Cosmetics, GQSP-SA focal point, Directorate Chemicals, Cosmetics, Plastics and Pharmaceuticals, Department of Trade, Industry and Competition (dtic), Pretoria
- Ms Anna-Marie Lotter, Director, Technical Quality Infrastructure, Multistakeholder Quality Forum (MSQF), Department of Trade, Industry and Competition (dtic), Pretoria
- Ms Anya Knoetze, National Expert (training courses; rerun of C4Q tool), Pretoria
- Mr Thabo Hlongwane, Standards Development Supervisor, Natural Sciences, South African Bureau of Standards (SABS), Pretoria
- Mr Tshepo Modiba, Acting GM, Legal Metrology unit, National Regulator of Compulsory Standards (NRCS)
- Mr Jaco Marneweck, Senior Manager Legal Metrology and Regional Coordinator for SADCMEL, South African Bureau of Standards (SABS), Pretoria
- Dr Maria Fernandez-Whaley, Senior Manager Analytical and Material Sciences, National Metrology Institute of South Africa (NMISA), Pretoria
- Ms Penny Manganyi, Senior Manager African Reference Institute, National Metrology Institute of South Africa (NMISA), Pretoria
- Dr Ashwell Ndhlala, Bioeconomy Development Specialist, Essential Oil Testing Laboratory, University of Limpopo, Polokwane
- Ms Dineo Raphasha, Essential Oil Testing Laboratory, University of Limpopo, Polokwane
- Mr Keratilwe Mokoditoa, Essential Oil Testing Laboratory, University of Limpopo, Polokwane
- Ms Karen Swanepoel, Executive Director, Southern African Essential Oils Producer Association (SAEOPA), Pretoria
- Ms Marianna du Plessis, Secretary, Southern African Essential Oils Producer Association (SAEOPA), Pretoria
- Ms Nnana Makhubu, Owner, Senzubuhle (SME), Chairperson of SAEOPA, Mpumalanga
- Ms Sanelisiwe Makhubu, Senzubuhle (SME), Mpumalanga
- Ms Nosipo Mkumatela, Director, Phatsima Shayde (SME), Limpopo
- Mr Henry Mahlobo, Owner, BNX (SME), KwaZulu Natal
- Ms Nolwazi Mahlobo, BNX (SME), KwaZulu Natal
- Ms Riana Minnaar, Owern, Highland Essential Oils (SME), Clocolan
- Ms Annarie Van den Heever, Personal Assistant, Highland Essential Oils (SME), Clocolan
- Mr Tafara Shuro, CEO, QOBO QOBO (SME), Eastern Cape
- Ms Anna Reyneke, Country Representative South Africa, SIPPO, Swiss Import Promotion Programme, Pretoria
- Mr Gordon Gleimius, Export Promotion Assistant, SIPPO, Swiss Import Promotion Programme, Pretoria
- Mr Danie Lauchenauer, Head of SECO South Africa Office, Embassy of Switzerland, Pretoria
- Mr Shakespear Mudombi, Programme Manager SECO South Africa Office, Embassy of Switzerland, Pretoria
- Dr Shawn Cunningham, Process Consultant, Mesopartner, Pretoria
- Dr Idan Chiyanzu, Senior Researcher, Agriculture Research Council (ARC), Pretoria
- Ms Mosima Monareng, Research Technician, Agriculture Research Council (ARC), Pretoria

Kyrgyzstan

- Mr Juan Pablo Diaz-Castillo, Project Manager, GQSP Kyrgyzstan, UNIDO, Vienna.
- Ms Nurgul Baiburaeva, National project coordinator, Bishkek.
- Mr Zhanybek Saatov, National monitoring & admin associate, Bishkek.
- Mr Damir Bisembin, Senior Programme Officer /Economic Affairs, Embassy of Switzerland in the Kyrgyz Republic, Bishkek.
- Ms Nathalie Sémoroz, Senior Water Policy Advisor, Federal Department of Foreign Affairs (FDFA), Swiss Agency for Development and Cooperation (SDC), Berne (former staff member of the Embassy of Switzerland in the Kyrgyz Republic)
- Mr Rustam Baltabaev, Executive Director, Agricultural Development Association of Kyrgyzstan, Bishkek.
- Ms Elena Novikova, Director, Ecofloris LLC, Djal village, Chui Region
- Mr Bakyt Shabdanov, Head of Technical Regulations and Metrology Department, Ministry of Economy and Commerce of the Kyrgyz Republic, Bishkek.
- Mr Bolotbek Nurmatov, Director, Centre for Standardization and Metrology (CSM), Ministry of Economy and Commerce of the Kyrgyz Republic, Bishkek.

- Mr Almaz Baialiev, UNIDO Expert on Metrology and Head of Metrology Department, Centre for Standardization and Metrology (CSM), Ministry of Economy and Commerce of the Kyrgyz Republic, Bishkek.
- Ms Dinara Aitmurzaeva, Head of Sandardization Department, Centre for Standardization and Metrology (CSM), Ministry of Economy and Commerce of the Kyrgyz Republic, Bishkek.
- Ms Aigul Aksupova, UNIDO Expert on Testing Lab and Head of Testing Laboratory, Centre for Standardization and Metrology (CSM), Ministry of Economy and Commerce of the Kyrgyz Republic, Bishkek.
- Mr Kanatbek Kyrgyzbaev, Head of Metrology Department, Regional Laboratory of CSM, Karakol.
- Ms Batmagul Rakhmankulova, Head of Certification Department, Regional Laboratory of CSM, Karakol.
- Ms Gulushkan Tailakova, Head of Laboratory, Centre for State Sanitary and Epidemiological Supervision, Karakol.
- Mr Vladimir Makarenko, Director, Sazanovskiy LLC (fruit juice production company); Issyk-Kul Oblast.
- Mr Ishen Kozhaliev, Head of Cooperative, Ichke-Suu Cooperative, (fruit processing cooperative), Issyk-Kul Oblast.
- Mr Asylbek Barakanov, Head, Regional Laboratory of CSM, Cholpon-Ata.
- Ms Tatiana Bulyga, Technologist, Oberon LLC (fruit and vegetable warehouse company), Balykchy.
- Mr Aitbek Ajibekov, National Project Coordinator of Food Safety Project, FAO, Bishkek.
- Ms Hanna Sabass, Head of Programme, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Bishkek.
- Mr Salmorbek Asanaliev, Advisor, Green Economy and Sustainable Private Sector Development in Kyrgyzstan, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Bishkek.

Georgia

- Ms Nino Manvelidze (Ph.D.), Irma Chanturia's Wine Laboratory, Quality Manager, UNIDO/GQSP National Technical Advisor, Board Member of the GeLab, Tbilisi
- Mr lia Kunchulia, Certification Specialist, Georgian Farmers Association (GFA), Tbilisi
- Ms Tinatin Jajanidze, Director, Irma Chanturia Wine Laboratory, Tbilisi
- Mr Irakli Guledani, Director, LEPL State Laboratory of Agriculture (SLA), Ministry of Environmental Protection and Agriculture (MEPA), Tbilisi
- Ms Ana Gulbani, Deputy Director, LEPL State Laboratory of Agriculture (SLA), Ministry of Environmental Protection and Agriculture (MEPA), Tbilisi
- Mr Davit Pharkosadze, Deputy Director, LEPL State Laboratory of Agriculture (SLA), Ministry of Environmental Protection and Agriculture (MEPA), Tbilisi
- Mr Davit Tkemaladze, Director General, Georgian National Agency for Standards and Metrology (GeoSTM), Tbilisi
- Ms Nino Mikanadze, Director of Metrology Institute, Georgian National Agency for Standards and Metrology (GeoSTM), Tbilisi
- Mr Sulkhan Tabagua, Head of Standardization Department, Georgian National Agency for Standards and Metrology (GeoSTM), Tbilisi
- Ms Tamar Sachaneli, Head of Microbiological Laboratory, Agro-ecological Learning-Scientific-Diagnostic Laboratory, LEPL Georgian Technical University , Tbilisi
- Ms Elene Sordia, Head of Physical-chemical Laboratory, Agro-ecological Learning-Scientific-Diagnostic Laboratory, LEPL Georgian Technical University , Tbilisi
- Mr Rezo Kobakhidze, Director, G.Natadze Scientific-Research Institute of Sanitation Hygiene and Medical Ecology, Tbilisi
- Ms Ina Kavtaradze, Head of Food Laboratory, G.Natadze Scientific-Research Institute of Sanitation Hygiene and Medical Ecology, Tbilisi
- Ms Natia Odikadze, Quality Manager, G.Natadze Scientific-Research Institute of Sanitation Hygiene and Medical Ecology, Tbilisi
- Mr Giorgi Ghambashidze, Head of Laboratory MEPA, LEPL Scientific-research Centre of Agriculture (SRCA), Natakhtari

- Ms Nutsa Khvadadze, National Junior Policy Officer, Food and Agriculture Organization of the United Nations (FAO), Tbilisi
- Ms Lia Aptsiauri, Director of GeLab, Head of Atmospheric Air, Water and Soil Analyses Laboratory, National Environment Agency, Tbilisi
- Mr Gia manjgaladze, Director/Head of Laboratory, Norma LTD, Tbilisi
- Ms Nino Chikvaidze, Quality Manager, Norma LTD, Tbilisi
- Mr Beka Tagauri, Head of Programme, Economic Development, Swiss Cooperation Office for the South Caucasus, Embassy of Switzerland, Tbilisi
- Mr Teimuraz Khomeriki, Programme Coordinator SECO, Swiss Cooperation Office for the South Caucasus, Embassy of Switzerland, Tbilisi
- Ms Ia Ebralidze, Branding Manager, Biological Farming Association Elkana, Tbilisi
- Mr Steve Sidney, UNIDO Expert, National Laboratory Association, South Africa
- Mr Dominic Blaettler UNIDO Experts, Lecturer in Rural Development & Innovation, School of Agricultural, Forest and Food Sciences HAFL, Bern University of Applied Sciences BFH, Switzerland
- Ms Pia Fehle, UNIDO Expert, Consultant, Switzerland
- Ms Alice Mosca, UNIDO Expert, Founder and Managing Partner of AIM, Portugal

Annex 5: List of sites visited (for observations)

Indonesia
- National Lab SNSU Building, Puspitek Office, Serpong, South Tangerang
- PTP provider, BUSKIPM, Setu, East Jakarta
- GQSP PSO office in Poltek AUP, Jakarta
- Karawang Fisheries Polytechnic, West Java Province
- Agar Makmur Seaweed farms, Agar Makmur
- Mina Agar Makmur Coperative-Pak Usup, Agar Makmur

Vietnam
- Southern Pesticide Control and Testing Centre (SPCC), Ho Chi Minh City.
- South Institute of Agriculture Engineering and Post Harvest Technology (SIAEP), Ho Chi Minh City.
- Vietnam Mango Association (VMA) and Fruit and Vegetable Association (Vinafruit), Ho Chi Minh City.
- Hoang Phat company, Long An province
- Buoi Da Xanh Pomelo cooperative, Ben Tre province
- Chanh Thu company, Ben Tre province
- Verification and Testing Centre (DOVETEC), Dong Thap province
- Kim Nhung company, Dong Thap province
- Blue Ocean company, Dong Thap province
- cum Chairman of Mango Farm Club in Cao Lanh
- Mango cooperative, Dong Thap province

Colombia
- Glocosme company, Cosmetics sector, Medellin
- Sanam company, Natural products sector, Medellin
- Aoxlab Laboratory, Medellín
- Polikem company, Industrial cleaning sector, Medellin
- PET Y SOLO PET company, PET producers – industrial recycling sector, Bogota
- Micotox company offices, Laboratory reference materials beneficiary, Bogota

Peru
- Collection center- Drying modules, ALLIMA Cacao Cooperative, San Martin.
- Collection center and Laboratoy, Aproselvanor Coffee Cooperative, San Martin.
- Collection center, ACOPAGRO Cacao Cooperative, San Martin

South Africa
- Organic Analysis Laboratory, National Metrology Institute of South Africa (NMISA), Pretoria
- Laboratory, Agriculture Research Council (ARC), Pretoria

Kyrgyzstan
- Testing Laboratory, Centre for Standardization and Metrology (CSM), Ministry of Economy and Commerce of the Kyrgyz Republic, Bishkek.
- Metrology Department, Centre for Standardization and Metrology (CSM), Ministry of Economy and Commerce of the Kyrgyz Republic, Bishkek.
- Regional Laboratory of CSM, Karakol.
- Regional Laboratory of CSM, Cholpon-Ata.
- Center for State Sanitary and Epidemiological Supervision, Karakol.
- Ecofloris LLC, (tea production company), Djal village, Chui Region.
- Sazanovskiy LLC (fruit juice production company), Issyk-Kul Oblast.
- Ichke-Suu Cooperative, (fruit processing cooperative), Issyk-Kul Oblast.
- Oberon LLC (fruit and vegetable warehouse company), Balykchy.

Georgia
- Irma Chanturia Wine Laboratory, Tbilisi
- Agroecological Learning-Scientific-Diagnostic Laboratory, Georgian Technical University, Tbilisi
- G.Natadze Sanitation, Hygiene and Medical Ecology Scientific-Research Institute, Tbilisi
- Laboratory at the Scientific-research Center of Agriculture (SRCA), Natakhtari
- Atmospheric Air, Water and Soil Analysis Laboratory, National Environment Agency, Tbilisi

Annex 6: List of key documents

Global level

- Advancing Gender Equality through Global Trade, UNIDO/GQSP, 2022.
- Global Quality and Standards Programme (GQSP) – Phase 2 (Programme Document), UNIDO, 2023.
- GQSP Inception Report (Phase 2), GQSP, 2023.
- Terms of Reference - Independent final evaluation - Global Quality and Standards Programme (GQSP), UNIDO, 2023.
- Independent mid-term evaluation - Global Quality and Standards Programme (GQSP), UNIDO, 2021.
- Global Quality and Standards Programme (GQSP) - Status quo of follow-up to recommendations from the mid-term evaluation (2021) as of July 2023.
- Global Quality and Standards Programme - Annual Report 2022, UNIDO, 2023.
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- GQSP Impact Stories, UNIDO/GQSP, 2023.
- Presentation during the inception call for this evaluation, GQSP, July 2023.

Indonesia

- Report on Approach and Methodology of the programme for cost Efficiency, Kick Off meeting, Jakarta, 2022
- Impact Assessment excel files, report and presentation, by Eko Ruddy Cahyadi , Indonesia 2023
- Final Report GQSP ID Phase 1, Indonesia, 2023
- Booklet on sustainable aquaculture value chains development for improving market access and livelihood, Indonesia 2022
- Article published on INFOFish 2022 by Mr. Sudari on the indonesian shrimp industry –trends and challenges, Indonesia 2022
- Article published on INFOFish 2023 by Mr. Sudari on Fish INDUSTRY PROFILE
- Article Published On Infofish 2023 Titled Strengthening The Milkfish Value Chain In Indonesia By Ita Sualia And Kuswantoro
- Article Published On Infofish 2023 Titled Small-Scale Seaweed Processing In Indonesia By Maria Gigih Setiarti And Yudhistira Wiryawan
- Impact Assessment of GQSP Indonesia
- GQSP Indonesia Draft Journal Seaweed
- GQSP Indonesia Draft Journal Panagsius
- GQSP Indonesia Brochure
- GQSP Indonesia 4th SC meeting material_2021
- Best Stories Internship Programme_AUP Polytechnic
- GQSP ID Women's leadership in Indonesia’s modern seaweed processing industry
- GQSP ID The Blue Agenda Launching
- Draft Progress Report GQSP Indonesia_7th SC Meeting
- Seering comittee meeting reports:
- GQSP ID Progress Report 7th SC Meeting
- GQSP ID Progress Report 6th SC Meeting
- GQSP ID Progress Report 6th SC Meeting
- GQSP ID Progress Report 5th SC Meeting
- GQSP ID Progress Report 4th SC meeting
- 3. GQSP ID Progress Report SC meeting
- 3rd SC meeting document GQSP Indonesia
- Final Document Of 5th Sc Meeting

Vietnam

- Introduction of SCA report, GQSP Vietnam, 2023
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- Technical Regulations On Food Safety And Animal And Plant Quarantine Presentation, Ministry Of Agricultural and Rural Development, 2023
- Result sharing presentation, SPCC, 2023
- Result sharing, Hoang Phat company, 2023
- GQSP promotional video with English subtitle, GQSP Vietnam, 2023
- Chanh Thu Company factsheet, GQSP Vietnam, 2023
- HTX Da xanh Company factsheet, GQSP Vietnam, 2023
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- GQSP Vietnam factsheet on laboratories, GQSP Vietnam, 2023
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- GQSP vietnam Brochure, GQSP Vietnam, 2023
- Market access document by SIAEP, prepared by Mr Peter Johnson and Mr. Le Thu Lam , 2023
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- Training brochure for Labs, GQSP 2021.
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- GQSP Vietnam annual report 2021
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- Report and recommendations on a monitoring programme for determination of pesticide residues in mango, UNIDO 2023.
- Standards Compliance Analytic for VIETNAM, GQSP Vietnam, 2023

Colombia

- ProDoc GQSP Global Phase 1
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- GQSP Global Implementation Report 2022
- ProDoc GQSP Colombia – Chemical Value Chain
- Presentation GQSP Colombia Theory of Change
- Colombia GQSP Implementation 1st Implementation Report
- Colombia GQSP Implementation 2nd Implementation Report
- Colombia GQSP Implementation 3rd Implementation Report
- Colombia GQSP Implementation 4th Implementation Report
- Colombia GQSP Implementation 5th Implementation Report
- Colombia GQSP Implementation 6th Implementation Report
- Colombia GQSP Implementation 7th Implementation Report
- Colombia GQSP Implementation 8th Implementation Report
- Colombia GQSP Implementation 9th Implementation Report

Peru

- GQSP Programme Peruvian Inception Report, 2021
- GQSP Annual Report 2019
- GQSP Annual Report 2020
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- GQSP PERU Progress Report Non 2022 to APR 2023
- UNIDO Monitoring Committee Seventh Report Peru

South Africa

- Information Brochure for the essential & vegetable seed oils industry, Southern African Essential Oil Producers' Association (SAEOPA), 2023.
- Essential and Vegetable Oils – Quality Infrastructure supporting essential and vegetable oils market access, Southern African Essential Oil Producers' Association (SAEOPA), UNIDO, 2021.
- Essential Oils Trade Data per Quarter September 2022, Department for Trade, Industry and Competition (dtic), 2022.
- Letter of accreditation for NMISA Organic Analysis Laboratory, from the South African National Accreditation System (SANAS), Sept 2023.
- Strengthening the quality of essential and vegetable oils exports from South Africa - Highlights from the Global Quality and Standards Programme South Africa Project 2018–2023, GQSP, UNIDO, 2023.
- Annual Report: GQSP South Africa, January – December 2022, GQSP, 2023.
- Improving the quality of essential and vegetable oils in Southern Africa: Micro-narratives of change and progress, GQSP, UNIDO, 2023.
- Project Document: Global Quality and Standards Programme South Africa - Phase II - Unlocking the export potential of essential and vegetable oils, PPP, GQSP, 2023.
- Power Point Presentation: Global Quality and Standards Programme South Africa - Phase II - Unlocking the export potential of essential and vegetable oils, PPP, GQSP, 2023.
- South Africa Inception Report Global Quality and Standards Programme, UNIDO/GQSP, 2019.
- QUALITY - What is it, what is it not, and what then if it is, or if it is not? A chronicle on how the producers of essential and vegetable oils in South Africa changed their narrative on quality, UNIDO, 2023.
- Advancing Gender Equality through Global Trade, UNIDO/GQSP, 2022.
- South Africa Cooperation Programme 2021–2024, State Secretariat for Economic Affairs SECO, Swiss Confederation, 2021.
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- https://www.qualityforumsa.org/ (Quality Forum South Africa, Multi-Stakeholder Quality Forum)
- https://hub.unido.org/qi4sd/ZAF

Kyrgyzstan

- GQSP Kyrgyzstan, Final Report, Reporting Period September 2019 – August 2023, including Meeting Minutes of the 3rd Steering Committee Meeting GQSP (16.3. 2022), GQSP, 2023.
- GQSP Kyrgyzstan, Progress Report, Reporting Period 1 September 2021 to 31 January 2022, including Meeting Minutes of the 2nd Steering Committee Meeting GQSP (10.9.2021), 2022
- GQSP Kyrgyzstan, Progress Report, Reporting Period 1 November 2020 to 31 August 2021, including Meeting Minutes of the 1st Project Steering Committee Meeting (16.11.2020), GQSP, 2021.
- GQSP Kyrgyzstan, Inception Report, GQSP, 2020.
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- Assessment of Select Horticultural Sectors in Kyrgyzstan, and their Market Access Potential, ILO, 2018
- Project Document, Linking the tourism industry to productive activities in the Issyk-Kul region of the Kyrgyz Republic, UNIDO, 2016

Georgia

- GQSP Georgia, Final Report, July 2020 - November 2022, GQSP/UNIDO, 2023.
- GQSP Georgia, Final Report, GQSP/UNIDO, 2022.
- Strategic Roadmap for Sustainable Laboratory Infrastructure Development in Georgia, GQSP, 2022.
- GQSP Georgia, Strengthening conformity assessment for fruits and vegetables, Value Chain Study, GQSP, UNIDO, 2021.
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- GQSP Georgia, Factsheet, UNIDO/GQSP, (no date).

- Advancing Gender Equality through Global Trade, UNIDO/GQSP, 2022.
- REPORT
- Laboratory Needs Analysis Georgia, Bert Popping, (mandated by FAO), 2022.
- https://gelab.org.ge/en Georgian Laboratory Association (GeLab)
- https://hub.unido.org/qi4sd/GEO
- https://trademap.org 2022

Ghana

- GQSP Ghana, Annual Report December 2021- November 2022, GQSP 2022.

Annex 7: Evaluation matrix

Primary evaluation criteria	Primary evaluation questions	Source of information and data collection methods	Data analysis methods
1. Relevance (of component 1 and 2)	a) To what extent is the GQSP responding to the needs of the QI institutions? (National Quality Infrastructure (i.e., NSB, NMI, NAB) and conformity assessment bodies (i.e., testing and calibration laboratories, certification bodies, inspection bodies) b) To what extent is the GQSP responding to the needs of the targeted SMEs and value chains? c) Have the right value chains been selected?	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders[1] GQSP documents	Qualitative content analysis of notes from interviews and focus group discussions Qualitative content analysis of GQSP documents Comparative analysis of "country analysis templates"
2. Effectiveness (of component 1 and 2)	a) To what extent is the technical competence and sustainability of the National Quality Infrastructure System enhanced in the GQSP countries? (outcome 1) b) To what extent is the SME compliance with international standards and technical regulations in GQSP countries enhanced? (outcome 2) c) To what extent is the policy environment and awareness for quality enhanced in the GQSP countries? (outcome 3)	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders[1] Observations at QI institutions and SMEs GQSP documents	Qualitative content analysis of notes from interviews, focus group discussions and observations Quantitative and qualitative content analysis of GQSP documents Comparative analysis of "country analysis templates" Portfolio analysis
3. Impact (of component 1 and 2)	a) To what extent has the international (and domestic) competitiveness of SMEs been enhanced? (selected value chains in GQSP countries)	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders[1] Observations at SMEs GQSP documents	Qualitative content analysis of notes from interviews, focus group discussions and observations Quantitative and qualitative content analysis of GQSP documents

	b) Has the GQSP an impact beyond the pilots? (upscaling, replication in other value chains)		Comparative analysis of "country analysis templates" Portfolio analysis
4. Coherence (DAC criteria)	a) To what extent is the GQSP partnering with other actors at the country level thereby avoiding duplication or collusion?	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders[1] GQSP documents	Qualitative content analysis of notes from interviews and focus group discussions Content analysis of GQSP documents Comparative analysis of "country analysis templates"
5. Sustainability (DAC criteria)	a) What are the key factors for the benefits of the GQSP to last?	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders[1] GQSP documents	Qualitative content analysis of notes from interviews and focus group discussions Content analysis of GQSP documents Comparative analysis of "country analysis templates" Portfolio analysis

Secondary evaluation criteria	**Secondary evaluation questions**	**Source of information and data collection methods**	**Data analysis methods**
6. Efficiency (DAC criteria)	a) Has the GQSP delivered results in an economic and timely manner?	Interviews with GQSP stakeholders GQSP documents	Qualitative content analysis of notes from interviews Quantitative content analysis and financial data analysis of GQSP documents
7. RBM, monitoring, evaluation and reporting (UNIDO criteria)	a) To what extent are RBM, monitoring, evaluation and reporting at country level linked with the global level?	GQSP documents	Qualitative content analysis of GQSP documents
8. Digital transformation (specific interest)	a) To what extent has the GQSP contributed to the digital transformation at the level of the QI institutions and SMEs?	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders[1] Observations at QI institutions and SMEs GQSP documents	Qualitative content analysis of notes from interviews, focus group discussions and observations Content analysis of GQSP documents Comparative analysis of "country analysis templates"
9. Gender mainstreaming	a) How is the GQSP addressing gender mainstreaming and in particular women empowerment?	Interviews and focus group discussions at the country level	Qualitative content analysis of notes from interviews and focus group discussions

(UNIDO criteria)		with GQSP beneficiaries and stakeholders[1] GQSP documents	Content analysis of GQSP documents Comparative analysis of "country analysis templates"
10. Environment (UNIDO criteria)	a) How is the GQSP addressing environmental and climate related challenges?	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders[1] Observations at QI institutions and SMEs GQSP documents	Qualitative content analysis of notes from interviews and focus group discussions Content analysis of GQSP documents Comparative analysis of "country analysis templates"
11. Social considerations (UNIDO criteria)	a) How is the GQSP addressing social challenges?	GQSP documents	Qualitative content analysis of GQSP documents
12. Performance of partners (UNIDO criteria)	a) To what extent does UNIDO fulfil its role in the programme? b) To what extent do national counterparts fulfil their role in the programme? c) To what extent do implementing partners fulfil their role in the programme? (if applicable) d) To what extent does SECO fulfil its role in the programme?	Interviews and focus group discussions at the country level with GQSP beneficiaries and stakeholders GQSP documents	Qualitative content analysis of notes from interviews and focus group discussions Content analysis of GQSP documents Comparative analysis of "country analysis templates"
[1] Data collection from SME depends on the country context; selection of most appropriate methods to be decided during the preparation of the country missions in consultation with the GQSP country coordinators; see also section "Data collection from SMEs" in chapter 5.			

Source: Evaluation team.

Annex 8: Terms of Reference

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

Independent final evaluation

Global Quality and Standards Programme (GQSP)

UNIDO Project No.: 17

JULY 2023

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I. Project background and overview

1. Project factsheet

Project title	Global Quality and Standards Programme, GQSP
UNIDO project No. and/or ID	170032
Region	Global
Countries	Albania, Colombia, Costa Rica, Georgia, Ghana, Indonesia, Kyrgyzstan, Peru, Philippines, South Africa, Ukraine, and Vietnam
Planned implementation start date	01.11.2017
Planned implementation end date	31.10.2022
Actual implementation start date	01.12.2017
Actual implementation end date	30.11.2023
Implementing agency(ies)	UNIDO
Executing partner(s)/entity(ies)	n/a
Donor(s):	Switzerland, through the State Secretariat of Economic Affairs (SECO)
Total project allotment	EUR 16,336,035 equal to CHF 18,149,455 (incl. 13% Programme Support Costs)
Total co-financing at design (in cash and in-kind)	N/A
Materialized co-financing at project completion (in cash and in -kind)	N/A

(Source: Project document)[16]

[16] Project information data throughout these TOR are to be verified during the inception phase.

2. Project context

Background

Global trade is growingly embedded within value chains, influenced by new technologies and is increasingly governed by quality and standard requirements. Despite the opportunities induced by trade liberalization and the efforts made by developing countries to strengthen integration into the world trade system, exporters from many developing and middle-income countries struggle to meet market requirements and thus substantially increase their access to global markets.

Exporters from developing countries, in particular Small and Medium-sized Enterprises (SME), face substantial challenges to meet and prove conformity with market entry requirements, thus facing Technical Barriers to Trade (TBT) that hinder their ability to compete. Import rejections rates in major global markets clearly mirror systemic deficiencies in many developing countries in terms of compliance with requirements, and this is especially true for middle-income countries, which account for the bulk of import rejections in major markets. Such rejections result in financial losses for the producers and can seriously damage the reputation of their home country, in both cases affecting their competitiveness. These situations can be overcome with better quality products, which have been tested, inspected and, if possible, certified, through an internationally recognized accredited body.

In order to gain and maintain access to international trade and benefit from global markets, standards compliance and proof of conformity are essential. To ensure standards compliance, countries need to establish an effective, efficient and internationally recognized Quality Infrastructure System (QIS), so that firms can assess and verify the conformity of their products against the requirements (standards) of application, being the results internationally acceptable. Thus, QI becomes an issue of importance for the industry, regulators and trade negotiators, with implications at macro, meso and micro levels.

UNIDO/SECO Cooperation

SECO and UNIDO have been cooperating in providing trade-related technical assistance for more than 15 years, supporting partner countries to increase their international competitiveness through a stronger National Quality Infrastructure System and compliance with international standards. The Global Quality and Standards Programme (GQSP) consolidates UNIDO-SECO interventions on quality and standards compliance within one programme, adding the benefit of a global component facilitating synergies and enhancing coherence among the interventions.

In the past, joint projects on standards compliance have been conducted in different countries with no formal cross-linkages between them to capitalize on experiences and overall knowledge. Henceforth, SECO and UNIDO want to achieve a more comprehensive impact by implementing a coherent programmatic approach. The GQSP is the first programme of its kind developed and implemented to achieve higher impact at a programme level.

GQSP Overview

The GQSP was formulated in 2017 as a result of long-standing cooperation between SECO and UNIDO. UNIDO and Switzerland signed a Letter of Agreement at the opening of UNIDO's 17th Session of the General Conference to further strengthen their strategic partnership in the field of trade and competitiveness to facilitate inclusive and sustainable development in partner countries.

The overall objective of the programme is to strengthen the quality and standards compliance capacity in SECO partner countries to facilitate market access for SMEs by working in emblematic value chains per country. The total budget of the GQSP is CHF 18,149,455 (incl. 13% support costs), equal to € 16,336,035. SECO contribution is provided in CHF, all projects are implemented in EUR.

This programme supports countries to align the demand for and supply of quality services required to prove and verify the quality of products, through:

1. Strengthening the technical competence and sustainability of the National Quality Infrastructure System,
2. Enhancing SME compliance with international standards and technical regulations, and
3. Raising awareness for quality through advocacy and knowledge dissemination.

The programme is structured around three components, one on global knowledge management (C1), one on country projects (C2) and one on programme management, monitoring and evaluation (C3).

Nine countries have been selected for country projects under component 2, based on SECO priority countries and UNIDO country assessments (Albania, Colombia, Ghana, Indonesia, Kyrgyzstan, Peru, South Africa, Ukraine and Vietnam). All country projects are expected to address the three outcomes of the programme and are structured accordingly.

In addition to these full-fledged country projects, the possibility of special measure interventions (under Component 2) has been explored in five countries, Georgia, Costa Rica, Philippines, Bolivia and Guatemala. Project proposals for Georgia, Costa Rica and the Philippines have been approved and implementation started in 2020 and 2021 respectively. The table below provides a summary of countries, starting dates, project budgets and value chains selected for support.

Country	Start	End date	SECO contribution (EUR)*	Value Chain(s)
Albania	May 2022	Nov 2023 (module 1)	1,840,000	▪ Medicinal & aromatic plants ▪ Fruits & vegetables
Colombia	Apr 2019	Nov 2023	2,700,500	▪ Chemicals
Costa Rica	Feb 2021	Oct 2023	380,000	▪ Beef
Georgia	July 2020	Nov 2022	350,000	▪ Fruits & vegetables
Ghana	Aug 2019	Aug 2023	1,304,000	▪ Cocoa ▪ Cashew ▪ Oil palm
Indonesia	July 2019	Jun 2023	2,929,000	▪ Fish ▪ Seaweed
Kyrgyzstan	Oct 2019	Nov 2022	864,500	▪ Fruits
Peru	Jan 2019	Nov 2023	2,325,000	▪ Cocoa ▪ Coffee
Philippines	Jul 2021	Nov 2023	359,500	▪ PPE

South Africa	Sept 2018	May 2023	1,378,000	▪ Essential & vegetable oils
Ukraine	Sept 2019	Nov 2023	1,060,000	▪ Wood
Vietnam	Mar 2020	Jun 2023	1,040,000	▪ Mango

**Numbers rounded to the nearest hundred*

The project document and GQSP monitoring and evaluation framework foresee regular monitoring, an independent mid-term review (MTR) and a terminal evaluation (TE).

Following the success of the first phase, UNIDO and SECO also agreed to a second programme phase. The second programme phase officially started on 1 December 2022, while the first phase will conclude on 30 November 2023, allowing for a smooth transfer between the phases. Based on the recommendations of the mid-term evaluation and the result of an assessment of the country projects implemented under the first phase of GQSP, the following countries will be included in the second phase of the programme:

Country	Estimated start date	SECO contribution (EUR)
Albania	Dec 2023 (module 2)	1,356,000 (module 2)
Colombia	Dec 2023	1,130,000
Indonesia	Jul 2023	2,260,000
Peru	Dec 2023	1,469,000
South Africa	Jun 2023	1,469,000
Ukraine	Dec 2023	1,243,000
Vietnam	Jul 2023	1,469,000
Small-scale interventions	*TBD*	904,000

3. Project objective

The overall objective of the GQSP is to strengthen the quality and standards compliance capacity to facilitate market access for SMEs. The Programme will pursue three outcomes, thus responding to the main compliance challenges identified for developing countries:

- ***Outcome 1:*** *Technical competence and sustainability of the National Quality Infrastructure System enhanced.* Institutional strengthening of key institutions and relevant public-private support institutions through capacity building, use of best practices, skills development, and implementation of management systems to ensure quality and international recognition of their services.
- ***Outcome 2:*** *SME compliance with international standards and technical regulations enhanced.* Improving compliance capacity through specialized training, capacity building and preparation for certification, strengthening of cluster networks and quality consortia as well as relevant support institutions.
- ***Outcome 3:*** *Awareness of quality is enhanced.* Advocacy, up-scaling of knowledge dissemination, and advice for informed policy decisions on standards compliance and support for policy development.

The three programme outcomes are achieved through two Components:

1 Global Knowledge Management (Component 1: C1)

2 Country Projects (Component 2: C2)

A third component (Component 3: C3), relating to programme management and coordination, is considered in reporting and budget structure. The graph below illustrates the interrelation between the two technical components of the GQSP (Figure 2).

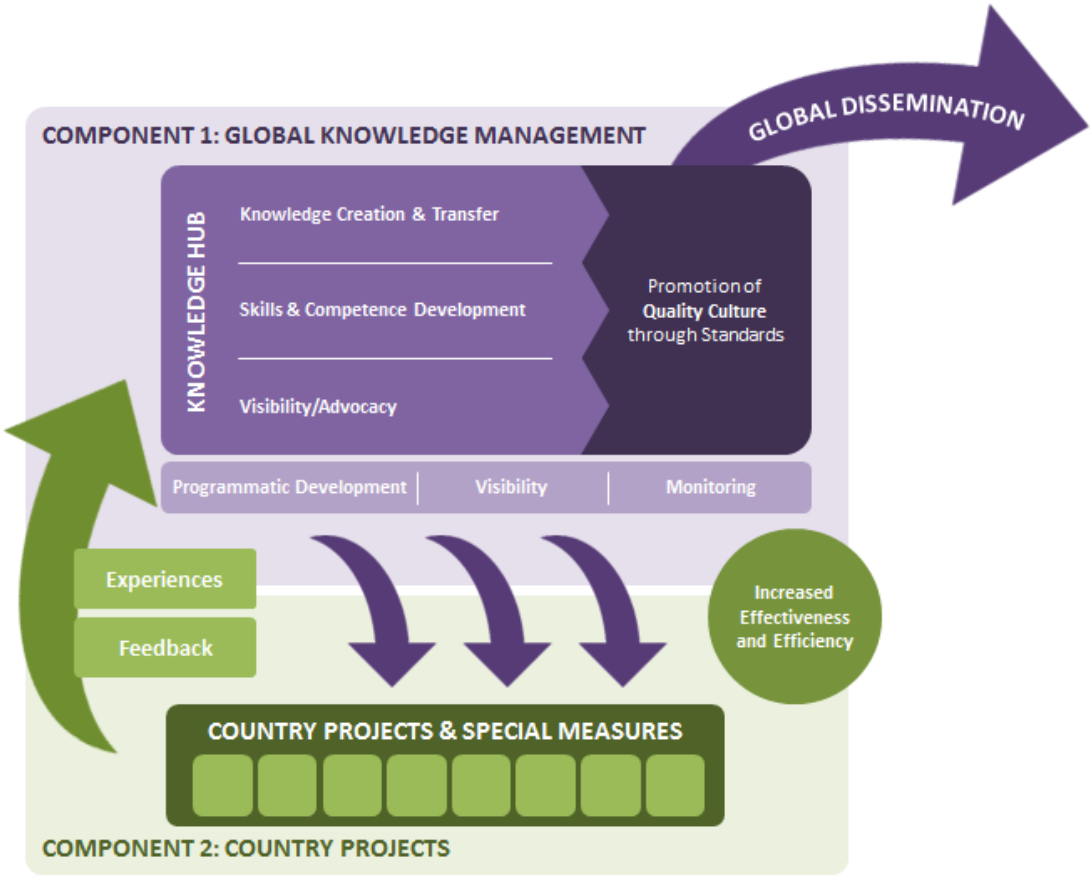

Figure 1: Global Programme

Component 1: Global Knowledge Management (C1)

C1 is a strategic and transversal component with the objective to generate and disseminate knowledge from research and past endeavors, which can be used to tackle quality and standards related challenges. This knowledge will be globally disseminated to country projects within the C2 and to the general public through an online platform hosted by UNIDO – the Knowledge Hub. C1 will have a direct feedback link with C2 by responding to the common needs in line with the three outcomes of the programme. C1 will support the development of skills and competencies and provide visibility and advocacy of the tools produced. It will be a catalyst to achieve greater effectiveness while optimizing efficiency in the use of resources. The benefits of C1 will exceed the GQSP framework and serve as a useful global public good for future quality and standard-related programmes and strengthen the cooperation with other organizations working within this field.

Component 2: Country Projects (C2)

C2 will address country-specific standards and quality compliance issues by implementing tailor-made interventions for:

Type 1: Priority country projects (3-4 years) will address standard compliance challenges in a holistic and tailor-made manner and intervene on all three outcome levels, giving priority according to country needs in one or a limited number of specific sectors, with a focus on value chains.

Type 2: Special measures (1-2 years) will consist of short-term strategic activities in the area of standards compliance and quality. It will be limited in scope and focus on targeted issues, not necessarily intervening on all three outcome levels.

In both types, coordination with existing projects – thematic or country – will be actively promoted, to avoid overlaps and create synergies.

Component 3: Programme Coordination, Monitoring and Evaluation

C3 of the GQSP was introduced to reflect activities related to project coordination, including monitoring, reporting and evaluation, as well as activities related to overall programme visibility and communication.

Expected Results

The following are, in brief, some of the expected results of the project/programme:

C1: Global Knowledge Management
Outcome 1: Technical competence and sustainability of the National Quality Infrastructure System enhanced.
- Global issues and trends in standards compliance and identified, analyzed and disseminated.
- Good practices on Quality Infrastructure Systems shared.

Outcome 2: SME compliance with international standards and technical regulations enhanced.
- Knowledge to support SMEs in enhancing their capacity to comply with standards created and disseminated.
- Competencies and skills of SMEs enhanced through e-learning.
- Lessons learned from country projects identified, analyzed and disseminated.

Outcome 3: Awareness of quality is enhanced.
- Advice for informed policy decision-making on standards compliance and support for policy development provided.
- Activities to raise quality awareness developed.

C2: Country Projects
Outcome 1: Technical competence and sustainability of the National Quality Infrastructure System enhanced.
- In-depth analysis of the capacity of the QI institutions and service providers was conducted and an action plan was prepared.
- Technical competence of the QI at the institutional level strengthened.
- Technical competence of the QI at the service provider's level strengthened.

Outcome 2: SME compliance with international standards and technical regulations enhanced.
- In-depth analysis/assessment of the relevant market requirements conducted and action plan prepared.
- Technical assistance in the form of advice to SMEs to enhance their capacity to comply with the standards provided.
- Targeted training to SMEs to enhance capacity to comply with standards provided.
- Clusters among VC actors were promoted.

Outcome 3: Awareness of quality is enhanced.

- Advice for informed policy decision-making on standards compliance and support for policy development provided.
- Activities to raise quality awareness developed.

Further information on implementation progress, budget and implementation arrangements is given in Annex 8.

II. Purpose and scope of the evaluation

The purpose of this terminal evaluation (TE) is to independently assess the Global Quality and Standards Programme to help UNIDO improve the performance and results of future programmes and projects. This programme will come to an end on 30 November 2023 and a second phase has already been initiated. This TE covers the first phase of the project from December 2017 to date and its recommendations are envisaged to address potentially necessary adjustments for the implementation of activities of the second phase programme, with an end date in November 2027.

The evaluation has three specific objectives:

1. Assess the programme performance in terms of relevance, coherence, effectiveness, efficiency, impact, and sustainability[17];
2. Identify key learning to feed into the implementation of the second phase, particularly with a view to improving the impact of country interventions as part of a global programmatic approach;
3. Develop a series of findings, lessons and recommendations for enhancing the design of future programmes and projects by UNIDO keeping in mind the integration of UNIDO services (energy and resource efficiency; circular economy; and digitalization) and global UN System developments (co-operation with UN System agencies and integration into UN Sustainable Development Cooperation Frameworks).

Considering that, due to the pandemic, field missions to participating countries could not take place during the independent mid-term evaluation, the TE will focus on six in-depth GQSP country interventions. A pre-selection of countries to visit has been undertaken by the programme management team and evaluation manager taking into consideration criteria such as inclusion in Phase II; long-term UNIDO engagement and phase out; small-scale and large-scale interventions; geographic distribution; perceived positive and negative results feedback; coherence with other on-going UNIDO or SECO-funded programmes. The countries preliminarily selected for in-depth assessment are: South Africa, Ghana, Indonesia, Vietnam, Colombia and Peru. The methodology to be used will be determined during the inception

[17] As per new DAC evaluation criteria: https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm

phase. All final arrangements will be undertaken in close consultation with the programme management and SECO teams.

In view of the limited time and resources available, the TE will not examine the full spectrum of programme activities, achievements and drawbacks or be able to conduct extensive quantitative surveys of all programme countries. Rather, the TE will pursue a stratified approach to provide a more in-depth analysis of a few selected countries. This approach will, however, not preclude a portfolio review of all country data and the collection of some primary data for all the non-visited countries. The inception report may suggest a categorization of the programme countries, e.g. countries with missions; countries with online interviews; and, countries with written questionnaires.

In applying a forward-looking approach, and in responding to programme management's quest for learning the focus of the TE is on assessing the coherence of the ***programmatic approach and its impact on country interventions and global activities*** (compared to traditional technical cooperation with independent country projects). This includes:

- Impact and value added of global knowledge management tools and activities (component 1), incl. positive spillover effects beyond the subject programme (e.g. global public goods, advocacy).
- Impact of interventions at the country level (based on selected countries) (component 2).
- Impact of special measures / small-scale interventions (component 2).
- Synergies created and used between country projects.
- Synergies created and used between the Global Knowledge Management component and the country projects.
- Streamlining of procedures (ProDocs, approaches, etc.) within UNIDO and stakeholders (beneficiaries, donors, etc.) and related efficiency gains.

Through its assessments, the Evaluation Team (ET) will enable UNIDO, SECO and other stakeholders and counterparts to verify ***prospects for development impact and sustainability***, providing an analysis of the attainment of global objectives, programme objectives, delivery and completion of programme outputs/activities, and outcomes/impacts based on indicators.

The learning from the TE can inform the programme management team whether the programme (through its two phases) is likely to achieve its main objective, to what extent the programme is still relevant and coherent, and, whether it sufficiently considers sustainability and scaling-up factors for an increased contribution to sustainable results and further impact.

III. Evaluation approach and methodology[18]

The evaluation will be conducted in accordance with the UNIDO Evaluation Policy[19] UNEG Norms and Standards for evaluation and the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle[20].

The evaluation will be carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the programme will be informed and consulted throughout the evaluation. The evaluation team leader will liaise with the UNIDO Independent Evaluation Unit on the conduct of the evaluation and methodological issues.

The evaluation will use a theory of change approach and mixed methods to collect data and information from a range of sources and informants. It will pay attention to triangulating the data and information collected before forming its assessment. This is essential to ensure an evidence-based and credible evaluation, with robust analytical underpinning.

The theory of change, which has been developed in a consultative process by the project management team, identified causal and transformational pathways from the programme outputs to outcomes and longer-term impacts, and drivers as well as barriers to achieving them. The validity of the existing theory of change will be tested by the external evaluators and adapted, if necessary, to benefit the implementation of the second phase and the design of future programmes, particularly with a view to integrating environmental sustainability practices and new ways of using digitalization.

1. Data collection methods

The evaluation will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources, as necessary: desk studies and literature review, statistical analysis, individual interviews, focus group meetings/discussions, surveys and direct observation. The specific mixed methodological approach will be described in the inception report. The evaluation team will develop interview guidelines. Interviews can take place either in the form of focus group discussions or one-on-one consultations.

The following are the main instruments for data collection:

(a) **Desk and literature review** of documents related to the project, including but not limited to:

[18] Due to the global COVID-19 pandemic, the evaluation will be conducted in line with overall UNIDO guidance and rules responding to the global crisis, thus prioritizing the health and safety of all parties involved.

[19] UNIDO. (2021). Director General's Bulletin: Evaluation Policy (DGB/2021/11, dated 21 September 2021)

[20] UNIDO. (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle partially superseded by UNIDO/DGB/(P).130 and UNIDO/DGAI.21

- The original project document, monitoring reports (such as progress and financial reports), mid-term evaluation report, output reports, back-to-office mission report(s), end-of-contract report(s) and relevant correspondence;
- Notes from meetings of committees involved in the project.

(b) **Stakeholder consultations** will be conducted through structured and semi-structured interviews and focus group discussions. Key stakeholders to be interviewed include:
- UNIDO Management and staff involved in the project; and
- Representatives of donors and government counterparts.

(c) **Progress review of** GQSP country projects:
- Review of results achieved by the projects, including interviews of actual and potential beneficiaries in the private sector and civil society;
- A portfolio review of all relevant documents (project documents, progress reports, etc.) related to the country projects;

(d) **Interviews** with the relevant UNIDO Country Office representatives, as well as representatives of subject-related UN System agencies and UN Resident Coordinator's Offices to the extent that they were involved in, or aware of, the project, and the project's management members and the various national and sub-regional authorities dealing with project activities as necessary.

(e) **Other interviews, surveys or document reviews** as deemed necessary by the evaluation team and/or by the Independent Evaluation Unit for triangulation purposes.

2. Evaluation of key questions and criteria

The key evaluation questions (corresponding to the six OECD/DAC criteria) are the following:

1) Relevance: Is the intervention doing the right thing? To what extent do the project/programme's objectives respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change?
2) Coherence: How well does the intervention fit? How compatible is the project/programme with other interventions in the country, sector or institution?
3) Effectiveness: Is the project/programme achieving its objectives?
4) Efficiency: How well are resources being used? Has the project/programme delivered results in an economical and timely manner?
5) Impact: What difference does the intervention make? To what extent has the project/programme generated significant positive or negative, intended or unintended, higher-level effects? Has the project/programme had transformative effects?
6) Sustainability: Will the benefits last? To what extent will the net benefits of the project/programme continue, or are likely to continue?

Table 5 below provides the key evaluation criteria to be assessed by the evaluation. Detailed questions to assess each evaluation criterion are in Annex 2 of UNIDO's Evaluation Manual.

Table 5. Summary of project evaluation criteria

#	Evaluation criteria	Mandatory rating
A	**Progress to Impact**	**Yes**
B	**Project design**	**Yes**
1	• Overall design	Yes
2	• Project results framework/log frame	Yes
C	**Project performance and progress towards results**	Yes
1	• Relevance	Yes
2	• Coherence	Yes
3	• Effectiveness	Yes
4	• Efficiency	Yes
5	• Sustainability of benefits	Yes
D	**Gender mainstreaming**	Yes
E	**Project implementation management**	Yes
1	• Results-based management (RBM)	Yes
2	• Monitoring and Evaluation, Reporting	Yes
F	**Performance of partners**	
1	• UNIDO	Yes
2	• National counterparts	Yes
3	• Implementing partner (if applicable)	Yes
4	• Donor	Yes
G	**Environmental and Social Safeguards (ESS), Disability and Human Rights**	Yes
1	• Environmental Safeguards	Yes
2	• Social Safeguards, Disability and Human Rights	Yes
H	**Overall Assessment**	Yes

Whereas the evaluation will mainly focus on the achievement of expected results indicated in the programme's logical framework, the inception report will scope out and provide more focus concerning the set of questions to address during the evaluation, and taking into consideration the overall evaluation objectives and priorities.

Rating system

In line with the practice adopted by many development agencies, the UNIDO Independent Evaluation Unit uses a six-point rating system, where 6 is the highest score (highly satisfactory) and 1 is the lowest (highly unsatisfactory) as per table below.

Table 6. Project rating criteria

Score		Definition	Category
6	Highly satisfactory	Level of achievement presents no shortcomings (90% - 100% achievement rate of planned expectations and targets).	SATISFACTORY
5	Satisfactory	Level of achievement presents minor shortcomings (70% - 89% achievement rate of planned expectations and targets).	
4	Moderately satisfactory	Level of achievement presents moderate shortcomings (50% - 69% achievement rate of planned expectations and targets).	
3	Moderately unsatisfactory	Level of achievement presents some significant shortcomings (30% - 49% achievement rate of planned expectations and targets).	UNSATISFACTORY
2	Unsatisfactory	Level of achievement presents major shortcomings (10% - 29% achievement rate of planned expectations and targets).	
1	Highly unsatisfactory	Level of achievement presents severe shortcomings (0% - 9% achievement rate of planned expectations and targets).	

IV. Evaluation process

The evaluation will be conducted from July to November 2023. The evaluation will be implemented in five phases which are not strictly sequential, but in many cases iterative, conducted in parallel and partly overlapping:

1) Inception phase: The evaluation team will prepare the inception report providing details on the evaluation methodology and include an evaluation matrix with specific issues for the evaluation to address; the specific site visits will be determined during the inception phase, taking into consideration the findings and recommendations of the mid-term review.
2) Desk review and data analysis;
3) Interviews, survey and literature review;
4) Field mission and debriefing to key relevant stakeholders in the field;
5) Data analysis, report writing and debriefing to UNIDO staff at the Headquarters; and
6) Final report issuance and distribution with a management response sheet, and publication of the final evaluation report on UNIDO website (by EIO/IEU).

V. Time schedule and deliverables

The evaluation field missions are tentatively planned for September/October 2023. At the end of the field missions, the evaluation team will present the preliminary findings for key relevant stakeholders involved in this programme in the country. The tentative timeline is provided in the table below.

After the evaluation field missions, the evaluation team leader will visit UNIDO Headquarters for debriefing and presentation of the preliminary findings of the terminal evaluation. Online presentation is to be arranged in case the visit cannot take place. The draft TE report will be submitted no later than four weeks after the end of the mission. The draft TE report is to be shared with the UNIDO Project Manager (PM), UNIDO Independent Evaluation Unit and other stakeholders for comments.

The evaluation team leader is expected to revise the draft TE report based on the comments received, edit the language and submit the final version of the TE report in accordance with UNIDO ODG/EIO/IEU standards.

Table 7. Tentative timelines

Timelines	Tasks
July	Desk review
July/August	• Preparation of Inception report (incl. evaluation matrix) • Online briefing with UNIDO project manager and the project team based in Vienna.
September/October	• Data collection, incl. interviews, and field visit to max. 6 selected countries • Presentation to national stakeholders
November	• Debriefing online • Finalization of a first draft evaluation report
November/December	• Internal peer review of the report by UNIDO's Independent Evaluation Unit and factual validation by other stakeholders • Incorporation of comments to draft evaluation report
December	Final evaluation report

VI. Evaluation team composition

The evaluation team will be composed of one international evaluation consultant acting as the team leader, one international quality infrastructure expert with evaluation experience, and one Spanish-speaking evaluator as a team member. The evaluation team members will possess a mixed skill set and experience including evaluation, relevant technical expertise, social and environmental safeguards and gender, as well as language skills. All three consultants will be contracted by UNIDO.

The tasks of each team member are specified in the job descriptions annexed to these terms of reference.

According to UNIDO Evaluation Policy, members of the evaluation team must not have been directly involved in the design and/or implementation of the project under evaluation.

The UNIDO Project Manager and the project management units in the selected countries to be visited will support the evaluation team.

An evaluation manager from UNIDO Independent Evaluation Unit will provide technical backstopping to the evaluation team and ensure the quality of the evaluation. The UNIDO Project Manager and national project teams will act as resource persons and provide support to the evaluation team and the evaluation manager.

VII. Reporting

Inception report

These terms of reference (ToR) provide some information on the evaluation methodology, but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager, the team leader will prepare, in collaboration with the team member, an inception report that will operationalize the ToR relating to the evaluation questions and provide information on what type and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible UNIDO evaluation manager.

The Inception Report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology including quantitative and qualitative approaches through an evaluation framework ("evaluation matrix"); division of work between the evaluation team members; field mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable[9].

Evaluation report format and review procedures

The draft report will be delivered to UNIDO Independent Evaluation Unit (with a suggested report outline) and circulated to UNIDO staff and key stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact in the draft report will be sent to UNIDO's Independent Evaluation Unit for collation and onward transmission to the evaluation team who will be advised of any necessary revisions. On the basis of this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The evaluation team will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feedback in preparing the evaluation report. A presentation of preliminary findings will take place at UNIDO HQ afterwards.

The evaluation report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, what was evaluated, and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate the dissemination and distillation of lessons.

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given by UNIDO Independent Evaluation Division.

VIII. Quality assurance

All UNIDO evaluations are subject to quality assessments by UNIDO Independent Evaluation Unit. Quality assurance is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process of UNIDO Independent Evaluation Unit, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by UNIDO's Independent Evaluation Unit).

The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO Independent Evaluation Unit should ensure that the evaluation report is useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by UNIDO Independent Evaluation Unit, which will circulate it within UNIDO together with a management response sheet.

Vienna International Centre
Wagramerstr. 5, P.O. Box 300,
A-1400 Vienna, Austria

+43 1 26026-0

www.unido.org

evaluation@unido.org

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INDUSTRIAL DEVELOPMENT ORGANIZATION